CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

AIR RESOURCES BOARD

FINAL STATEMENT OF REASONS

Amendments to California's Emission Warranty Information Reporting and Recall Regulations and Emission Test Procedures

October 2007

TABLE OF CONTENTS

I. General 1

A. The Action Taken in This Rulemaking 1

B. Economic and Fiscal Impacts 4

C. Consideration of Alternatives 5

II. MODIFICATIONS TO THE ORIGINAL PROPOSAL 5

A. An Overview Of The Original Proposal 5

B. Modifications to the Original Proposal 9

III. SUMMARY OF PUBLIC COMMENTS AND AGENCY RESPONSES ... 16

A. Summary of Public Comments Presented Prior to the Board Hearing or at the Hearing and Agency Responses 17

1. Main Comments..... 19
2. Aftermarket Vehicle Repair Industry 47
3. Regulatory Procedures 50
4. Corrective Action 57
5. Regulatory Alternatives 62
6. Regulatory Development 68
7. Public Hearing 88
8. Compliance Statement 90
9. Cost Benefit Analysis..... 98
10. Miscellaneous 101

B. Summary of Public Comments Submitted During The 15-day Comment Period and Agency Responses 108

1. Aftermarket Vehicle Repair Industry 108
2. Regulatory Procedures 109
3. Regulatory Development 109
4. Miscellaneous 110
5. Cost Benefit Analysis 110

C. Miscellaneous 111

Appendix 1 Supplement to the Final Statement of Reasons 112

State of California
AIR RESOURCES BOARD
Final Statement of Reasons for Rulemaking
Including Summary of Comments and Agency Response

Amendments to California's Emission Warranty Information Reporting and Recall Regulations and Emission Test Procedures

Public Hearing Dates: December 7, 2006 and March 22, 2007
Agenda Item No: 06-11-5

I. GENERAL

A. The Action Taken in This Rulemaking

In this rulemaking, the Air Resources Board (ARB or Board) is adopting amendments to its regulations and test procedures that establish emissions component warranty, reporting and corrective action requirements applicable to on-road motor vehicles. The current emissions warranty information reporting (EWIR) and recall regulations require manufacturers of on-road motor vehicles to perform corrective action when emission-related components on the vehicles they manufacture experience systemic failure rates as determined under the emission warranty reporting program.

The purposes of the EWIR regulations are to reduce vehicular emissions by: (1) ensuring that vehicles with emission control components that fail at systemic rates are identified, recalled, and repaired to meet the applicable emission standards and test procedures; and, (2) encouraging manufacturers to improve the design and durability of emission control components to avoid the expense and adverse publicity of a recall or other corrective action. The overall objective of the amendments staff proposed is to further the purposes of the EWIR regulations by making corrective actions for vehicles that have defective emission control devices or systems more available than they are under the current regulations. To accomplish this, the staff identified three aspects of the current regulations that needed improvement, specifically: (1) the proof required to demonstrate violations of ARB's emission standards or test procedures that require corrective action; (2) the corrective actions available to ARB to address the violations; and, (3) the manner in which emissions warranty information is reported to ARB. The amendments ultimately adopted by the Board significant improve the regulations in these three areas.

The rulemaking was initiated by the October 20, 2006 publication of a notice of a December 7, 2006 public hearing to consider the adoption of proposed amendments to the EWIR regulation. The hearing notice is entitled "Notice of Public Hearing to Consider Amendments to California's Emission Warranty Information Reporting and Recall Regulations and Emission Test Procedures" (Notice or Hearing Notice). On

October 20, 2006 the staff also published the "Staff Report: Initial Statement of Reasons for Rulemaking, Public Hearing to Consider Amendments to California's Emission Warranty Information Reporting and Recall Regulations and Emission Test Procedures" (the Staff Report or ISOR) and made it available to the public upon request as required by Government Code § 11346.2. Prior to the publication of the Notice and Staff Report, the staff held a public workshop on May 2, 2006 and held several meetings with stakeholders.

The Staff Report contains an extensive description of the rationale for the original proposal. Attachment A to the Staff Report contains the originally-proposed text of the amendments to sections 1958, 1956.8, 1961, 1976, 1978, 2112, 2122, 2136, 2141 and the newly proposed sections 2166-2174 of title 13 of the California Code of Regulations (CCR). In addition to these amendments, Attachment B of the Staff Report contained the originally-proposed amendments to the following test procedures incorporated by reference in regulations being amended: "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel-Engines and Vehicles," "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Otto Cycle Engines," "California Refueling Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles," and "California Evaporative Emission Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles." The Hearing Notice and the Staff Report and its attachments were also posted on October 20, 2006 on the ARB's Internet site for the rulemaking: *www.arb.ca.gov/regact/recall06/recall06.htm*.

At the December 7, 2006, hearing, the Board considered the staff's proposal and received written and oral comments from the public. At the hearing, a number of witnesses provided testimony in opposition to the staff's proposal and requested a delay to work with staff to resolve the issues they had with the proposal. The staff presented a list of proposed modifications to the staff's originally-proposed amendments. The Board voted to continue the item to allow the additional time the witnesses requested. In doing so, the Board also directed the staff to return within six months with a final proposal for the Board to consider. In response, a notice to continue the December 7, 2006 hearing to March 22, 2007 was published and posted on ARB's Internet site for the rulemaking listed above.

The staff held several additional meetings with stakeholders between December 7, 2006 and January 23, 2007. On January 23, 2007, staff issued a supplement to the October 20, 2006 staff report. This supplement is entitled "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." (Supplemental Staff Report or Supplemental ISOR) The Supplemental Staff Report gave notice of an additional workshop to be held on the staff's proposal on February 14, 2007. In the Supplemental ISOR the staff summarized and responded to comments on the proposed amendments received up to that point

and, among other things, discussed alternatives to the staff's approach and provided additional analysis of the economic impact of the staff's proposal. The Supplemental ISOR also included regulatory language for the conceptual modifications staff had proposed at the December 7th hearing and for other changes the staff was able to reach consensus with stakeholders as well. The Supplemental ISOR was posted on ARB's Internet site for the rulemaking. The staff continued to meet with stakeholders.

After holding the additional workshop with stakeholders on February 14, 2007, on March 12, 2007 staff posted an updated version of the proposed regulations and incorporated Test Procedures showing all recommended modifications to the originally-proposed text on ARB's Internet site for the rulemaking. The staff continued to meet with stakeholders.

At the Board's March 22, 2007 hearing the staff presented the modified amendments made available March 12, reflecting over 80 specific changes to its original October 20, 2006 proposal. While these modifications addressed many of the stakeholders' concerns, including limiting the duration of extended warranties to the useful life of the applicable vehicles or engines, and providing manufacturers the ability to contest the decision to order extended warranties at an administrative hearing. Unfortunately, however, these modifications did not gain stakeholders' full support for the staff's proposal. At the March 22, 2007 hearing the Board again heard opposing testimony from motor vehicle and engine manufacturers, as well as from the automobile aftermarket parts and service industries, which was similar to the testimony that was presented at the December 7, 2006 hearing.

At the conclusion of the March 22, 2007 hearing, the Board voted unanimously to adopt Resolution 06-44, in which it approved the originally proposed amendments with the modifications presented by staff. The Resolution directed the Executive Officer to incorporate the modifications (set forth in Attachment B to the Resolution) into the proposed regulatory text, with such other conforming modifications as may be appropriate. In accordance with section 11346.8 of the Government Code, the Board directed the Executive Officer to adopt the modified amendments to sections 1958, 1956.8, 1961, 1976, 1978, 2112, 2122, 2136, 2141 and the modified new sections 2166-2174, title 13, CCR, along with the modified amendments to the incorporated Test Procedures, after making the modified text available to the public for comment for a period of at least 15 days. The Board further directed the Executive Officer to consider written comments regarding the modified text that may be submitted during this period, make modifications as may be appropriate in light of the comments received, and present the regulations to the Board for further consideration if warranted.

On June 4, 2007, the text of the proposed modifications to the originally proposed regulatory actions was made available for a supplemental 15-day comment period by issuance of a "Notice of Public Availability of Modified Text" (the 15-day Notice). The notice described each modification, and the proposed title 13 CCR regulatory text and test procedures, with the modifications clearly indicated, was attached to the Notice. The 15-day Notice and its attachment were mailed on June 4, 2007, to all parties

identified in section 44(a), title 1, CCR, along with other interested parties. The 15-day Notice and its attachment were also posted on the ARB's Internet site for the rulemaking on June 4, 2007. Two comments were received during the supplemental 15-day comment period.

After considering the comments submitted during the 15-day comment period, on June 25, 2007, the Executive Officer issued Executive Order R-07-007, which adopted the final amendments to sections 1958, 1956.8, 1961, 1976, 1978, 2112, 2122, 2136, 2141, and final new sections 2166-2174, title 13, CCR, along with the final amendments to the five incorporated Test Procedures.

This FSOR updates the Staff Report by identifying and providing the rationale for the modifications made to the originally proposed regulatory text. It also contains a summary of the comments the Board received on the regulatory action during the formal rulemaking process and ARB's responses to those comments. The Hearing Notice, the ISOR, the Supplemental ISOR and the 15-Day Notice are incorporated by reference in this FSOR.

B. Economic and Fiscal Impacts

In developing the regulatory actions, ARB determined that the proposed regulatory action will create costs to ARB, as defined in Government Code section 11346.5(a)(5) and (6). Costs would not be created to any other state agency, or in federal funding to the state. The regulation will not create costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code or other nondiscretionary cost or savings to state or local agencies.

ARB has also determined that the businesses to which the requirements are addressed and for which compliance would be required are manufacturers of California-certified motor vehicles. For motor vehicle manufacturers that comply with existing requirements for producing vehicles that comply with ARB's emission standards and test procedures the cost of complying with the proposed regulatory action are expected to be negligible. Moreover, manufacturers are expected to comply with all applicable laws. For manufacturers that produce vehicles or engines with systemic emission component failures once the amendments take effect, corrective action costs may increase compared to the current regulations. The economic impact on industry is not easily quantifiable because it depends on the quality and durability of the vehicular emission control components manufacturers produce in the future. Based on its cost impact study, the staff estimates that the corrective action costs to industry based on the changes to the warranty reporting regulations will be similar to the costs manufacturers are currently incurring to correct vehicles with emission component problems under the current emission warranty reporting program. Manufacturers will experience some savings in decreased warranty reporting costs under the new emission warranty information reporting program.

ARB has also determined that the regulatory action will not have a significant adverse economic impact on businesses, including the ability of California businesses to compete with businesses in other states. While there could be significant costs to an automaker that produces vehicles that do not comply with emission standards or test procedures, the amendments should have minimal impact on the independent service and repair industry and aftermarket parts manufacturers because the Board has determined that any corrective action campaigns performed by manufacturers would only be imposed on the specific emission components that are identified as failing at a systemic rate. Failures of this magnitude are believed to be inconsequential in comparison to the overall size of the independent automotive service and repair industry and the aftermarket parts industry.

The Board's Executive Officer has also determined, pursuant to Government Code section 11346.5 (a)(3)(B), that the regulations will not affect small business, for the reasons discussed above.

C. Consideration of Alternatives

For the reasons set forth in the Notice, the Staff Report, the Supplemental ISOR, in staff's comments and responses at the hearing, and in this FSOR, ARB has determined that no alternative considered by the agency, or that has otherwise been identified and brought to the attention of the agency, would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective or less burdensome to affected private persons than the adopted regulation.

II. MODIFICATIONS TO THE ORIGINAL PROPOSAL

A. An Overview of the Original Proposal

1. Background

California has enacted some of the most stringent emission control requirements in the world for passenger cars, light- and medium-duty vehicles, heavy-duty vehicles and the engines used in such vehicles, and motorcycles. Without the assurance that those vehicles or engines will be equipped with emission-control components that are effective and durable for the certified useful life periods, the emission reductions and health benefits to Californians envisioned by these stringent emission control requirements will not be fully realized.

California Health and Safety Code (HSC) section 43105 authorizes ARB to order a recall or other corrective action for violations of its emission standards or test procedures. Under this same authority, ARB has wide discretion to determine the facts constituting compliance with these emission standards and test procedures, to fashion corrective action, including recalls and other remedies, for noncompliance, and to adopt procedures for making these determinations. HSC section 43106 requires that

production vehicles or engines must in all material respects be substantially the same as the certification test vehicles manufacturer use to obtain ARB's certification.

In 1982, the Board adopted regulations that established ARB's first in-use vehicle recall program. The regulations were intended to reduce vehicular emissions by: (1) ensuring that noncompliant vehicles are identified, recalled, and repaired to meet the applicable emission standards and comply with the test procedures in customer use; and (2) encouraging manufacturers to improve the design and durability of emission control components to avoid the expense and adverse publicity of a recall.

In 1988, as an expansion to the 1982 in-use program, ARB adopted the Emissions Warranty Information Reporting (EWIR) regulations (title 13, CCR, sections 2141-2149) for tracking emission-control component defects affecting on-road vehicles. The EWIR regulations require manufacturers to review all emission-related warranty claims on a quarterly basis to determine the number of repairs or replacements made for each component. Each manufacturer must report warranty activity that exceeds a one percent level and has additional reporting requirements when a component's warranty claim rate exceeds four percent on an engine family or test group basis. When an emission-control component's EWIR rate exceeds a true four percent level, the defect is considered to be systemic in nature. Should in-use vehicles or engines exhibit a systemic defect and the manufacturer's EWIR submittals acknowledge that fact, the staff considers the situation to be a violation of test procedure requirements and possibly emission standards. The warranty reporting regulations apply to all on-road 1990 and newer model-year passenger cars, light-, medium-, and heavy-duty trucks, California-certified engines used in such vehicles, and motorcycles.

In some cases, usually involving relatively small vehicle populations or simple defects, in which manufacturers have reported valid warranty claims in excess of four percent for an emission control device manufacturers have agreed to correct the situation by recalling the affected vehicles and installing more durable emission control devices. In other cases manufacturers have agreed to extend the emission control warranties on the components in question. In many other cases, however no corrective action has occurred. In two notable cases that involved large vehicle populations and more complex defects, Daimler-Chrysler Corporation and Toyota Motor Corporation claimed (over ARB's objection) that despite evidence of a pervasive defect in the emission control components or systems of their vehicles, the ARB was not authorized to order that the defect be corrected since the affected vehicles allegedly did not exceed emission standards, on average for all vehicles, over their useful lives.

The Toyota case was litigated and an administrative law judge upheld Toyota's claim. As a result, Toyota did not correct the defects ARB had determined to exist in the on-board diagnostic (OBD) systems in over 300,000 of its vehicles in California. In response, the Board amended the OBD regulations to enhance their enforceability so that should a similar OBD defect occur in the future, corrective action would result.

The Daimler-Chrysler case involved dozens of models, sold over several years, many of whose catalytic converter substrates disintegrated in use. Despite ample evidence that the catalyst design was defective and that catalysts were failing in-use, ARB was not able to show that for each individual model the catalyst failure would result in the subject vehicles exceeding emission standards, on average, during the vehicles' useful life. The result was a 2005 settlement agreement in which Daimler-Chrysler agreed, among other things, to remedy only 27 percent of the vehicles that contained the catalyst that ARB had determined to be defective. Had the proposed amendments discussed below been in place, staff believes most of the Chrysler vehicles involved in that matter would have undergone corrective action and that corrective action would have been implemented in many other cases where high warranty claims rates occurred.

2. The Originally-Proposed Amendments

Based on the Board's statutory authority and its experience in the implementation and administration of the EWIR regulations, the staff identified three aspects of the preexisting regulation that need improvement, specifically: (1) the proof required to demonstrate violations of ARB's emission standards or test procedures, (2) the corrective actions available to ARB to address the violations and, (3) the way emissions warranty information is reported to ARB. The proposed amendments targeted these aspects of the current regulations and were designed to result in corrective action to more vehicles that have defective emission control devices or systems, thereby reducing emissions.

After it adopted the EWIR regulations, the Board adopted regulations (title 13, CCR, sections 1968.1-1968.5) requiring OBD systems on most new vehicles sold in the state. These requirements offer ways of determining vehicles' compliance with emission standards and test procedure requirements that were not taken into account when the EWIR regulations were originally adopted. The original proposal was designed to capitalize on the ability of the now mature OBD program to detect failing components, prompt drivers to seek repairs and ensure that vehicles with systemic emission control defects are corrected by the vehicle manufacturers in a more timely and effective manner than is occurring under the current regulations. The original proposal would also streamline administration and reduce program reporting. The staff also proposed to link directly the exceedances of emissions warranty reporting levels with ARB's durability certification test procedures. The proposed amendments would take effect with the 2010 model year.

a. Proof of Violations

Staff proposed a change in the proof necessary for determining if a group of vehicles is in violation of emission standards or test procedures. Under staff's proposal, once a group of vehicles exceeds a valid warranty claim rate threshold of four percent or 50 vehicles, whichever is greater, ("warranty claims threshold") it would be considered to be in violation of test procedures and possibly emission standards and the manufacturer would be required to implement a recall and/or other corrective action, as

specified. The preexisting standard that a class or category of vehicles must exceed an emission standard on average over its useful life would be eliminated.

b. Corrective action

Under the staff's proposal, if the warranty claims threshold is exceeded for an exhaust after-treatment device, the Executive Officer may order a recall and/or other corrective action, including an extended warranty, but recall would be the remedy that would be considered first. If the warranty claims threshold is exceeded for emissions components other than exhaust after-treatment devices, the Executive Officer may also order a recall and/or other corrective action, including an extended warranty, but the extended warranty would be the remedy that would be considered first. For vehicles with malfunctioning on-board computers, vehicles not equipped with OBD, or vehicles equipped with OBD systems that do not function properly, a recall and/or corrective action, including an extended warranty, would be required when the warranty claims threshold is exceeded for any emissions component, with the recall remedy being considered first. All replacement parts would be required to be of improved quality and durability.

In some cases, extended warranties could be required for periods beyond the affected vehicles' useful lives. For passenger cars, light-duty trucks and medium-duty vehicles, the extended warranty could not exceed 15 years or 150,000 miles, whichever occurs first. For heavy-duty vehicles and their engines, the extended warranty was to be 10 years, 200,000 miles, or 6000 hours, whichever is less. For motorcycles, the extended warranty period was the useful life of the motorcycle.

The proposed amendments would make it clear that manufacturers may request hearings when recalls are ordered, and that the record would be limited to the information generated in the emissions warranty reports and any other information required by the Executive Officer up to the date of the recall order. Consistent with statute, under the staff's proposal hearings would not be available when other types of corrective action besides recall are ordered, but parties would retain all rights to challenge such orders in court.

c. Reporting

The proposal would increase the threshold for which an EWIR is required from one percent to four percent or 50 claims (whichever is greater) for all model vehicles subject to reporting requirements. Follow up EWIR reports would be required on an annual basis, rather than quarterly. When the unverified warranty claims rate reaches ten percent, a Supplemental Emissions Warranty Information Report (SEWIR) would be required. The SEWIR replaces the FIR, which currently is issued when an unverified claims rate exceeds four percent. The SEWIR would determine the valid claims rate, and if above four percent would trigger the corrective action process. The FIR report would no longer be required.

B. Modifications to the Original Proposal

1. Revising the Length of an Extended Warranty Serving as a Corrective Action

The Board modified the "extended warranty" definition in section 2166.1(h) so that extended warranty will be equal to the useful life for all passenger cars, light-duty trucks, medium-duty vehicles and engines, and heavy-duty vehicles and engines. The end of a vehicle's useful life as specified in ARB's regulations makes a natural endpoint for any extended warranty required of a manufacturer. For all passenger cars and light-duty trucks other than those certified as partial ZEV allowance vehicles (PZEVs), this will reduce the length of the warranty. For heavy-duty vehicles and engines, this modification will extend the potential extended warranty period.

While the extended warranty that must accompany a new PZEV at time of sale is 15 years or 150,000 miles, ARB's regulation provides that the time period for the battery pack of a hybrid-electric vehicle (HEV) is only 10 years. Since the shorter warranty period for the battery pack of a HEV reflects uncertainty in the lifetime of this component manufacturers asserted that any corrective action involving an extended warranty for battery packs should not exceed its warranty period. Because this consideration has merit, 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).

2. Identifying Instances in Which Particular Types of Warranty Claims May Be Screened Out

An "infant mortality" provision has been added in section 2168(b) that allows for early systemic emission component failures that manifest themselves very early in the emission warranty period. If such a case is demonstrated by the manufacturer and appropriate early corrective action is implemented and satisfactorily completed early in the warranty period, the manufacturer may not be subject to additional corrective action as required under Article 5, title 13, CCR. Language was also included that if the failure rate for a specified emission component continues to rise beyond the manufacturer's expected failure rate, the manufacturer would be required to perform corrective action for the identified emission component. The reason for this change was in response to industry's request to eliminate the need for corrective action for emission components that fail early within the normal emissions warranty period.

A new provision was added in section 2168(c) that allows for screening criteria for removing warranty claims from the emission warranty information reporting database when emission components were replaced due to vehicle abuse, misdiagnosis or customer satisfaction issues. If these factors can be established, it is not appropriate to count the claim as a warranty failure. The reason for this change was in response to industry's request to provide screening mechanisms for evaluating emission components repaired or replaced improperly under the emissions warranty.

A new provision was added in section 2168(d) to allow for secondary component failures to be removed or screened from the emission warranty information reporting database when emission components were replaced as a direct result from a primary component failure. The reason for this change was in response to industry's request to recognize that some component failures are replaced under the emissions warranty as a direct result of the failure of another component or system.

A new provision was added in section 2168(e) was added so that manufacturers that voluntarily recall an emission component may not be required to report a Supplemental Emissions Warranty Information Report for these components. The reason for this change was in response to industry's request to not have to provide a Supplemental Emissions Warranty Information Report for emission components already replaced under recall. A manufacturer will be allowed 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 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.

New section 2168(f) was added to address a systemic emission component failure that will have no emissions impact under any conceivable condition. Manufacturers that demonstrate this condition to the satisfaction of the Executive Officer will not have to perform further corrective action outside of normal warranty coverage, since there will be no adverse emissions impact.

New section 2168(g) was added to address systemic OBD recalibration repairs that are not being installed to correct an emissions exceedance or an OBD compliance issue. In these cases it is not appropriate to require manufacturers to provide further corrective action outside of normal warranty coverage, and under the modification they will not be required to do so.

3. Providing Public Hearing Process to Challenge All Types of Corrective Actions Including Extended Warranties.

A modification to section 2174(a) allows a manufacturer to request a public hearing to contest not just recalls as originally drafted but also other ordered corrective actions such as an extended warranty. The considerations regarding a challenge of a recall order apply equally to other sorts of ordered corrective actions.

4. Test Procedure Requirements Relating to Durability of Emission Control Components.

This rulemaking includes amendments to five ARB Test Procedures. Three of these cover certification to the exhaust emission standards for (1) passenger cars, light-duty trucks and medium-duty vehicles, (2) heavy-duty diesel engines, (3) heavy-duty Otto-

cycle engines. The other two cover certification of all motor vehicles to ARB's evaporative emission standards and refueling emission procedures.

Under the original proposal, language being added to each of these Test Procedures provided that manufacturers shall demonstrate at the time of certification that their emission control devices would not exceed a valid failure rate of 4% or 50 vehicles. Industry expressed a concern on their ability to demonstrate at time of certification they would not exceed the 4% failure rate requirement. In response, the new language in the Test Procedures has been modified to require that manufacturers instead include a statement that, at the time of certification, based on good engineering judgment and available information, the emission control devices on their vehicles or engines are durable and are designed and will be manufactured to operate properly and in compliance with all applicable requirements for the full useful life (or allowable maintenance interval) of the vehicles or engines. Language has also been added stating that vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. Finally, language was added that notifies the manufacturer that if it is determined any emission control component or device experiences a systemic failure because valid failures for that component or device meet or exceed four percent or 50 vehicles (whichever is greater) in a California-certified engine family or test group, it constitutes a violation of the test procedures and the Executive may take corrective action. A modification also clarifies that ongoing warranty actions will not result in the denial of new certification applications provided the manufacturer commits to correct the violation. Overall, these modifications more effectively clarify and identify the test procedure durability requirements that can trigger corrective actions if the manufacturer fails to comply.

5. Waiver of Requirements in Instances of Undue Burdens

Section 2166(d) was modified such that the requirements of Article 5, Chapter 2, Division 3, Title 13, CCR can be waived if the Executive officer determines that the requirements constitute an "undue" burden as opposed to an "unwarranted" burden as originally proposed. A statement was also added that, when making a determination of an undue burden, the Executive Officer may, but is not required to, consider the economic impact or emissions impact of the requirement, except as provided in section 2168(f), title 13, CCR. These modifications were made to make the waiver determination consistent with the new regulatory standard that the amendments are adopting, i.e., one that is focused primarily on the failure rate of emissions components, not on the emissions or economic consequences of the failures.

6. Technical or Minor Modifications Regarding Applicability of Requirements

§2111. Applicability.

The (a)(1) provision was amended so that the applicability of this section ends with the 2009 model year passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty

vehicles and motorcycles. Section (d) was eliminated because the changes to section (a)(1) duplicate the components of section (d).

§2136. General Provisions.

In the amended provision, staff inadvertently removed the provisions to perform in-use compliance testing on 2010 and subsequent model year vehicles or engines. Modifications were added to authorize ARB to continue in-use compliance testing on 2010 and subsequent model year vehicles and engines.

§2166. General Provisions.

The proposed provision (a)(1) was modified to remove the applicability reference of off-road motorcycles and all-terrain vehicles from Article 5, title 13, CCR. The reason for this change was that this language was not consistent with the current warranty reporting program as noted by the motorcycle industry.

7. Technical or Minor Modifications Regarding Definitions

§2166.1. Definitions.

The proposed (c) definition for “Correlation factor” was removed from this section since it is not applicable to this article.

The proposed (d) definition for “Emission control component” or “emission-related component was modified to be defined as the components described in the manufacturer’s approved application for certification of a warranted part pursuant to Article 6, title 13, CCR. The reason for this change was in response to industry’s request to simplify this definition for clarity.

The proposed (e) definition for “Emission Warranty Claim” was modified to clarify applicability as requested by industry.

The proposed (h) definition for “Extended Warranty” was modified so that corrective action only applies to the vehicles’ or engines’ useful life. Industry also requested modification for battery pack extended warranties on hybrid electric vehicles to be limited to the lesser of the vehicles’ useful life or 10 years.

The (i) definition of “Emission Warranty Information Reporting Termination Point” was added to indicate when applicable reporting periods will end. The reason for this inclusion was in response to industry’s request to define when reporting periods conclude.

The proposed (k) definition for “Nonconformity” or “noncompliance” excluded the words “emission standards” to clarify that nonconformities subject to Article 5, title 13, CCR, will be tied to violations of the test procedures only.

The proposed (n) definition for “Systemic Failure” was modified to define that the affected vehicles would be based on California certified engine families or test groups. The reason for this change was in response to industry’s request to define the applicability of Article 5, title 13, CCR to California vehicles.

The proposed (p)(8) definition for useful life was modified to include partial zero emission vehicles.

The proposed (r) definition for “Violation of emission standards” was removed and a new definition “Valid failure” or “valid failure rate” was added to represent the true and accurate failure rate of a specific emission component as performed under the vehicles’ or engines’ emissions warranty. The reason for this change was to clarify that nonconformities subject to Article 5, title 13, CCR, will be tied to violations of the test procedures only.

The proposed (u) definition “Voluntary Emission Recall” was changed to “Voluntary Recall” to clarify that nonconformities subject to Article 5, title 13, CCR, will be tied to violations of the test procedures only.

8. Technical and Minor Modifications Regarding Reporting Requirements

§2167. Emission Warranty Information Report.

The proposed provision (a)(1) was modified to ensure that collected warranty claims would be based on California warranty claims. The reason for this change was in response to industry’s request to clearly define “warranty claims” as “California warranty claims.”

The proposed provision (a)(2) was modified to count multiple repairs with the same part number (e.g., replacing three fuel injectors with the same part number) in a single service event as one warranted repair for that service event. The reason for this change was in response to industry’s request for handling a single service event with multiple components with identical part numbers being repaired or replaced.

With the exception of exhaust after-treatment devices and computer related repairs including calibration updates, the proposed provision (4) was modified so that manufacturers must report any emission-related component that is not subject to the partial zero emission vehicle warranty of 15 years or 150,000 miles excluding the emission energy storage device used for traction power.

The proposed provision (b) was modified to clarify that, when submitting the Emission Warranty Information Report, the test group or engine family name and part number name cannot be duplicated in subsequent reporting of these records. The database in which these files are stored will not allow for duplicate records to be uploaded into the system.

The proposed provision (b)(3) was modified stating that after filing an Emission Warranty Information Report file, the component name cannot be changed in subsequent filings without approval from the ARB database administrator. The reason for this change allows for meaningful analysis of the warranty data.

The proposed provision (b)(5) was modified to clarify that the warranty data is based on warranty repairs received under the California warranty regulations. The reason for this change was in response to industry's request for this modification.

The proposed provision (b)(6) was modified to clarify how the warranty claims percentage is calculated.

The proposed provision (b)(9) was modified to clarify that the action status report code will be determined by the ARB database administrator.

The proposed provision (c) was modified to clarify that reporting will continue until the "Emission Warranty Information Reporting Termination Point" is reached. This termination point was clarified in Section 2166.1(i), title 13, CCR.

§2168. Supplemental Emission Warranty Information Report.

The proposed provision (a) was modified to incorporate four changes to this section. The changes included: 1) amended language that the Supplemental Emission Warranty Information Report shall be filed 60 days "after" the Emissions Warranty Information Report reaches the specified trigger level, 2) deleted provisions to file the Supplemental Emission Warranty Information Report in an electronic format similar to the Emissions Warranty Information Report, 3) added language determining when to terminate filing the Supplemental Emission Warranty Information Report, and 4) added language that allows manufacturers to terminate filing a Supplemental Emission Warranty Information Report with approval of the Executive Officer. The reason for some of these changes was in response to industry's request for modifications to the reporting criteria.

The proposed provision (e) has been moved to (j) and was modified to eliminate the requirement to electronically report the Supplemental Emissions Warranty Information Report in the same format as the Emissions Warranty Information Report. This provision allows ARB to specify the electronic format for the Supplemental Emissions Warranty Information Report at a later date.

The proposed provision (e)(2) has been moved to (j)(2) and clarifies that the Supplemental Emissions Warranty Information Report will be reported for each emission-related component that reaches the specified reporting levels indicated in Section 2168(a), title 13, CCR.

The proposed provision (e)(4) has been moved to (j)(4) and includes the citation for the heavy-duty Engine Manufacturer Diagnostic and OBD system sections of 1971 and

1971.1, respectively. The reason for this change was in response to industry's request for this modification.

The proposed provision (e)(7)(v) has been moved to (j)(7)(v) and was subsequently eliminated because this provision no longer applies to this section.

The proposed provision (k) was added so that the Executive Officer can request further details from the manufacturer supplying the Supplemental Emissions Warranty Information Report (e.g., presenting further details on why dealers are replacing emission components with no identified failure).

9. Technical and Minor Modifications Regarding Corrective Action Requirements

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

The proposed provision (a) was modified to clarify that exhaust after-treatment device failures be recalled for only those affected vehicles in an identified engine family or test group. The reason for this change was in response to industry's request for this modification.

The proposed provision (b) was modified to clarify that an extended warranty could be used as a supplement to recall action as required in provision (a). Manufacturers requested this change so that it was clear that the provision was not requiring a recall and an extended warranty for addressing exhaust after-treatment device failures in every case.

§2170. Recall and Corrective Action for Other Emissions-Related Component Failures (On-Board Diagnostic-Equipped Vehicles and Engines).

The proposed provision (c) was added for manufacturers that provide emissions warranty coverage for their vehicles or engines for the full useful life. Manufacturers who warrant to the full useful life may not have to provide corrective action for systemic emission component failures (with the exception of exhaust after-treatment devices).

§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.

The proposed provision (a) was modified to include the heavy-duty OBD regulatory citation title 13, CCR, section 1971.1. The reason for this change was in response to industry's request for this modification.

The proposed provision (b) was modified to clarify that an extended warranty could be used as a supplement to recall action as required in provision (a). Manufacturers requested this change so that it was clear that the provision was not requiring a recall and an extended warranty for addressing systemic failures in every case.

The proposed provision (c) was added for manufacturers that provide emissions warranty coverage for their vehicles or engines for the full useful life. Manufacturers who warrant to the full useful life may not have to provide corrective action for systemic emission component failures (with the exception of exhaust after-treatment devices).

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

This proposed provision was amended to allow manufacturers additional time to submit a corrective action plan as long as good cause is shown to the Executive Officer. The reason for this change was in response to industry's request to allow additional time, if needed, to file a corrective action plan.

§2172.1. Ordered or Voluntary Corrective Action Plan.

The proposed provision (a) was changed to clarify that a recall or corrective action plan shall be submitted to ARB's modified mailing address within the time frame specified in section 2172.

§2172.3. Notification of Owners

The proposed provision (d)(1) was amended revising the opening statement of the owner notification letter indicating that the vehicle or engine has a problem and requires corrective action. The reason for this change was in response to industry's request for this modification.

The proposed provision (d)(10) was amended eliminating the off-road motorcycle inclusion.

III. SUMMARY OF PUBLIC COMMENTS AND AGENCY RESPONSES

The Board received written and oral comments in connection with the December 7, 2006, and March 22, 2007, hearings. Additional written comments were submitted during the 15-day supplemental comment period.

Set forth below is a summary of each objection or recommendation specifically directed to the proposed regulation or to the procedures followed by ARB in proposing or adopting the regulation. Each comment is followed by the agency response explaining how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. The comments have been grouped by topic wherever possible. Comments that do not involve objections or recommendations specifically directed towards the rulemaking, or to the procedures followed by ARB in this rulemaking are generally not summarized below. Additionally, any other referenced documents are not summarized below. Staff incorporates the

Supplemental ISOR here, which summarized and responded to many, if not all, of the comments received up to January 23, 2007.

The regulatory action was supported by the Natural Resources Defense Council, the Union of Concerned Scientists, Environmental Defense, the Sierra Club of California, the American Lung Association of California, the Coalition for Clean Air, and the South Coast Air Quality Management District.

A. Summary of Public Comments Presented Prior to or at the Hearing and Agency Responses

During the 45-day comment period, the Board received written comments from the following persons or entities. The identifier in the right column is used to attribute each listed comment to the person or entity submitting the comment.

Julie Becker	Alliance of Automobile Manufacturers	Alliance
John W. Duerr	Detroit Diesel Corporation	DDC
David Munoz	Automotive Service Provider	ASP
Bob Renteria	Automotive Service Provider	ASP
Bob Little	Automotive Service Provider	ASP
Brad Kyle	Automotive Service Provider	ASP
Matthew Corson	Automotive Service Provider	ASP
Nick Modesti	Automotive Service Provider	ASP
Aaron Lowe	Automotive Aftermarket Industry Association	AAIA*
John Goodman	Automotive Engine Rebuilders Association	AAIA*
William Gager	Automotive Parts Remanufacturers Association	AAIA*
Bob Constant	Automotive Services Councils of California	AAIA*
David McClune	California Autobody Association	AAIA*
Martin K. Keller	California Automotive Business Coalition	AAIA*
Rodney Pierini	California Automotive Wholesalers Association	AAIA*
Chuck Spiteri	Automotive Service Provider	ASP
Pamela Amette	Motorcycle Industry Council, Inc.	MIC
Norbert Krause	Volkswagen of America, Inc.	VW
Mike Howe	Automotive Service Provider	ASP
Scott Brown	Automotive Service Provider	ASP
Craig Wells	Automotive Service Provider	ASP
Denny Kahler	Automotive Service Association	ASA
Gordon R. Gerber	Caterpillar Inc	Caterpillar
K. Shiraishi	Mitsubishi Motors Corporation	Mitsubishi
Brent Black	International Automotive Technicians' Network	iATN
Dean Saito	South Coast Air Quality Management District	SCAQMD
Sara Rudy	Ford Motor Company	Ford
Diane Bailey & Miriam Rotkin-Ellman*	Natural Resources Defense Council	NRDC*
Don Anair	Union of Concerned Scientist	NRDC*

Kathryn Phillips	Environmental Defense	NRDC*
Bill Magavern	Sierra Club California	NRDC*
Bonnie Holmes-Gen	American Lung Association of California	NRDC*
Tom Plenys	Coalition for Clean Air	NRDC*
Kevin McCartney	Citizen	PC
Steven Douglas	Alliance of Automobile Manufacturers	Alliance
Barry Wallerstein	South Coast Air Quality Management District	SCAQMD
Paul Frech	Automotive Trade Organizations of California	ATOC
Michael Mahneke	Automotive Service Provider	ASP
Nikki Ayers	Independent Automotive Professionals Association	IAPA
Timothy Kitt	Independent Automotive Professionals Association	IAPA
Michael Self	Citizen	PC
Craig Johnson	Citizen	PC
John M. Cabaniss Jr.	Association of International Automobile Manufacturers	AIAM
Karl Simon	United States Environmental Protection Agency	U.S. EPA
Vama Emfinger	Automotive Service Provider	ASP
Jed Mandel	Engine Manufacturers Association	EMA

AAIA* This letter was signed by a coalition of 7 industry associations in opposition to the rule.

NRDC* This letter was signed by a coalition of 6 environmental and public health advocates.

Additional written comments were received on the day of the December 7, 2006 and March 22, 2007 Board hearing from:

Daniel Goycochea	Citizen	PC
Reginald R. Modlin	DaimlerChrysler Corporation	DCC
Kinglsey Macomber	Sierra Research	MIC
Alan Weverstad & Tim McCann	General Motors Corporation	GM
Roger T. Gault	Engine Manufacturers Association	EMA
Philip Fournier	Automotive Service Council of California	ASCCA
Allen Pennebaker	Automotive Service Council of California	ASCCA

At the December 7, 2006 hearing, oral testimony was presented by:

Nikki Ayers	Ayers Automotive Repair	ASP
Ann Gallon	Sierra Club	Sierra
Tony Martino	General Motors	GM
Steve Douglas	Alliance of Automobile Manufacturers	Alliance

Sara Rudy	Ford Motor Company	Ford
Norman Plotkin	California Automotive Wholesalers Association	CAWA
Martin K. Keller	California Automobile Business Coalition	CalABC
Kingsley Macomber	Motorcycle Industry Council	MIC
John Cabaniss	Association of International Automobile Manufacturers	AIAM
Jed Mandel	Engine Manufacturers Association	EMA
Denny Kahler	Automotive Service Association	ASA
Dean Saito	South Coast Air Quality Management District	SCAQMD
Dave Patterson	Mitsubishi Motors of America, Inc.	Mitsubishi
Bob Klingenberg	Automotive Service Council of California Association	ASCCA
Alan Prescott	Ford Motor Company	Ford
Aaron Lowe	Automotive Aftermarket Industry Association	AAIA

At the March 22, 2007 hearing, oral testimony was presented by:

Tony Martino	General Motors	GM
Steve Douglas	Alliance of Automobile Manufacturers	Alliance
Sara Rudy	Ford Motor Company	Ford
Norman Plotkin	California Automotive Wholesalers Association	CAWA
John Cabaniss	Association of International Automobile Manufacturers	AIAM
Dave Patterson	Mitsubishi Motors of America, Inc.	Mitsubishi
Alan Prescott	Ford Motor Company	Ford
Aaron Lowe	Automotive Aftermarket Industry Association	AAIA
Jeffrey Bossert Clark	Kirkland & Ellis LLP	Alliance
Pamela Amette	Motorcycle Industry Council, Inc.	MIC
Roger T. Gault	Engine Manufacturers Association	EMA
Vaughn Burns	DaimlerChrysler Corporation	DCC
Doug Kortof	Private Citizen	PC
Jim O' Neil	Automotive Service Provider	ASP
Larry Nobriga	Automotive Service Council of California Association	ASCCA
Paul Frech	Automotive Trade Organizations of California	ATOC
Zarkis Martirosian	Automotive Service Council of California	ASCCA
Glenn Davis	Automotive Service Council of California	ASCCA
Bud Rice	Automotive Service Provider	ASP
Allen Pennebaker	Automotive Service Council of California	ASCCA
Henry Hogo	Air Quality Management District	SCAQMD
Bill Magavern	Sierra Club California	SCC

1. Main Comments

1. Comment: The Board should adopt the amendments to the warranty reporting and recall procedures. (SCAQMD, U.S. EPA, SCC, NRDC*)

   Agency Response: We appreciate this comment. ARB has adopted the proposed amendments to the warranty reporting and recall procedures with modifications.

2. Comment: The staff has not adequately explained the purpose of the proposed regulation, and the unstated purpose would invalidate the proposal. Agencies may not engage in post hoc rationalizations because they think that such purposes appear more palatable than the real ones. In other words, the ARB assumes systemic emission component failures will cause an excess emissions problem for a given engine family or test group. The April 2006 Mailout does not give adequate notice of the staff's proposal that was contained in the Hearing Notice released October 20, 2006. (Alliance)

   Agency Response: We disagree. The April 2006 Mailout gave adequate notice of the proposal the staff presented to stakeholders at the May, 2006 workshop. The staff's proposal evolved after the May 2006 workshop. The purpose of the amendments is adequately explained in the Hearing Notice, the ISOR, the Supplemental ISOR, and the 15-day Notice which are incorporated by reference here and all give adequate notice of the amendments. The staff believes that it is reasonable to conclude that excess emissions can result from systemic failures of emission control component.

   For example, the October 20, 2006 Notice for the amendments provides at page 3:

   > "Based on the Board's statutory authority and its experience in the implementation and administration of the EWIR regulations, the staff has identified three aspects of the existing regulation that need improvement, specifically: (1) the proof required to demonstrate violations of ARB's emission standards or test procedures, (2) the corrective actions available to ARB to address the violations and, (3) the way emissions warranty information is reported to ARB. The proposed amendments target these aspects of the current regulations and, if adopted, will result in corrective action to more vehicles that have defective emission control devices or systems, thereby reducing emissions."

   The ISOR provides at page 31:

   > "California has enacted some of the most stringent emission requirements for passenger cars, light- and medium-duty vehicles, heavy-duty vehicles and engines used in such vehicles, and motorcycles. Without the assurance that those vehicles or engines will be equipped with emission-control components that are both effective and durable for the certified useful life periods, the envisioned health benefits to Californians will not be fully realized.

> Systemic defects involving emission-control components are routinely identified on relatively new vehicles sold in California each year. The current regulations whose objective is to implement corrective action for failing components are not doing their job. Therefore, staff has developed revisions to these regulations that will result in more defective emission-control components being repaired or replaced. The proposed revisions will also reduce the amount of reporting required of vehicle and engine manufacturers. Staff recommends the Board adopt the proposed amendments to California's emission warranty information reporting and recall regulations and test procedures."

The Supplemental ISOR provides at page 1:

> "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."

There are no unstated purposes for the amendments. Pages 2-10 of the ISOR discuss the history of the program and present and analyze data indicating that under the current regulations corrective action occurred in relatively few cases where defects in emission control components were reported. The ISOR also indicates that it is likely that excess emissions occurred as a result of these defects going uncorrected. The purpose of the amendments is to remedy this situation. The staff believes that increased emissions likely result when emissions control components fail at systemic rates. The amendments will protect emission standards.

3. Comment: The amendments are deficient in several areas: emission standards, compliance statement, due process and extended warranty. The amendments ignore emission standards, which is inappropriate and unnecessary. The compliance statement is not a test procedure the violation of which can trigger corrective action. The amendments violate due process because they improperly limit the evidence and defenses the manufacturers can employ at hearings on the Executive Officer's decision to require corrective action. ARB has no authority to order extended warranties. The amendments also fail to adequately address three other issues. The staff's economic analysis is deficient. The staff failed to adequately analyze all regulatory alternatives. The amendments impermissibly adopt a prescriptive standard instead of a performance standard. The commenter cites various legal authorities. (Alliance).

   Note: These comments are separately restated and responded to below.

4. Emission Standards Comment: The amendments ignore emission standards, which is inappropriate and unnecessary. (Alliance).

Agency Response: The amendments do not ignore emission standards; in fact as discussed in the Response to Comment 2, above, the purpose of the amendments is to protect the emission standards and prevent excess emissions. The amendments do not establish emission standards, however. Instead, as described in section 2166(e), and in accordance with ARB's statutory authority, the amendments establish:

> "….procedures for reporting emissions warranty information and procedures for determining, and the facts constituting, compliance or failure of compliance with and violations of emission standards and 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 HSC section 43105 to require recalls or other corrective action in other types of situations."

The amendments accomplish this, in part, by adopting the following requirement in the durability provisions of the ARB's test procedures:

> "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 and in compliance with all applicable requirements for the full useful life (or allowable maintenance interval) of the vehicles or engines. Also, vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If it is determined pursuant to title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174 that any emission control component or device experiences a systemic failure because valid failure for that component or device meet or exceed four percent or 50 vehicles (whichever is greater) in a California-certified engine family or test group, it constitutes a violation of the foregoing test procedures and the Executive Officer of the Air Resources Board may require that the vehicles or engines be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Certification applications may not be denied based on the foregoing information, provided that the manufacturer commits to correct the violation."

ARB has wide discretion to adopt test procedures to determine whether vehicles are in compliance with the emission standards and this requirement is well within ARB's statutory authority. (See, e.g., HSC section 43104 and 43105.) The pitfalls of basing corrective action for systemic emission component failures are well described in the ISOR at pp. 4-10. The amendments establish a test procedure that will allow ARB to determine whether vehicles certified to ARB's emission

standards comply with those emission standards at the time of production and throughout their useful lives, i.e. whether the vehicles and engines tested for certification are durable and are, in all material respects, substantially the same as production vehicles or engines and, that the emission control components or devices on the production vehicles or engines continue to operate properly throughout the useful lives of the vehicles or engines.

Federal test procedures have durability requirements and HSC section 43104 requires ARB to base its test procedures on their federal counterparts. These durability requirements guarantee that vehicles will continue to meet the emission standards they were certified to over their useful lives. HSC section 43105 prohibits manufacturers from producing vehicles that violate emission standards or test procedures, unless the manufacturer takes corrective action which may include a recall, "specified by the state board in accordance with regulations of the state board." "The procedures for determining, and the facts constituting, compliance or failure of compliance shall be established by the state board." This is precisely what the amendments do. They establish test procedures and they establish the procedures for determining compliance with them. They also establish the corrective action that may be required in the event of violations of the test procedures. ISOR pp. i-iv, 1-4, 6-21, 27-29, 31; Supplemental ISOR pp. 1-2, 7-10, which are incorporated by reference here.

The basis for making the amendments goes beyond the need to correct deficiencies that came to light in the Toyota and DaimlerChrysler cases, although either case would provide a sound basis for the amendments by itself. As discussed on pp. 4-10 of the ISOR, over the 18 years the staff has administered the emissions warranty information reporting and recall regulations, problems have arisen in obtaining corrective action when emissions-control components fail at high levels in use. These problems can be traced to the unreasonably high burden of proof that the current regulation places on the Executive Officer in order to require that corrective action be carried out, specifically that the affected vehicles will violate numerical emissions standards on average over their useful lives. Because of this unreasonably high burden, in many instances where systemic failures of emissions control components occur, the Executive Officer is unable to require manufacturers to carry out corrective action. The amendments will provide a much clearer standard for requiring corrective action and will lead to many more corrective actions being taken in the event of systemic emissions component failures. Staff believes that it is feasible for all manufacturers to comply with the amendments. Historically, most emissions components have not failed at 4% rates over the warranty periods of the vehicles they are installed in. See also the Response to Comment 5.

5. Test Procedure Comment: The compliance statement is not a test procedure the violation of which can trigger corrective action. (Alliance.)

Agency Response: We disagree. The compliance statement (quoted in its entirety in the Response to Comment 4) was modified in response to comments, and is indeed a test procedure element that guarantees that emissions control components on production vehicles will be durable and function properly throughout the useful lives of the vehicles they are installed on, and guarantees that production vehicles are substantially similar in all material respects to the vehicles that manufacturers test to prove that their production vehicles pass emission standards and are entitled to ARB's certification. This is entirely appropriate and well within ARB's statutory authority.

HSC Section 43105 provides:

> "No new motor vehicle, new motor vehicle engine, or motor vehicle with a new motor vehicle engine required pursuant to this part to meet the emission standards established pursuant to Section 43101 shall be sold to the ultimate purchaser, offered or delivered for sale to the ultimate purchaser, or registered in this state *if the manufacturer has violated emission standards or test procedures and has failed to take corrective action, which may include recall of vehicles or engines, specified by the state board in accordance with regulations of the state board.* If a manufacturer contests the necessity for, or the scope of, a recall of vehicles or engines ordered pursuant to this section and so advises the state board, the state board shall not require such recall unless it first affords the manufacturer the opportunity, at a public hearing, to present evidence in support of the manufacturer's objections. If a vehicle or engine is recalled pursuant to this section, the manufacturer shall make all necessary corrections specified by the state board without charge to the registered owner of the vehicle or vehicle with such engine or, at the manufacturer's election, reimburse the registered owner for the cost of making such necessary corrections. *The procedures for determining, and the facts constituting, compliance or failure of compliance shall be established by the state board*." Emphasis added.

HSC section 43105 gives ARB a great deal of authority to order a recall or other corrective action for violations of its emission standards or test procedures. Along with this authority, section 43105 gives ARB wide discretion to determine the facts constituting compliance with emission standards and test procedures, to fashion remedies for noncompliance and to adopt procedures for making these determinations. The proposed amendments all fall within section 43105's grant of authority, and within the authority bestowed by the other statutes discussed below as well.

Warranty reporting thresholds are linked to vehicle durability and can also be considered test procedures, the violation of which would entitle ARB to order recall or other corrective action. The Health and Safety Code contains no definition of the term "test procedures" comparable to the definition it provides for "emission

standards", but the language of sections 43104 and 43105 suggests that "test procedures" means the test procedures that manufacturers must conduct to obtain ARB's certification to sell their products in California. HSC section 43104 provides, in pertinent part:

> "For the certification of new motor vehicles or new motor vehicle engines, the state board shall adopt, by regulation, test procedures and any other procedures necessary to determine whether the vehicles or engines are in compliance with the emissions standards established pursuant to Section 43101. "

The warranty reporting thresholds are being made part of the test procedures, providing solid grounds for the ARB to order recall or other corrective action when a warranty reporting threshold is violated.

HSC section 39027 defines "emission standards" as "specified limitations on the discharge of air contaminants into the atmosphere". Many warranty claims are made because owners are prompted to seek repairs by their vehicles' OBD systems. OBD systems use malfunction criteria based on numeric multiples of various certification emission standards and are themselves numerical, quantifiable emission standard under HSC sections 39027.[1] This lends further statutory support for the amendments.

The amendments find support in HSC section 43106, which provides:

> "Each new motor vehicle or engine required pursuant to this part to meet the emission standards established pursuant to Section 43101 shall be, in all material respects, substantially the same in construction as the test motor vehicle or engine, as the case may be, which has been certified by the state board in accordance with this article. However, changes with respect to new motor vehicles or engines previously certified may be made if such changes do not increase emissions above the standards under which those motor vehicles or engines, as the case may be, were certified and are made in accordance with procedures specified by the state board."

At the time of certification, manufacturers test prototype vehicles to demonstrate that their emissions control components will be durable and last for the useful life of the vehicle. When emissions components then fail at the rate of four percent or 50 in use, this is strong evidence that the production vehicles are not, in all material respects, substantially the same in construction as the test vehicles, and

[1] For example, exhaust after-treatment devices play a critical role in reducing emissions (often by themselves reducing emissions by over 95 percent) and a failure identified by the OBD system such cases indicates an exceedance of the emission standard by 1.75 times.

are in violation of HSC section 43106. The systemic failure rate is a proper part of the test procedure. It supplements the current durability requirements that require that manufacturers must use good engineering judgment to determine that all emission-related components are designed to operate properly for the full useful life of the vehicles in actual use. Test procedures are not just confined to determining whether vehicles will pass emission standards at the time of certification because vehicles are required to comply with emission standards throughout their useful lives. HSC sections 43204-43205.5 basically provide that manufacturers must warrant that the vehicles they manufacture are "designed, built and equipped so as to conform, at the time of sale, with the applicable emission standards" and "free from defects in materials and workmanship" which cause them to "fail to conform with applicable emission standards" for their useful lives. The amendments give manufacturers a clear target in designing and producing their products to meet this requirement and it gives the Executive Officer a clear standard to evaluate manufacturers' applications for certification in this regard as well as a clear standard to enforce. The engineering and factual bases of this design are available to the manufacturers at the time they seek ARB's certification and under the amendments will be provided along with the other information that the manufacturers provide to the ARB when seeking its certification. In fact, the provision was modified to substitute the compliance statement in the place of a compliance demonstration, in response to comments.

There are several other sources of statutory authority to adopt the proposed amendments to the warranty/recall regulations. For example, HSC section 39600 bestows broad authority on the ARB to "do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, the state board by this division and by any other provision of law." HSC section 39601 requires the ARB to adopt regulations to carry out the duties that section 39600 bestows. These provisions bestow authority on the ARB to enact the amendments whether they are considered emissions standards, test procedures or simply other types of requirements that the manufacturers must comply with. The amendments are also conditions the manufacturers must meet to receive the ARB's certification, authorized under HSC section 43102.

The amendments establish, on the whole, test procedures and standards to determine compliance with the test procedures and possibly emission standards ARB has adopted or will adopt. This provides a basis of authority for the staff's proposal similar (but not identical) to the authority that supports ARB's 2003 amendments to the OBD recall regulations:

> "The adopted OBD II regulation, title 13, CCR section 1968.1, and the proposed regulation for 2004 and subsequent model year vehicles, title 13, CCR section 1968.2, establish both emission standards and test procedures for certification to those standards. The ARB expressly adopted title 13, CCR section 1968.1 pursuant to authority granted by the Legislature to adopt and implement emission standards and test procedures under the Health and Safety Code. Likewise, the staff is

> proposing that section 1968.2, title 13, CCR be adopted pursuant to the same authority. In so acting the Board has not, and will not have, exceeded its authority under the statute. The existing and proposed regulations clearly establish quantitative emission standards for most, if not all, of the major monitoring systems (e.g., detection of malfunctions before emissions exceed 1.5 times the applicable tailpipe emission standard). These malfunction criteria establish specified limitations on the discharge of air contaminants into the atmosphere and thus meet the definition of "emission standards" as defined at section 39027 of the Health and Safety Code." (Staff Report: Initial Statement of Reasons for Proposed Rulemaking, "Technical Status and Revisions to Malfunction and Diagnostic System Requirements for 2004 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (OBD II)" ("OBD II ISOR", p. 72.)

The amendments establish the warranty reporting levels as part of the certification test procedures, the violation of which would entitle the Executive Officer to order a recall or other corrective action, just as the violation of the requirements of the OBD regulations authorize a recall or other corrective action also.

The rationales advanced for the OBD recall regulations are discussed further below because they relate to the warranty/recall proposal in several other ways, but first some of the other sources of statutory authority for the proposal are listed here.

HSC section 43013(a) provides:

> "The state board may adopt and implement motor vehicle emission standards, in-use performance standards, and motor vehicle fuel specifications for the control of air contaminants and sources of air pollution which the state board has found to be necessary, cost-effective, and technologically feasible, to carry out the purposes of this division, unless preempted by federal law."

HSC section 43018 provides, in pertinent part:

> "(a) The state board shall endeavor to achieve the maximum degree of emission reduction possible from vehicular and other mobile sources in order to accomplish the attainment of the state standards at the earliest practicable date.
>
> (b) Not later than January 1, 1992, the state board shall take whatever actions are necessary, cost-effective, and technologically feasible in order to achieve, not later than December 31, 2000, a reduction in the actual emissions of reactive organic gases of at least 55 percent, a reduction in emissions of oxides of nitrogen of at least 15 percent from motor vehicles. These reductions in emissions shall be calculated with

respect to the 1987 baseline year. The state board also shall take action to achieve the maximum feasible reductions in particulates, carbon monoxide, and toxic air contaminants from vehicular sources.

(c) In carrying out this section, the state board shall adopt standards and regulations which will result in the most cost-effective combination of control measures on all classes of motor vehicles and motor vehicle fuel, including, but not limited to, all of the following:

(1) Reductions in motor vehicle exhaust and evaporative emissions.

(2) Reductions in emissions from in-use emissions from motor vehicles through improvements in emission system durability and performance.

(3) Requiring the purchase of low-emission vehicles by state fleet operators.

(4) Specification of vehicular fuel composition."

Also see HSC sections 43101 and 43102.

Turning now to the OBD II Recall Regulations, issues of authority arose when the Board adopted amendments to the OBD II recall procedures, title 13 CCR sections 1968.1-1968.5. In the Staff Report for that regulation identified several rationales for adopting the OBD II regulations that apply here as well. First is that failure of an emission-related part should be grounds for a recall, irrespective of whether the failure causes a quantifiable increase in tailpipe or evaporative emissions of the entire group of affected vehicles:

"the proposed regulation would clarify that in ordering a recall of a nonconforming OBD II system, the Executive Officer would not need to demonstrate that the nonconforming system directly causes a quantifiable increase in the tailpipe or evaporative emissions of the entire group of affected vehicles nor would a manufacturer be able to overcome the recall by making such a showing. The recall of an effectively nonfunctional monitoring system is necessary because the existence of such a noncomplying system effectively defeats the purposes and objectives of the OBD program and potentially undermines the emission reduction benefits that have been projected from adopted motor vehicle emission reduction programs. It has been the long-standing position of the ARB that it is necessary to repair or replace such nonconforming systems because they are not capable of detecting future malfunctions of the vehicle's emission control systems and that this would likely lead to future emission increases." OBD Recall ISOR pp. 78-79.

Second is that while it is inherently speculative to forecast the future emissions consequences of failed emissions components that fail over time it is beyond dispute that as motor vehicles age and accumulate high mileage, their emission control systems deteriorate and increasingly malfunction, causing emissions from motor vehicles to increase, and for these reasons, the ARB needs to be able to order recalls on the basis of failing emissions-related components, not just on the basis of average emissions exceedances in an affected vehicle group:

> "As stated, it is beyond dispute that as motor vehicles age and accumulate high mileage, their emission control systems deteriorate and increasingly malfunction, causing emissions from motor vehicles to increase. The ARB adopted the OBD II requirements to address this problem and, specifically, to provide assurance that when malfunctions in emission control systems do occur, they will be expeditiously discovered and repaired. To properly perform these objectives, the OBD II system itself must be functional and capable of detecting malfunctions when they occur. To minimize potential emission increases in future years, it is imperative that the identified, effectively nonfunctional OBD II systems be recalled and repaired at the time noncompliance of the systems is discovered. No one knows or can accurately predict how well emission control systems of different manufacturers will work 10, 20, or more years from now. This is especially true when vehicles are being required to meet increasingly stringent emission standards, requiring new and complex technologies to be utilized.
>
> Contrary to the contentions of the automobile manufacturers, any forecasting of future compliance with tailpipe and evaporative emissions standards would be much more difficult to do in the case of an OBD II nonconformity than in the case of failed emission related component. In the latter case, the manufacturer knows specifically what emission-related component has failed (and the manner in which it has failed) and can conduct in-use emission testing of the vehicle fleet with the known failed part. In the case of the nonconforming OBD II system, the only thing known is that the OBD II monitor is not working. At the time of such failure, neither the Executive Officer nor the manufacturer knows what emission-related part or combination of parts might fail in the immediate or distant future without illumination of the MIL. Such an evaluation, which entails the ability to accurately predict which part(s) will fail, in what manner, at what failure rate, and at what point in the vehicle's life, would be, at best, extremely speculative. As stated before, appropriate remedial action should be based solely on compliance (or lack of) with the OBD II requirements. The ability of the Executive Officer to order appropriate remedies, including recall, irrespective of a finding of direct emissions consequences, is also necessary so that California can continue to meet its obligations under the federal CAA that the states incorporate OBD checks as part of their inspection and maintenance

(I/M) programs. This has been an objective of the OBD II regulation since its inception." (OBD ISOR pp. 79-80.)

Based on its experience, the staff believes that it is also inherently speculative to forecast future compliance in the case of emissions related components.

Third is that properly operating emissions components are crucial to the success of OBD and I/M programs:

"To protect the benefits of an OBD-based I/M check, it is imperative that functional and viable OBD II systems are installed in all certified vehicles. To assure that they are, it is necessary to assure that all OBD II systems that are found to be effectively nonfunctional be recalled and repaired, irrespective of whether one can make a showing that the vehicles, equipped with such nonfunctioning systems, on average comply with applicable tailpipe certification standards." (OBD II ISOR p. 81.)

The OBD II ISOR contains this final summary of the authority issue:

"In summary, given that the OBD II regulation establishes both emission standards and test procedures that are required for certification of new motor vehicles, the ARB has undisputed authority under Health and Safety Code section 43105 to adopt the OBD II-specific enforcement regulation. Beyond this express grant of authority, Health and Safety Code, section 39600 further entrusts the ARB with general powers to do such acts as may be necessary for the proper execution of the powers and duties granted to it under Health and Safety Code. The ARB adopted the OBD II regulation pursuant to the powers and duties granted to the ARB under Health and Safety Code sections 43013(a), 43018, 43101 and 43104. Accordingly, under its general powers, the ARB is authorized to adopt all necessary enforcement regulations to assure compliance with the OBD II requirements." (OBD II ISOR pp. 91-92) ISOR pp. 11-17.

Staff believes that it is feasible for all manufacturers to comply with the amendments. Historically, most emissions components have not failed at over 4% rates over the useful lives of the vehicles they are installed in. This does not require manufacturers to predict the future performance of their emissions control components perfectly, only reasonably and to be responsible for correcting them when they fail at systemic rates (i.e. 4%). See also the Responses to Comments 3, 42 and 94.

6. Due Process Comment. The amendments violate due process because they improperly limit the evidence and defenses the manufacturers can raise at hearings on the Executive Officer's decision to require corrective action. The amendments do not provide an opportunity to challenge the Executive Officer's

decision to require other types of corrective action such as extended warranties. The amendments do not allow manufacturers argue at the hearings that the Executive Officer's decision is an abuse of discretion. (Alliance).

Agency Response: We believe that the amendments afford manufacturers due process.

While the staff believes that HSC section 43105 does not require that a manufacturer be afforded a hearing when the Executive Officer orders extended warranties and staff believes that this comports with due process, staff nevertheless, in response to this comment, modified its original proposal to provide for hearings when the Executive Officer's orders other types of corrective action, including extended warranties. The amendments limit the evidence and defenses that manufacturers can raise at the hearings to the evidence that is relevant to the regulatory standard the amendments enact. The amendments allow additional defenses and evidence on several issues that were added in response to comments. Raising abuse of discretion arguments at administrative hearings is not permissible, but parties may make such arguments in court. The amendments comply with the requirements of due process.

The amendments make it clear that manufacturers may request hearings when recalls or other corrective actions are ordered and establish several defenses to the imposition of recalls or other corrective actions. The amendments authorize hearings to be held in more instances than is required by statute. HSC section 43105 provides that there must be hearings in cases where recalls are ordered, but does not require hearings when other corrective actions are ordered. The amendments provide for more hearings than the statute requires.

HSC section 43105 also requires that at the hearings manufacturers be afforded an opportunity to provide evidence in support of their objections. The amendments provide manufacturers the opportunity to introduce evidence in support of their objections, but it limits this evidence to evidence relevant to the regulatory standard at issue in such a hearing, namely whether a systemic failure has occurred in an emission component that was revealed in the warranty reporting for that component. The amendments would not allow evidence of the emissions impact of the systemic failure, for example, except for the showing under section 2168(f), which establishes the defense that the failure will not have an emissions impact under any conceivable circumstance. This modification to staff's original proposal was adopted in response to comments as were other modifications that establish additional defenses that would allow introduction of: new, previously unavailable relevant evidence (section 2174(a)), evidence that the systemic failure is occurred very early after the affected vehicles were produced and is being corrected under warranty (section 2168(b)), evidence that the failures were due to owner abuse of neglect, or the warranty claims were paid solely for customer satisfaction or due to misdiagnosis (section 2168(c)), evidence of secondary component failures (section 2168(d)), evidence that the manufacturer has

committed to perform a recall (section 2168(e)), and evidence that an OBD recalibration is not being performed to address an emissions exceedance or an OBD compliance issue (section 2168(g)). The requirement that the evidence be generated and submitted in the defect reporting process guarantees that all relevant evidence will be brought to the Executive Officer's attention before he or she has to make the decision whether to order recall or corrective action and is an improvement over the former regulation which allowed manufacturers to delay presenting their complete case until after a recall was ordered, an inefficient and illogical situation. ISOR, pp. 8-10.

The amendments are consistent with the ARB's authority granted by HSC section 43105: "The procedures for determining, and the facts constituting, compliance or failure of compliance shall be established by the state board." The staff believes that allowing manufacturers to continue to use the administrative hearing process as an instrument to frustrate the implementation of corrective action for systemic defects is not acceptable. It would be pointless to change the regulatory standard to one that is focused on the presence of systemic defects and not similarly limit the hearing process to the evidence that is relevant to that standard.

The Executive Officer's decision whether to seek enforcement of an alleged violation is not subject to review by an administrative law judge. (See *Heckler v. Chaney* (1979) 470 U.S. 821 and cases cited therein and *Sierra Club v. Whitman* (2001 9th Cir.) 268 F.3d 898, *Dix v. Superior Court of Humboldt County* (1991) 53 Cal.3d 442, and *Manduley v. Superior Court of San Diego County* (2002) 27 Cal.4th 537.) The current regulation does not authorize manufacturers to raise this issue in administrative hearings. Whatever rights the manufacturers have to raise this issue may be exercised in the courts.

After the hearings are held, manufacturers have the ability to challenge the proceedings, including the Executive Officer's decision, in court. The regulations establish standards for requiring corrective. The Executive Officer's discretion in making this determination is not unfettered. The amendments provide ample due process.

7. Extended Warranty Comment: ARB has no authority to order extended warranties. ARB cannot order extended warranties beyond vehicles' useful lives. (Alliance.)

Agency Response: We disagree. ARB does have authority to order extended warranties and order them beyond the useful lives of vehicles. Nevertheless, in response to this comment the amendments were revised to limit extended warranties to the useful lives of the affected vehicles.

The staff agrees that the ARB's authority to order extended warranties does not reside in HSC sections 43204-43205.5. Sections 43204-43205.5 basically provide that manufacturers must warrant that the vehicles they manufacture are "designed,

built and equipped so as to conform, at the time of sale, with the applicable emission standards" and "free from defects in materials and workmanship" which cause them to "fail to conform with applicable emission standards" for their useful lives. Clearly, if it were basing its proposal on these provisions alone, ARB would not have authority to require that manufacturers extend warranties on failing emissions related parts beyond the useful lives of the vehicles they are found in. The reason is simple – because these provisions do not authorize warranty coverage beyond the periods prescribed in the statutes. That being said however, there is nothing in sections 43204-43205.5 that in any way limits ARB's authority to order corrective action for violations of its emission standards or test procedures and there is ample other authority for ARB to order corrective action for such violations in the form extended warranties.

HSC section 43105 prohibits manufacturers from selling vehicles in California "if the manufacturer has violated emission standards or test procedures *and has failed to take corrective action, which may include recall of vehicles or engines, specified by the state board in accordance with regulations of the state board*." Emphasis supplied. This means that in the case of violations of its test procedures or emission standards the ARB may require other kinds of relief in the form of corrective action, not just recall. Furthermore, the Health and Safety Code does not define or limit the term "corrective action". This, coupled with the fact that HSC section 43105 provides that in the case of violations of the test procedures or the emission standards the ARB has wide discretion ("The procedures for determining, and the facts constituting, compliance or failure of compliance shall be established by the state board.") indicate that ARB does have the authority to require that warranties on failing emissions related part must be extended beyond the useful lives of the vehicles they are installed in. Extended warranties for failing emission control components is simply one type of corrective action, one made particularly effective because of the ability of OBD systems to detect malfunctions and warn owners to seek repairs. Furthermore, HSC section 39601 requires the ARB to adopt regulations to carry out the duties that section 39600 bestows. These provisions bestow authority on the ARB to enact the amendments and require that in certain cases manufacturers must, rather than recalling the vehicles in a certain class or category that are experiencing systemic failures of emission control components and replace each one of the suspect components whether it is failing or not, to extend the warranty on the particular emissions component instead. Again, the authority for doing this is not located in HSC sections 43204-43205.5 which provide the authority for requiring the basic emissions warranty, but in HSC section 43105 that provides the ARB with wide discretion to require recalls or other corrective action in the event of violations of emission standards or test procedures and the wide authority granted by HSC sections 39600 and 39601.

Under the amendments, warranty extensions would be required where component failures exceeded the warranty reporting threshold, linked to the test procedures, entitling the ARB to order corrective action, in this case an extended warranty. Again, it is also notable that HSC sections 43204-43205.5 do not place any

limitations, explicit or otherwise, on ARB's authority to order corrective action under HSC section 43105. Similarly, given ARB's wide discretion in this area, there is no legal impediment to requiring manufacturers to recall the affected vehicles or provide extended warranties for them. (ISOR pp. 27-28, which is incorporated by reference here.)

One factual rationale for doing this is similar to the one advanced in the OBD recall rulemaking – that projecting failure rates and future emission of failing components is highly speculative, but it is certain that emissions components fail more frequently as they age. When OBD systems detect these future failures of components that have systemically failed during the vehicles' useful lives, they should be remedied, either by recall or other corrective action such as extended warranty. Staff's experience in administering the warranty reporting program also indicates that extended warranties are an effective corrective action. Extended warranties have been included in a number of case settlements which address systemic emission control component failures.

In response to comments, the amendments were modified to limit the extended warranties to the useful lives of the vehicles involved in the corrective action, despite the fact that if a recall were to be ordered for the same defect the owners of the entire class of the vehicles that was plagued with the systemic emissions control component failure would receive new, improved replacement components that it is reasonable to expect would last beyond the useful lives of the vehicles they would be installed in.

8. Economic Analysis Comment: The staff's economic analysis is deficient. (Alliance.)

Agency Response: The staff's economic analysis is more than adequate. Government Code sections 11364.2(b)(4) requires that an agency include in the initial statement of reasons: "Facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse impact on business." Government Code section 11346.5 specifies what findings and economic impact information the agency must include in its notice of proposed rulemaking, including: "A description of all cost impacts known to the agency at the time the notice of proposed action is submitted to the office, that a representative person or business would necessarily incur in reasonable compliance with the proposed action." The staff has clearly complied with these and all other applicable requirements to analyze the economic impacts of the amendments. In substance, the commenter appears to contend that the staff's economic analysis is deficient simply because it does not agree with the commenter's economic analysis, but this is not the legal requirement. The Hearing Notice included the following discussion of economic impact:

> "The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private

persons and businesses in reasonable compliance with the proposed regulations are presented below.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action will create costs to the ARB. The ARB is expected to incur ongoing costs of approximately $200,000 per year for two additional staff to implement the regulation and enforce compliance. Costs would not be created to any other state agency, or in federal funding to the state. The regulation will not create costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to part 7 (commencing with section 17500), division 4, title 2 of the Government Code, or other nondiscretionary cost or savings to state or local agencies.

The businesses to which the proposed requirements are addressed and for which compliance would be required are manufacturers of California motor vehicles. There are presently 35 domestic and foreign corporations that manufacture California-certified passenger cars, light-duty trucks, and medium-duty gasoline and diesel fueled vehicles that would be subject to the proposed amendments, 20 heavy-duty engine manufacturers, and over 60 motorcycle manufacturers. Only one motor vehicle manufacturing plant (NUMMI) is located in California.

In developing this regulatory proposal, the ARB staff evaluated the potential economic impacts on representative private persons or businesses. Costs to the manufacturers should be reduced by the significantly minimized reporting requirement. Because manufacturers are fully expected, and required, to comply with the regulations, enforcement costs to manufacturers should also be negligible. However, to the extent the regulations increase the number of corrective actions implemented, costs to those manufacturers that have produced vehicles with defective components may increase. Staff estimates that the industry wide cost will be roughly equivalent to current costs, however.

The Executive Officer has made an initial determination that the proposed regulatory action will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons. Again, any cost impacts are expected to be slight, absorbable or positive.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action will not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. Any impact on businesses in

California is expected to be slight, absorbable or positive. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined, pursuant to title 1, CCR, section 4, that the proposed regulatory action will not affect small businesses because the cost impacts are expected to be slight, absorbable or positive." Notice, pp. 6-7.

The ISOR includes the following economic analysis at pp. 29-31:

"B. Economic Impacts

The Administrative Procedures Act requires that, in proposing to adopt or amend any administrative regulation, state agencies shall assess the potential for adverse economic impacts on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states, and fiscal impacts on state and local agencies. Below is staff's assessment of the economic impacts of this proposal.

C. Cost to State Agencies

The implementation of these regulations in 2010 is expected to result in additional corrective actions compared to the current regulations. If overall reliability of components does not improve compared to today, it will require up to two additional ARB staff to ensure proper corrective actions are taken at a cost to the ARB of approximately $200,000 per year.

The proposed amendments are not expected to create additional costs to any other state agency, local district, or school district, including any federally funded state agency or program.

D. Costs to Engine and Motor Vehicle Manufacturers

The businesses to which the proposed requirements are addressed and for which compliance would be required are manufacturers of California motor vehicles. There are presently 34 domestic and foreign corporations that manufacture California-certified passenger cars, light-duty trucks, and medium-duty gasoline and diesel fueled vehicles that would be subject to the proposed amendments. Only one motor vehicle manufacturing plant (NUMMI) is located in California. For motor vehicle manufacturers to comply with the proposed regulatory action, the costs are expected to be negligible. Moreover, manufacturers are expected to comply with all applicable laws. For manufacturers that continue to

produce vehicles or engines with defective components, recall and/or warranty costs will increase. The amount cannot be quantified at this time. Manufacturers will experience some savings in decreased warranty reporting costs.

E. Potential Impacts on Other Businesses

The proposed amendments should have minimal impact on the independent service and repair industry and aftermarket parts manufacturers since the proposal deals with relatively new vehicles and engines that are still within their certified useful life period. The proposed recall and/or extended warranty requirements are strategies utilized by the ARB for many years. Only those emission-control components that are determined to have systemic defects would be affected by the extended warranty.

F. Potential Impact on Business Competitiveness

The proposed amendments are expected to have no effect on the ability of California businesses to compete with businesses in other states.

G. Potential Impact on Employment

Staff does not believe the regulatory proposal would result in the loss of jobs. It may create additional jobs in California, based on the need to perform the additional recall or extended warranty work." (ISOR at pp. 29-31.)

In response to comments received in the 45-day public comment period and at the December 7, 2006 hearing, the staff included the following economic analysis in the January 23, 2007 Supplemental ISOR at pp. 12- 14:

"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."

The commenter submitted additional economic analysis prior to the March 22, 2007 continued hearing on the amendments, which also disputes the staff's economic analysis and is summarized at Comments 167-170. Again, the agency is not required to agree with a particular commenter's economic analysis, and, in fact the staff does disagree with this commenter's analysis, for the reasons specified above and below at Responses to Comments 167-173.

Overall the industry has made significant improvements to their products over the years, with many manufacturers showing reductions in emission component failures that exceed the ten percent unscreened level and that this should minimize the impact of the amendments. At the March 22 hearing, staff reported to the Board that had the amendments been in effect between model years of 2001-2003, 17 manufacturers would have been unaffected by the amendments, 13 manufacturers would have potentially experienced 3 or fewer extended warranty actions, and only 5 manufacturers would have potentially experienced more than 3 extended warranty actions. There would be a possibility of recall for those manufacturers experiencing systemic failure rates involving exhaust after-treatment devices but staff believes that nearly every manufacturer has developed robust after-treatment technology and that should avoid recall action caused by failures of these components. The economic impact of the amendments is truly dependent on how manufacturers will make what staff believes to be modest changes in the durability of a limited number of emissions components before the 2010 model year, and the staff further believes that manufacturers would be making these improvements and others to comply with the PZEV regulations in any event. The staff anticipates that most manufacturers will make the necessary improvements in their emission component design/production development and will also make improvements to their warranty process to ensure that the most accurate data is obtained from the field. Nevertheless, if manufacturers do not make the necessary changes and experience systemic emission control component failures after the amendments take effect, the amendments will require them to take action to correct the defects.

The staff believes that the proposed amendments are necessary to ensure that manufacturers design durable emissions control systems and achieve the benefits of ARB's emissions control programs. Many places in California exceed air quality standards, so any unnecessary increase in emissions is significant. Although the exact emissions benefits are difficult to quantify, the staff believes that they are not insubstantial (especially given California's serious air quality problems) and that they clearly justify the amendments. The staff included an analysis of the emissions impacts of two cases in the ISOR at p. 6-8.

9. Regulatory Alternatives Comment: The staff has failed to adequately address regulatory alternatives. (Alliance.)

Agency Response: The staff adequately addressed regulatory alternatives. The Notice discusses regulatory alternatives at p. 7:

> "Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the board or that has otherwise been identified and brought to the attention of the board would be more effective in carrying out the purpose for which the

action is proposed or would be as effective and less burdensome to affected private persons than the proposed action."

The ISOR contains this discussion of regulatory alternatives at p. 31:

"H. Regulatory Alternatives

One regulatory alternative would be to not adopt the proposed amendments. Staff believes that this would be unacceptable. The current status of the regulations has allowed several obvious violations of the intentions of the in use regulations as well as the certification test procedures and likely resulted in increased emissions, such as the Chrysler and Toyota cases. This approach of status quo would not strengthen and make clear the ARB's authority to ensure complying and durable emission control systems that ultimately meet the State's emissions goals. Staff does not consider this a viable option to protect the State's air quality benefits expected from the on road emission regulations.

Staff has determined that no feasible alternative considered would be more effective in carrying out the purpose of the proposed amendments. No alternative would be as effective as or less burdensome to affected private persons than the proposed amendments to the regulations."

The Supplemental ISOR contains this discussion of regulatory alternatives at pp. 9-12:

"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 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 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.)"

The commenter also states that alternatives based on emission testing should be acceptable to the staff, provided that the manufacturers agree to pay for the testing. We disagree. Even if manufacturers agree to pay for emissions testing, this does not eliminate the costs to staff of evaluating the manufacturer's testing, or conducting its own testing to validate the testing results the manufacturer obtained. Nor does having manufacturers pay for emissions testing remove the uncertainties or other issues involved in emission testing or the delays associated in conducting the testing and presenting it at contested hearings. The clear standard the amendments establish is superior to this alternative because it avoids all of the pitfalls associated with emissions testing in this type of process.

10. Prescriptive v. Performance Standards Comment: The staff's proposal impermissibly adopts a prescriptive standard instead of a performance standard and does not support it with adequate analysis.

Agency Response: We disagree with this comment. As stated in the Supplemental ISOR at p. 7: **"**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)."

2. Aftermarket Vehicle Repair Industry

11. Comment: The Board received many comments from automotive repair associations and automotive service providers that the amendments to the warranty reporting and recall procedures will have a negative economic impact on independent repair shops in California. (AAIA*, iATN, ATOC, ASA, IAPA, ASCCA, CalABC, CAWA, ASP's - David Munoz, Bob Renteria, Bob Little, Brad Kyle, Mathew Corson, Nick Modesti, Chuck Spiteri, Mike Howe, Craig Wells, Scott Brown, Vama Emfinger, Nikki Ayers, Bud Rice, PC's- Daniel Goycochea, Kevin McCartney, Michael Self, Craig Johnson)

12. Comment: Small businesses that comprise the independent aftermarket service industry will be negatively impacted from an economic standpoint due to this proposed amendment but would be willing to consider the proposal if independent repair facilities were authorized to conduct the extended warranty repairs required under this rule. (AAIA*, ASA)

13. Comment: ASA contends that the proposal will take away repairs from independent repair shops and cars will be repaired more often by the dealerships. (ASA)

Agency Response to Comments 11-13: The staff disagrees with these comments and incorporates its analysis at page 28 of the ISOR here. The staff also addressed these comments in the January 23, 2007 Supplemental ISOR at page 11, which is quoted above in Response to Comment 9, and is also incorporated by reference here. ARB staff analyzed the economic impact issue and projected that the independent repair facilities may experience an economic loss of no more than 0.3 percent due to modifications made in this proposal. The amendments will only apply to those parts that fail at systemic rates under the normal vehicle emissions warranty. The staff expects that manufacturers will strive to limit their corrective action liability by building durable emission components that will meet California's useful life requirements, lessening the slight economic impact of the amendments on the aftermarket parts industry even further. The proposed regulation will have very little impact on the independent repair industry that generates some $15 billion a year. (See: Supplemental ISOR page 11). As stated in the ISOR at p. 28 and the Supplemental ISOR at p. 12, the ARB has no authority to require manufacturers to use independent repair facilities as warranty repair stations in this context. However, the amendments were modified to limit the extended warranty period to the useful life of the vehicle.

14. Comment: There is no evidence to show that extending the warranty will improve emission component durability and also there is no evidence that owners are actually having their vehicles repaired under the extended warranty. AAIA also states that the staff has no evidence to show that extended warranties are effective in remedying known problems. (AAIA*)

    Agency Response: The staff disagrees with this comment and believes that manufacturers will make the necessary changes to defective emission components to avoid further corrective action issues, certification problems, and public dissatisfaction with their products. Manufacturers are very cognizant of warranty issues and attempt to avoid these problems if at all possible. For years manufacturers have offered their owners special service campaigns including warranty extensions to enhance their owners' satisfaction with their products. Under the amendments the extended warranty is required to be accompanied by an owner notification letter that will alert owners to the problem and advise them to return to the dealer to address it. The staff is confident that the majority of those owners who experience a systemic component failure outside of warranty will have their vehicles serviced under the extended warranty campaign, especially if warned of the failure by their vehicles' OBD systems, if the Executive Officer requires such corrective action. Staff's experience in requiring automakers to take corrective actions to remedy emission component defects indicates that the extended warranty is an effective corrective action strategy and will provide the needed repairs to identified systemic emission component failures. See, e.g. ISOR, pp. 5, 21

15. Comment: An owner will not know if the problem identified by an illuminated OBD light is covered by the extended warranty. The owner may go back to the dealer in every case to have the vehicle checked. (AAIA, ASCCA)

    Agency Response: The staff disagrees with this comment. An owner may or may not return to the dealer for an illuminated OBD light, just as an independent repair facility may repair a vehicle not knowing there is an extended warranty campaign that will correct the problem for free. When a component fails and illuminates an OBD light, owners must make their own decisions about obtaining repairs on their vehicles. The staff believes that an informed owner (i.e., an owner who received letter from the manufacturer regarding the failure), will make the best decision available based on the observed conditions of their vehicle. The Responses to Comments 11-13 are incorporated by reference here.

16. Comment: Existing regulations allow independent repair facilities to perform warranty repairs after 30 days if a part is not available at the dealer. Based on this provision alone, staff can require manufacturers to allow independent repair facilities to provide the extended warranty repairs. (AAIA*)

Agency Response: The staff disagrees with this comment. These provisions only apply in extreme cases where the dealers do not have the parts to perform the necessary warranty work. The staff does not believe that ARB has the authority to require manufacturers to pay, under extended warranties, for repairs or replacements done by independent repair facilities when the manufacturer has the parts available to do the work. Under the amendments, owners can seek repair at facilities of their choice, but they would not be reimbursed for the work unless the manufacturer did not have the necessary parts available. Again, staff does not believe that it has the legal authority to require manufacturers to pay independent repair facilities to perform all emission warranty repairs or all extended emission warranty repairs. The Responses to Comments 11-13 are incorporated by reference here.

17. Comment: If staff wants to clean the air, cars should be subjected to smog check inspections every year without giving a six year allowance to new cars. (ASC and ASSCA)

    Agency Response: The staff objects to this comment pursuant to Government Code section 11346.9(a)(3) because it is not specifically directed at the amendments or to the procedures followed in proposing or adopting the amendments.

18. Comment: These amendments will lend themselves to fraud because dealers are going to replace other components when the check engine light has illuminated. (ASSCA)

    Agency Response: The staff disagrees with this comment. The staff is not aware of any evidence that suggests that new car dealers are any more or less likely to sell unnecessary repairs than independent repair facilities are. The amendments target systemic component failures, and staff believes that because owners will be notified of the failing condition caused by the failure, owners will at least be informed and be able to evaluate repair recommendations whatever the source.

19. Comment: Smog Check has moved 80 percent of vehicle testing to test-only stations when they were told that it would only be 15 percent. Based on this correlation, why would staff believe that this proposal will insignificantly affect independent repair facilities? (ASP- Bud Rice)

    Agency Response: The staff disagrees with this comment, and is not certain that it is true. Assuming it is true, the staff believes that it is not relevant to the amendments. As noted in Response to Comments 11-13 above (which are incorporated by reference here), the repairs that will occur at dealerships under the amendments are expected to be insignificant compared to the size of the independent repair industry as a whole. Repair decisions involving the smog check program are more complex and cannot be correlated with the warranty reporting program. The warranty reporting program is straight forward and would

only require manufacturers to fix their vehicles if a systemic failure is identified. As opposed to smog check, the repairs that occur outside of warranty as a result of this program will be very limited (comparatively speaking as opposed to all repairs outside of warranty) and owners will be informed about the type of failure that would be covered under an extended warranty.

20. Comment: Dealers could recommend extra repairs (e.g., a valve job) when all is required is the specific extended warranty work. Owners will be in the dark and not sure what to do because they are forced to go to the dealer instead of someone they trust. (ASP- Jim O'Neil)

    Agency Response: The staff disagrees with this comment and incorporates its Response to Comment 18 here.

21. Comment: Warranty work lends itself to add-on repairs such as oil changes and brakes. (ASP- Larry Nobriga)

    Agency Response: The staff believes some add-on work can occur as a result of the extended warranty work but again, these repairs are based on the owner's decision and will not occur for every extended warranty repair performed on a vehicle. The extended warranty actions are limited (i.e., it only covers the parts that have been identified as systemic failures) and comparatively speaking will only affect a small population of vehicles as compared to all vehicles registered in the state. Responses to Comments 11-13 are incorporated by reference here.

22. Comment: When Audi increased their vehicle warranty to 10 years or 100,000 miles, it negatively affected the independent Audi repair business. The extended warranty corrective actions as set forth in this proposal will also impact vehicle repair businesses as it did in the case of Audi. (ATOC)

    Agency Response: The staff disagrees with this comment. The extended warranty actions only cover the emission components that were identified as a systemic failure; not the entire vehicle as was in the case with Audi.

3. Regulatory Process Comments

23. Comment: The Board received several requests for an analysis that demonstrates that under the proposed regulations, extended warranties will 1) improve air quality and 2) will provide an incentive for vehicle manufacturers to build more durable parts. (ASP- Scott Brown, AAIA*, ASCCA, CAWA, CalABC)

24. Comment: "Consistent with its failure to assess emissions benefits, ARB has not attempted to discharge its duties under the California Environmental Quality Act" (i.e., "ARB's failure to analyze and attempt to quantify the environmental effects of the rule to any extent preclude an precise analysis of how the fleet turnover effect applies and could cause adverse environmental effects.") (Alliance)

Agency Response to Comments 23 and 24: The staff disagrees with these comments and incorporates its Responses to Comments 2, 3, 4 and 7 here. As noted in the ISOR (pp. 2-8, 22-25 and 29), under the current regulations, increasing numbers of on-road vehicle manufacturers are avoiding corrective action for emission related components that are failing at systemic rates. Staff believes that the amendments will make it more difficult for manufacturers to avoid corrective action in the future, and that the manufacturers will build more durable products as a result, resulting in lower emissions than would be the case under the current regulations. However, it is not possible to quantify these emissions benefits in part because it is not possible to predict with in any reliable way the magnitude or type of emission control component failures that would occur and not be corrected under the current regulations versus those that would occur and be corrected under the amendments.

25. Comment: "Staff has decided not to comply with the combined effect of Government Code §§ 11346.2, 11346.5, and the *Economic Analysis Guidance* because it has determined at this preliminary stage that this rule is not a "major rule," since in its view as expressed in the ISOR the economic impact of the Proposed EWIR Regulations is too low." (Alliance)

26. Comment: The California Administrative Procedures Act (CAPA) requires ARB to consider the economic impact and burdens of proposed rules to avoid unreasonable imposition of costs. (Alliance)

27. Comment: The proposed regulation should be constituted as a "major regulation" (i.e., as one costing more than $10 million) and should follow the obligations of Health & Safety Code § 57005. (Alliance)

Agency Response to Comments 25-27: The staff disagrees with these comments and incorporates its Response to Comment 8 here. The staff has analyzed the cost impacts of the amendments, and its analysis disagrees with that of the commenter.

28. Comment: "Staff have ignored specific alternatives presented during and in connection with the public workshop process, so the Proposed EWIR regulations do not comply with California Government Code §11346.2(b)(3)(A), because the ISOR's discussion of alternatives makes no attempt to explain why the proposal opts for "prescriptive standards" over "performance standards." (Alliance)

Agency Response: The staff disagrees with this comment and incorporates its Responses to Comments 9 and 10 here.

29. Comment: CAPA requires ARB, as an environmental agency, to explain departures from the federal approach to similar regulations. (Alliance)

30. Comment: "The Proposed Rule is invalid under the Clean Air Act because it is inconsistent with EPA's authority under Clean Air Act Section 202(a)." (Alliance)

31. Comment: "Staff has not explained why it is radically departing from the federal approach to the regulation of emissions-related vehicle defects." (Alliance)

Agency Response to Comments 29-31: The staff disagrees with these comments and believes that they do not accurately reflect the law and that staff has satisfied any obligation it may have to discuss its departure from federal law. The Notice contains this discussion of the federal law in this area:

> "Current California emissions warranty reporting requirements are more stringent and comprehensive than their federal counterparts. (See, generally 40 C.F.R. Part 85, in particular 40 C.F.R. sections section 85.1901 and 85.1903.) Federal law requires a onetime report – the emissions defect information report (EDIR) – describing the defect, the vehicles it affects and its impact on emissions. California law calls for similar information to the EDIR, but requires the manufacturer to file follow-up reports for escalating failure rates – the three progressive reports (EWIR, FIR and EIR) which are discussed above. Unlike federal law, California law explicitly ties the warranty information to the recall process, requiring the ARB to evaluate the need for a recall after the submission of the EIR. (title 13, CCR, section 2148.) Federal law has a different, potentially less stringent standard for ordering vehicle recalls than California does. Federal law allows a recall when a substantial number of vehicles do not conform to emission standards (42 U.S.C. section 7541(c)), while California regulations require a demonstration that a class or category of vehicles contains a defect that will cause the vehicles on average to exceed emission standards over their useful lives. In 1990, U.S. Environmental Protection Agency formally found that ARB's emissions warranty reporting and recall regulations were within the scope of previous waivers of federal preemption. (55 Fed. Reg. 28823 (July 13, 1990).)
>
> Although they are somewhat different, the two reporting regimes and the two recall standards have been comparably effective in prompting recalls where manufacturers have agreed to assume responsibility for correcting emissions related defects – but both the federal and state regulations have had limited success where manufacturers object to and contest the recalls, especially in complex cases. If adopted, the proposed amendments would modify and streamline California's requirements for defect reporting. These requirements would still be more extensive than the comparable federal requirements. The proposed amendments would also provide additional grounds for requiring a vehicle recall or other corrective action to remedy systemic defects revealed in emissions warranty reporting which could be proven without the resource intensive

emissions testing that is required under current federal law and California regulations. This might lead to the implementation of more recalls or remedial actions when high rates of warranty failures are reported, than would be the case under current California or federal law in this area."

We believe that this satisfies requirements to analyze federal law in this rulemaking.

32. Comment: Based on the deficiencies of the ISOR (not addressing reasonable alternatives to the proposal, no discussion of "prescriptive" versus "performance" standards, linking recalls to component failures instead of emissions standards exceedances, etc.), the Alliance requests that the December 7, 2006 hearing, be rescheduled to allow the ISOR to be rewritten and reissued without deficiencies. (Alliance)

33. Comment: "If the staff proceeds with this proposed rulemaking on the basis of the current ISOR to the Board on December 7, and if substantive portions of the rule are later invalidated, the entire rulemaking would be invalid and would need to return to the ISOR stage – a consequence staff accepts by choosing to go ahead with the ISOR in its current form." (Alliance)

34. Comment: "We do not believe that it would be consistent with the Administrative Procedures Act to attempt to modify the existing proposal using the "15-day" process. The "15-day" provisions were not intended as means to address significant procedural shortcomings at earlier stages of the regulatory process." (Alliance)

Agency Response to Comments 32-34: We disagree with these comments and incorporates Responses to Comments 2-10 here. The staff gave stakeholders more than adequate notice of its proposals both before and after the December 7, 2006 hearing. The Board continued the December 7th hearing to provide even more notice and opportunity to comment on the staff's proposal.

Prior to the publication of the Notice and Staff Report, the staff issued a workshop notice in April of 2006 and held a public workshop on May 2, 2006 and thereafter held several meetings with stakeholders to develop the amendments. At the December 7, 2006, hearing, the Board considered the staff's proposal and received written and oral comments. At the hearing, a number of witnesses provided testimony in opposition to the staff's proposal and requested a delay to work with staff to resolve the issues they had with the proposal and the staff presented a list of proposed modifications to the staff's proposal. The Board voted to continue the item to allow the additional time the witnesses requested. In doing so, the Board also directed the staff to return within six months with a final proposal for the Board to consider. In response, a notice to continue the December 7, 2006 hearing to March 22, 2007 was published and posted on the ARB's Internet site listed above.

The staff held several additional meetings with stakeholders between December 7, 2006 and January 23, 2007. On January 23, 2007, staff issued a supplement to the October 20, 2006 staff report. This supplement is entitled "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." (Supplemental Staff Report or Supplemental ISOR) The Supplemental Staff Report gave notice of an additional workshop to be held on the staff's proposal on February 14, 2007. In the Supplemental ISOR the staff summarized and responded to comments on the proposed amendments received up to that point and, among other things, discussed alternatives to the staff's approach, provided additional analysis of the economic impact of the staff's proposal. The Supplemental ISOR also included regulatory language for the conceptual modifications staff had proposed at the December 7th hearing and for other changes the staff was able to reach consensus with stakeholders as well. The Supplemental ISOR was posted on the ARB's Internet site shown above and is incorporated by reference herein also. The staff continued to meet with stakeholders.

After holding an additional workshop with stakeholders on February 14, 2007, on March 12, 2007 staff posted additional proposed modifications to the proposed regulations for the Board's consideration on the ARB's Internet site for the rulemaking, which are incorporated by reference herein. The staff continued to meet with stakeholders.

At the Board's March 22, 2007 hearing the staff proposed over 80 specific changes to its original October 20, 2006 proposal. While these changes addressed many of the stakeholders' concerns, including limiting the duration of extended warranties to the useful life of the applicable vehicles or engines, and providing manufacturers the ability to contest the decision to order extended warranties at an administrative hearing. Unfortunately, however, these modifications did not gain stakeholders' full support for the staff's proposal. At the March 22, 2007 hearing the Board again heard opposing testimony from the motor vehicle and engine manufacturers, as well as from the automobile aftermarket parts and service industries which was similar to the testimony that was presented at the original December 7, 2006 hearing. After considering all of the testimony and staff's modified proposal, the Board voted to adopt the staff's proposal as modified. At the conclusion of the March 22, 2007 hearing, the Board voted unanimously to adopt Resolution 06-44 (Resolution), in which it approved the originally proposed regulation with the modifications suggested by staff.

On June 4, 2007, the text of the proposed modifications to the originally proposed regulation was made available for a supplemental 15-day comment period by issuance of a "Notice of Public Availability of Modified Text" (15-day Notice). The notice described each modification, and the proposed title 13 CCR regulatory text and test procedures, with the modifications clearly indicated, was attached to the

Notice. The 15-day Notice and its attachment were mailed on June 4, 2007, to all parties identified in section 44(a), title 1, CCR, along with other interested parties. The 15-day Notice and its attachment were also posted on the ARB's Internet site for the rulemaking on June 4, 2007. The documents are incorporated herein by reference. Two comments were received during the supplemental 15-day comment period.

After considering the comments submitted during the 15-day comment period, on June 25, 2007, the Executive Officer issued Executive Order X-7-XXX, which adopted the amendments as modified. The staff incorporates its Responses to Comments 2-10 by reference here.

35. Comment: "Staff ignored the directives of the other Board members to work closely with industry to try and reach an accommodation." (Alliance)

36. Comment: "…in a spirit of reconsidering some of industry's most basic objections to the nature and details of this rulemaking, staff by its own admission spent the December 2006-January 2007 holiday period diligently working on a revised proposed rule in the spirit of believing that they "were on the correct path."" (Alliance)

37. Comment: "So frenetic were the efforts at producing a new proposal that staff issued a supplemental statement of reasons for changed regulatory language several weeks before the relevant language was even ready (compare January 23, 2007 Supplemental ISOR to February 8, proposed new regulatory language). (Alliance)

Agency Response to Comments 35-37: We disagree with these comments and incorporates Responses to Comments 32-34 by reference here.

Staff made concerted efforts to work with industry in developing this rule before and after the December 7, 2006 Board Hearing. Prior to the December 7th hearing, staff held several meetings with stakeholders and a workshop to discuss specifics of the proposal. At the December 7th hearing the Board indicated that the staff's proposal was on the right track, but in response to stakeholder comments, continued the item and directed staff to attempt to work out remaining issues with stakeholders and return the item to the Board within six months. The staff disagrees with comment that staff misinterpreted the Board's meaning that "we were on the correct path" and therefore rushed out new language to industry in the January 23rd Supplemental ISOR. The staff worked diligently after the December 7th Board Hearing to carry out the Board's directives, including meeting with stakeholders several additional times, drafting regulatory language addressing the conceptual changes presented to the Board (see Supplemental ISOR pages 3-6) and also adding modified language to account for other comments made by the Board and/or stakeholders. The staff posted the language in a timely manner so that stakeholders could review the language before participating in the second

workshop held on February 14, 2007. Prior to this workshop staff worked closely with stakeholders and incorporated many suggested changes, including changes regarding such matters as emission component screening, redrafting definitions, special considerations for manufacturers that warrant their emission components for the entire useful life, allowing additional time to provide corrective action plans, etc. Staff could not, however, accommodate industry's main concern with the amendments, e.g. that they do not employ emissions testing in determining whether corrective action will be required.

38. Comment: "Staff cannot excuse itself from its obligation to assess emissions reductions from its proposal (and resulting health benefits) by asserting that such analysis would be inherently speculative." (Alliance)

    Agency Response: We disagree with this Comment and incorporate Responses to Comments 23 and 24 here.

39. Comment: "Staff claims that its rulemaking will reduce administrative costs, yet requests $200,000 more in funding for two additional employees." (Alliance)

    Agency Response: We disagree with this comment. By reducing their reporting and record keeping obligations, the amendments will reduce administrative costs for the manufacturers across the board, but it is possible that the ARB may request additional funding to oversee the program which is currently staffed by one person.

40. Comment: "Staff has not provided adequate time for manufacturers to prepare an economic and/or technical study critiquing the Proposed Rule…It is unfair for staff to force private parties to bear the cost of performing the initial stages of an analysis the Board is required to perform by law." (Alliance)

    Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4, 5, 7, 9 and 32-37 here. As evidenced by the extensive written comments and testimony they placed in the record, stakeholders had adequate time to prepare both economic and technical analyses for critiquing this staff's proposal. Throughout, the staff's postings, from the original workshop notice through the fifteen-day notice provided adequate time for stakeholders to critique the amendments.

41. Comment: A submitted comment was not added to the rulemaking record. (Alliance)

    Agency Response: We disagree with this comment and believe that that the comment in question is part of the rulemaking record. In that comment, the commenter requested that the December 7th Board Hearing be postponed. The hearing was not postponed but was continued to March 22, 2007.

42. Comment: Staff is developing a regulation that is not providing any environmental benefit. (DCC)

    Agency Response: We disagree with this comment and incorporate Responses to Comments 23 and 24 by reference here. Manufacturers are responsible for building quality vehicles and engines in California that comply with both the emission standards and durability requirements. If these vehicles experience systemic failure of their emission control components, it is likely that emissions levels will increase. Manufacturers argue that the not all defects will cause vehicles to exceed the emission standards. This may be true, but the point largely missed by this argument is the fact that the increases in emissions caused by such failures were not accounted for in the emissions certification process. For example, the manufacturers' deterioration factors which are determinations of how emissions will increase as a vehicle or engine ages, do not account for the existence of emission control component that malfunction during the useful lives of the vehicles they are installed on. Instead the deterioration factors assume that these components will continue to operate as the manufacturers represent in their certification applications. Manufacturers must take responsibility for these failures to ensure that their vehicles or engines are operating at the lowest possible emission levels as they were originally designed and certified.

43. Comment: The proposed regulations brought to the Board on March 22, 2007, were so extensively re-written that it no longer bears a substantive resemblance to the proposal noticed for and considered at the December 7th hearing. In order to comply with the CAPA requirements, MIC believes that the rule should be re-issued with a new 45-day notice so that all interested parties will have adequate time to comment. (MIC)

    Agency Response: We disagree with this comment and incorporate Responses to Comments 32-37 here.

4. Corrective Action

44. Comment: ARB does not have the authority to extend the warranty beyond the 3 year or 50,000 mile warranty defined in current California statute. (AAIA*, ASCCA, IAPA, PC- Michael Self)

45. Comment: ARB lacks the authority to order extended warranties as corrective action. (Alliance, AIAM)

46. Comment: "ARB lacks the authority to require extended warranties beyond the useful life to remedy emissions-related defects." (Alliance, Caterpillar, Ford, VW)

    Agency Response: We disagree with these comments and incorporates Response to Comment 7 by reference here. Pursuant to the Board's directive at the

December 7th hearing, however staff modified its proposal to limit extended warranties to the useful lives of the affected vehicles.

47. Comment: "ARB lacks the authority to order recalls (or extended warranties) for vehicles that are not new." "Section 43105 could not be clearer in textually granting only the power to order recalls as to new vehicles, which have never been sold." (Alliance)

    Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4 and 5 by reference here. The commenter reads HSC section 43105 too narrowly and does not account for the fact that violations of emissions standards or test procedures may not manifest themselves until after vehicles have been sold and placed in use. Also, section 43105 uses the terms "recall" and "corrective action" which certainly encompass remedies that occur after vehicles are sold. Further, section 43105 also states that if vehicles are recalled the manufacturer must make the corrections without charge to the registered owners of the vehicles or reimburse them for the costs of the repair or replacement, also indicating that recall or other corrective action can be required after vehicles are purchased. Not allowing recall or corrective action after vehicles are sold would be absurd and illogical because many emission control component failures occur in use.

48. Comment: ARB lacks the authority to order remedies on the basis of "worst-case" failures. (Alliance)

    Agency Response: We object to this comment pursuant to Government Code section 11346.9(a)(3) because the comment is not directed to the amendments. This comment is instead directed to a provision in proposal the ARB issued in its April 2006 mailout that was discussed at the ARB's May 2, 2006, workshop. This provision was not part of the proposal presented to the Board at either the December 7, 2006 hearing or the March 22, 2007.

49. Comment: In proposed section 2169(b), is the staff intention to require corrective action that includes both recall and extended warranty? Similar language was used in 2170(b) and 2171(b). (Alliance)

    Agency Response: Yes, that is the plain meaning of the cited text.

50. Comment: "…staff says that its proposal harnesses the power of OBD systems. It eludes the Alliance how a "simple showing that an emission-related component failed in use at a particular percentage rate" has any particular tie-in to the OBD system." (Alliance)

    Agency Response: We disagree with this comment. OBD systems alert vehicle owners to failing parts, which they in turn seek repairs for. Under the amendments if an emissions part fails and is repaired while it is under warranty, manufacturers

must track the rate of the failures and report it to the ARB. If the failure rate exceeds 4% the manufacturer would have to take corrective action. The Response to Comment 2 is incorporated by reference here. See ISOR, pp. ii, 6, and19.

51. Comment: "ARB lacks the authority to order any form of remedy as to an entire class of vehicles, unless there is evidence of a classwide defect affecting a substantial number of vehicles." (Alliance)

52. Comment: "ARB's recall authority was intended to be constrained to remedies only against classwide defects – defects at a level for greater than a mere 4%." (Alliance)

Agency Response to Comments 51 and 52: We disagree with these comments and incorporate Responses to Comments 2, 4 and 5 by reference here. Additionally, the four percent failure rate is a well established threshold for requiring corrective action on emission-related component failures for the past 17 years. Also, under the amendments ARB generally will not consider requiring corrective action until a manufacturer reaches a ten percent warranty reporting level (i.e., the unscreened reporting level for given emission component for given test group or engine family). Once the ten percent warranty reporting level is reached, manufacturers still have the opportunity to screen their data and eliminate any warranty claims that are not valid (see, e.g., CCR, Title 13, Section 2168(c), (d), (e)). If, after screening, a manufacturer determines that at least a valid four percent failure level exists, the manufacturer may still be able to show that the failure is an early failure and has been corrected under warranty, that the failure has no conceivable emissions impact, or the high failure rate was attributed to an OBD software error (e.g., the tolerance limits of the OBD software were too sensitive causing the malfunction indicator to illuminate and resulted in a high component replacement rate) [See CCR, Title 13, Section 2168(b), (f), (g)].

53. Comment: "Why is it uniquely difficult to use emissions standards as the touchstone for compliance with the defect-reporting system, but not as difficult or undesirable to use the emissions standards everywhere else they are used?" (Alliance)

54. Comment: "Staff argues that emission standards are seldom dispositive, but the Alliance and its members are willing to make them dispositive. Indeed, the Alliance does not see why continued compliance of a vehicle or engine's emissions system with the emission standards is not dispositive of any relevant legal or policy questions in this area." (Alliance)

55. Comment: ARB lacks authority to order corrective action in situations where the engine family or test group has not been shown to fail applicable standards. (Alliance, Caterpillar, EMA, Ford, MIC, VW, AAIA, DDC)

56. Comment: "As long as the emissions system does not exceed the emission standard, it is a high-quality, effective, and law abiding emissions system." (Alliance)

57. Comment: "ARB lacks the authority to order recalls in situations where the entire engine family has not been shown to fail applicable emission standards." (Alliance)

58. Comment: Requiring recall and extended warranty on defects that do not cause increased emissions drives unnecessary cost and burdens the manufacturer with no attendant environmental benefit. (Caterpillar)

59. Comment: In the first hearing, Mitsubishi presented to the Board a chart showing two vehicles where one vehicle was slightly below the emission standard and had no defects and the second vehicle was at 50 percent below the standard with a defect present. Mitsubishi points out that staff's proposal would require corrective action of the second vehicle even though with the defect the emissions are at half the standard. Mitsubishi claims that the emission standards are the fundamental performance-based evaluation method for compliance with mobile source regulations. Mitsubishi admits that the three components of proving corrective action is difficult under the current regulations but believes a better plan other than staff's proposal can be collaborated between staff and industry. (Mitsubishi)

    Agency Response to Comments 53-59: We disagree with these comments and incorporate Responses to Comments 2, 4, 5 and 9by reference here. Additionally, that the scenarios posited may well result in emissions increases and that although they may not exceed the standard, they may well represent an emissions increase which was not part of the anticipated emissions deterioration rate as anticipated by the manufacturer and incorporated into its application for certification. We agree with Mitsubishi that under the current regulations it is difficult to enforce corrective action for systemic emission component failures.

58. Comment: Ford comments that the proposed regulations will not only subject the manufacturer to automatic remedial action but could also subject them to civil penalties. (Ford)

    Agency Response: We agree with this comment.

59. Comment: Industry does not believe that systemic failures require corrective action when there is no underlying systemic problem (i.e., a part could fail for multiple sporadic random failure modes). (Caterpillar, DDC)

    Agency Response: We disagree with this comment. The staff considered failure modes prior to the current warranty reporting procedures which resulted in no corrective action for many defective components. In the past, manufacturers would provide data of emission component defects but because failure modes

were slightly different (e.g., two cracked exhaust manifolds with cracks in slightly different areas) the manufacturers would argue that the failures were different and therefore should be counted separately. If a component fails and the failure is valid, the component should be counted towards the component's failure rate regardless of the failure mode.

60. Comment: More time may be needed for submitting a corrective action plan. (EMA, DDC)

Agency Response: We agree with this comment and modified section 2172 of the proposal allowing manufacturers and additional 45 days (90 days in total) to submit a recall plan and 45 days for an extended warranty plan. Should the manufacturer request more time, with cause, the Executive Officer can extend the time for drafting a proposed corrective action plan. The staff understands that corrective action plans can be delayed due to part availability or other logistic matters that can cause a delay. Staff will work with manufacturers towards getting the corrective action campaigns launched in a timely manner.

63. Comment: At the first hearing, Ford presented a "bath tub curve" showing that when a product is first introduced, a high failure rate could result in what is sometimes called "infant mortality" (referred to in the staff's proposal as an early failure), then the failure rate drops to an expected low failure rate, and later will increase to a high failure rate as parts wear out; this would be the useful life limit. Industry is concerned that the staff's proposal is requiring emission component replacements at the end of the vehicle's life when in fact the parts have simply worn out. (Ford)

Agency Response: We agree with this comment in part and disagree with it in part. The proposal was modified to account for the "infant mortality issue" in section 2168(b) of the amendments. In cases where the defect is caught and corrected very early, no further corrective action would be necessary. The staff believes that the comment is otherwise misleading, however, because it implies that the amendments would require reporting and corrective action throughout the useful lives of vehicles. This is incorrect. The amendments only track emission component failure rates for the applicable emission warranty period (5 years/50,000 miles or 7 years/70,000 miles, depending on the component) which is less than 50 percent of the certified useful life for most emission control components. Manufacturers need only report emission component failures during the applicable warranty period and would be required to take corrective action to correct them only when the defects reach systemic rates. If so, then manufacturers would be required to replace emission components under an extended warranty or recall but only for the certified useful life period. This is justifiable because manufacturers must certify that their emission components will be durable for the vehicles' or engines' full useful life period. Failures that exceed the four percent trigger after the warranty period terminates would not be required

to be reported and would not be subject to corrective action, in spite of what this comment implies to the contrary.

64. Comment: At the first hearing GM commented that mandatory extended warranties should be eliminated because ARB already has the bargaining power it needs to extend warranty. (GM)

Agency Response: We disagree with this comment. If this were the case, many more extended warranties would be in place. The staff incorporates the discussion at pp. 4-10 of the ISOR by reference here. In the staff's experience, under the current regulations the ARB has very little "bargaining power" when it comes to negotiating extended warranties or any other corrective action.

5. Regulatory Alternatives

65. Comment: The Board received a comment to utilize, as an alternative to the warranty reporting program, the low income repair assistance program (LIRAP) so that repairs can be approved by the state and the repair work be performed by a Smog Check repair station. (PC- Kevin McCartney)

Agency Response: We disagree with this comment because it would not correct the weaknesses in the current regulations. (ISOR, pp. 4-10). The LIRAP program is a program for handling vehicles that have failed Smog Check and are beyond their normal emissions warranty periods. The amendments to the warranty reporting regulation establish a program targeting systemic emission component failures that occur during the normal emission warranty periods and places the burden of correcting the emission component failure on the manufacturer not, on the vehicle owner or the State of California like the LIRAP Program does.

66. Comment: Staff has failed to prepare an ISOR that considers reasonable alternatives to the proposed amendments. (Alliance)

67. Comment: The analysis staff has provided of the industry's alternatives has been cursory and conclusory, or worse yet, entirely absent. Here is a listing of alternatives that staff must consider: (Alliance)

(a) "The no action or status quo alternative." (Alliance)

(b) Alliance May 2006 Workshop Proposal – Using projected failure rates and possible mileage driven on a given defect for determining corrective action. "Staff nowhere explains why such an alternative is flawed given the longstanding use in ARB regulations of family based emission limits and averaging." (Alliance)

(c) Staff's Own April 2006 Workshop Proposal – "The Alliance is at a loss to understand how staff could have floated an alternative in April, but within six

months (by October 10, 2006), that proposal somehow became untenable." (Alliance, MIC)

(d) Alliance November 20, 2006 Alternative – "…the Supplemental ISOR's consideration of that alternative stands or falls based on whether staff's explanation for eliminating consideration of emissions standards generally, is sufficient, which in the Alliance view, it is not." (Alliance)

(e) Alliance January 16, 2007 Alternative – "Although it is unclear, staff rejects this alternative because it requires a minimum of five tests of typical failures…Staff also appears to suggest that a seven-month delay associated with performing five tests is too long…Staff next argues that the disagreements may lead them to have to perform their own tests. The Alliance sees no reason why this is true…If there remained a disagreement about potential corrective action, the two types of test results could be submitted to a neutral decisionmaker (sic) for resolution…Finally, staff argues that there are "discrepancies and inaccuracies of emission test results due to laboratory quality control procedures."…It is inexplicable to the Alliance how staff can reject alternatives to the Proposed Rule, which creates a vast system of unreviewable administrative discretion, because they are insufficiently objective and might contain errors." (Alliance)

(f) "Revising the Proposed Rule to achieve equivalent emissions benefits by way of a minor adjustment to existing emissions standards…The point is that any change to the regulatory system in this area that adopts a new substantive standard must consider an amendment to the emissions standards as a benchmark for comparisons purposes…" (Alliance)

(g) AIAM proposes that "manufacturers be allowed the option to conduct engineering analyses, including analysis of available emissions data from development and other test programs, and to conduct additional emissions testing during the time between the EWIR report (4% trigger) and the SEWIR report (10% trigger). If and when the 10% action level trigger is achieved, the manufacturer will have assembled the data/analyses, as may be relevant, for discussion with ARB." (AIAM)

Agency Response to Comments 66 and 67: We disagree with these comments and incorporate Response to Comment 9 by reference here. The October 20, 2006 ISOR, contains an analysis of regulatory alternatives that the staff believes is adequate and in keeping within acceptable regulatory guidelines. Nevertheless, the industry contended that the ISOR did not address all of industry's alternatives to this proposal. Staff fully addressed this point in the Supplemental ISOR and analyzed each alternative that was submitted by industry. The staff disagrees that ARB's review of and response to these alternatives were cursory and unsupported. The staff commented on each of the alternatives provided by industry at the time the January 23, 2007 Supplemental ISOR was posted. In addition to the

Response to Comment 9, the staff provides the following further responses to this comment, by again addressing each alternative in the order listed above.

Agency Response to 67(a): The October 20, 2006, ISOR did address the "status quo" alternative by addressing the shortcomings of the current program. Staff showed that the current program has certain weaknesses that make it unnecessarily difficult to require manufacturers to provide corrective action for systemic emission component failures. Manufacturers provided few corrective actions for systemic emission component failures and allowed several high emission component failure rates to go uncorrected (ISOR, pp. 4-10). The ISOR discusses two major cases with Toyota and DaimlerChrysler that involved large vehicle populations and did not result in proper corrective action (see ISOR page 6). The monetary liability in these cases was potentially extensive and the strategy taken by these manufacturers was clear; i.e. to avoid recall by showing that ARB cannot prove that a given test group will fail the emission standards. It did not matter to these manufacturers that the DaimlerChrysler catalyst systems were failing at a rate of approximately 30 percent or that Toyota had, in the opinion of staff, a non-compliant OBD system installed Thanks to weaknesses in the current regulation, unsatisfactory results were reached in both cases. The OBD regulations were subsequently amended to eliminate the regulatory weaknesses that caused the unsatisfactory result in the Toyota case. The purpose of the amendments is similar to that of the OBD amendments; manufacturers experiencing systemic emission component failures will now be in violation of the certification test procedures prompting corrective action to remedy the nonconformity. The Alliance argues that under the current program, industry was never informed that existing Emissions Information Reports (EIRs) were insufficiently detailed and ARB could have requested further information as per CCR, title 13 section 2148(b). The ARB staff in fact did request information from manufacturers numerous times and far too often manufacturers supplied responses that were irrelevant or did not fully address the problem at hand. In some cases manufacturers simply ignored the requests and never responded to staff with further information.

Agency Response to 67(b): We disagree with this comment and believes that it appropriately addressed this alternative in the Supplemental ISOR (see page 9 of the Supplemental ISOR). The staff made it very clear in meetings with industry prior to and after the December Board hearing that this alternative was very complicated and subjective and to consider this alternative was not reasonable; in fact, it would be worse than the status quo program.

Agency Response to 67(c): We do not agree with this comment. The staff's April 2006 proposal (discussed at the May 2, 2006 workshop) employed emissions testing and in the staff's opinion too closely resembled the status quo. The staff reached this decision after months of consideration and rejected alternatives that employed emissions testing and resembled the status quo.

Agency Response to 67(d) & (e): The staff appropriately addressed these alternatives in the Supplemental ISOR (see pages 9-10 of the Supplemental ISOR). The main focus of these proposals is corrective action for systemic emission component failures if the manufacturer showed that with the failed component the vehicle(s) would fail the emission standards. This program is essentially the status quo program (i.e., manufacturers would have to supply emission testing, however an engineering report could be filed in lieu of testing to show the emissions impact with the failed component) and was rejected for this reason.

Agency Response to 67(f):

We do not believe that lower standards would by themselves guarantee that manufacturers would provide corrective action for systemic emission component failures. The same weaknesses in the regulations would frustrate the imposition of corrective action.

Agency Response to 67(g):

We believes that AIAM's proposal is a derivative of the current program and is unacceptable for the same reasons the status quo is—namely it relies on emissions testing and does not address any of the other weakness of the current program. Under AIAM's proposal, manufacturers would conduct emission testing before the ten percent trigger is reached. Should this event occur, the manufacturer would present its emission data and determine if corrective action is necessary. AIAM states that "most manufacturers are conscientious in tracking emissions warranty claims and often take voluntary actions well before the 10% action trigger is reached." They go on to state, "We also believe that manufacturers will exercise their option to raise issues over emissions impacts only on infrequent occasions." While it is true that manufacturers may launch corrective action before the corrective action trigger level is reached, often these actions are taken by manufacturers for customer satisfaction purposes only. In regards to manufacturers exercising their option to raise issues over emissions impacts, staff's experience is that manufacturers frequently raise this issue when faced with systemic emission component defects and believe the same would be the case under AIAM's proposal.

68. Comment: Alliance members are willing to bear the cost of testing, and the advantages of judging enforcement actions based on their emissions impact should not be thrown out simply because sometimes it makes sense to estimate such effects, rather than measure them exhaustively through a full-blown testing program. (Alliance)

Agency Response: We disagree with this comment and incorporates its Responses to Comments 2, 4 and 5 by reference here. The fact that the manufacturers would bear the cost of emissions testing would neither avoid the pitfalls of such testing (i.e. issues of sample size, vehicle procurement, validity of

results, resources staff would have to expend in analyzing test results, the time consumed in testing, disputes over the meaning of the test results, delays in implementing corrective action), nor would it correct the weaknesses in the current regulations that frustrate the imposition of corrective action, see, e.g. ISOR pp. 4-10.

69. Comment: Industry is willing to accept the staff's proposal with the following four changes added to the proposal that will allow manufacturers an affirmative defense ("with anyone such successful defense being sufficient to preclude a recall or other such corrective action"). (Alliance)

(a) "Identified defect would not cause an emissions standard exceedance."
(b) "Identified defect was unforeseeable at the time of vehicle or engine design and production."
(c) "The relief the Executive Officer has ordered creates an undue burden on manufacturers or vehicle owners."
(d) "Any determination made by the Executive Officer, especially concerning the form and scope of relief ordered, should be reserved as abuses of discretion."

Agency Response: We disagree with this comment and incorporates Responses to Comments 2, 4, 5 and 9 by reference here. This proposal would make obtaining corrective action for systemic emission component defects more difficult than it is under the current regulations. Comment (a) would base all corrective action on emissions testing and is unacceptable because it suffers from the issues of cost and the other issues that plague such testing (i.e. issues of sample size, vehicle procurement, validity of results, resources staff would have to expend in analyzing test results, the time consumed in testing, disputes over the meaning of the test results), nor would it correct the weaknesses in the current regulations that frustrate the imposition of corrective action, see, e.g. ISOR pp. 4-10. Comment (b) would add an additional burden on the Executive Officer to demonstrate that the defect was unforeseeable. This is not required under the current regulation and would make obtaining corrective action even more difficult than it is currently by providing manufacturers another unnecessary issue to contest instead of correcting defects in their emissions components. As far as Comment (c) is concerned, Section 2166(d) allows the Executive Officer to consider the burden the corrective action would place on the manufacturer. As noted above in Response to Comment 6, abuse of discretion is an issue not properly before an administrative law judge. The current regulation does not authorize manufacturers to raise this issue in administrative hearings. Whatever rights the manufacturers have to raise this issue may be exercised in the courts. The regulations establish standards for requiring corrective. The Executive Officer's discretion in making this determination is not unfettered.

70. Comment: MIC proposed that corrective action can be circumvented if 1) a failure can be detected within the first 200 miles after the defect has occurred and will

continuously warn the operator, 2) an overt drivability problem occurs as a result of the failure, or 3) if the average emissions for an entire engine family, group, sub-group are shown to be in compliance with the certification standards. (MIC)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4, 5 and 9 by reference here. This proposal would make obtaining corrective action for systemic emission component defects more difficult than it is under the current regulations. Comment (1) is unworkable because motorcycles do not have OBD systems that would warn owners that a defect is present and it is unlikely that they would detect one on their own. Comment (2) is unacceptable. If this were the case, then the some of the worst failures would be immune from corrective action just because they also cause drivability problems. Comment (3) would base all corrective action on emissions testing and is unacceptable because it suffers from the issues of cost and the other issues that plague such testing (i.e. issues of sample size, vehicle procurement, validity of results, resources staff would have to expend in analyzing test results, the time consumed in testing, disputes over the meaning of the test results), nor would it correct the weaknesses in the current regulations that frustrate the imposition of corrective action, see, e.g. ISOR pp. 4-10. Under the amendments, since motorcycle emission warranties currently extend to the full useful life of the vehicle, motorcycle manufacturers are not subject to extended warranty as a corrective action.

71. Comment: Because motorcycles are not required to incorporate OBD systems, the staff should recognize that motorcycles present unique special circumstances with regard to detecting and remedying defects and allow motorcycles to use existing recall procedures or other alternatives. (MIC)

Agency Response: We agree with this comment. The staff recognizes the unique situation of the motorcycle industry, especially since this is the only industry that warrants its vehicles for their full useful life. The amendments were modified in response to this. Under the amendments, since motorcycle emission warranties currently extend to the full useful life of the vehicle, motorcycle manufacturers are not subject to extended warranty as a corrective action.

72. Comment: MIC offered two alternatives prior to the December 7th board hearing. One of the alternatives was a slight modification of the existing warranty reporting program. The other alternative took into account the emission component failure and the vehicle's ability to detect the problem soon after the problem occurred or would be obvious to the driver. The third component to this alternative took into account if the emission component failure caused the vehicle to exceed the emission standards. (MIC)

Agency Response: The first alternative is a slight modification to the existing warranty reporting program and added an emissions testing component (or an engineering analysis) for determining the emissions impact of a given defect. If no emissions exceedance is demonstrated then no corrective action would be

required by the manufacturer. Staff addressed this alternative in the Supplemental ISOR (see page 10 of the Supplemental ISOR and Response to Comment 9, incorporated by reference here). The other alternative was addressed in the agency's Response to Comment 70, incorporated by reference here.

6. Regulatory Development

73. Comment: It is not sufficient here for staff to simply claim they are looking for a regulation that is easier to enforce. (Alliance)

    Agency Response: We disagree that the purpose of the amendments is simply to adopt a regulatory approach that is easier for staff to enforce. The staff incorporates its Responses to Comments 2, 4-7 and 9 by reference. The amendments would enact a fair and realistic process to correct systemic failures of emissions components in a prompt manner.

74. Comment: "From an engineering and logical standpoint, what staff has failed to acknowledge is the concept of design redundancy, an aspect of reliability theory in engineering. Sound product design, especially for a complex system with the potential of multiple components to malfunction, does not rely on designing one component to meet a particular design goal by assuming that component will never fail. Instead, well-designed products deliberately build in redundancy so that even if one component fails, an overall product objective or feature will not be compromised, or at least not be unduly compromised." (Alliance, Ford)

    Agency Response: We disagree with this comment. Staff is aware of the concept of design redundancy, but does not believe that it excuses systemic failures of emission control components. The staff incorporates its response to Comment 90 by reference here.

75. Comment: ARB's analysis of two cases is hardly enough information to base an entire regulatory amendment. (Alliance)

    Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4 and 5 by reference here. The Toyota and DaimlerChrysler cases involved large vehicle populations and emission control component defects that the staff regards as serious. The fact that unsatisfactory results were obtained in both cases exposed weaknesses in the current regulations that the amendments are designed to correct. Nevertheless, the staff did not base the amendments on these cases alone, but on its experience in running the program for nearly 18 years (See, e.g., ISOR at pp. 2-10) as well as on all of the facts and circumstances discussed at length in the Notice, ISOR, and Supplemental ISOR which are incorporated by reference here.

76. Comment: "No manufacturers build prototype vehicles, test them in accord with the California regulations and test procedures, and then build substantially similar

vehicles. Whether the vehicles so built and certified later cross the 4% defect threshold is an entirely separate matter." (Alliance)

Agency Response: We disagree with this comment. Manufacturers perform numerous tests in the design and production of their vehicles and engines to ensure that they comply with all requirements, including testing with prototype vehicles. (See, for example Comment 90, below.) California HSC section 43106 requires that all production vehicles or engines must be, in all material respects, the same as the vehicle or engine that was certified. Whether the vehicle that was tested for certification was a "prototype" vehicle or not is irrelevant. Manufacturers have processes for determining the functionality and durability of not only their emission control systems but virtually every other aspect of their vehicles.

77. Comment: "Staff has never explained why 4% constitutes evidence of a classwide defect, and not 2% or 10%. There is no engineering basis for this threshold, and it has no basis of which we are aware in any other source of law, whether statutory, regulatory, or common law…the 4% threshold was a mere presumption and a signaling device to the Executive Officer to investigate whether corrective action may be warranted." (Alliance)

78. Comment: "…what the Proposed Rule does is to reify the 4% threshold into an irrebuttable presumption of a classwide defect. The Board lacks the substantive authority to do this under the Health & Safety Code and cannot accomplish that end, consistent with due process because the Board has not met the constitutional test for establishing and irrebuttable presumption." (Alliance)

Agency Response to Comments 77-78: We disagree with these comments. The four percent threshold has long been used for determining whether emission component failures reached a systemic level and needed corrective action. The four percent threshold was established by the Board in 1988 for manufacturers of 1990 and newer motor vehicles and required corrective action for systemic failures in the field. The four percent threshold is not cast in terms of an irrebuttable presumption in the amendments, and the amendments provide various defenses. The threshold cast was as an irrebuttable presumption in an earlier version of the amendments that was circulated for comment, but was modified in response to comments. Even if it were an irrebuttable presumption, the staff believes that the threshold would meet any applicable constitutional test. The staff incorporates ISOR, pp. 2-10, and its Responses to Comments 2, 4-6, 93 and 94 here.

79. Comment: "Eighteen years ago (September 1988), the staff proposed changes very similar to those currently contained in the ISOR. Rather than adopting those changes, the Board rejected them and directed staff (to) work with industry to resolve problems with the proposed regulation. After meetings with industry and at the Board's direction, the staff modified their proposal to 1) link recalls based on component failures to the exceedance of emission standards, 2) eliminate a provision linking new vehicle certification to in-use failures." (Alliance)

Agency Response: We agree with this comment. 18 years of experience indicate the amendments are necessary. The staff incorporates ISOR, pp. 2-10, and its Responses to Comments 2, 4-6 here.

80. Comment: "Staff has never explained why, in light of the manufacturer's willingness to assume the full testing burden, staff can continue to rely on a "limited resources" rationale for this proposed rulemaking." (Alliance)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4 and 5 by reference here. The fact that the manufacturers would bear the cost of emissions testing would neither avoid the pitfalls of such testing (i.e. issues of sample size, vehicle procurement, validity of results, resources staff would have to expend in analyzing test results, the time consumed in testing, disputes over the meaning of the test results, delays in implementing corrective action), nor would it correct the weaknesses in the current regulations that frustrate the imposition of corrective action, see, e.g. ISOR pp. 4-10.

81. Comment: Additional lead time is required for manufacturers and their suppliers to develop and implement appropriate process improvement. (Ford)

Agency Response: We disagree with this comment. The amendments will take effect in the 2010 model year. Manufacturers currently must meet durability requirements and most manufacturers already do comply and will not be adversely affected by the proposal. 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 amendments will cause no additional cost, other than redesign of the defective part. In addition, it is reasonable to assume that defect rates will decline by at least ten percent when improved PZEV durability technology is passed onto to non-PZEV vehicles. The staff incorporates its Response to Comment 8 by reference here.

82. Comment: If the manufacturer can show an 80 percent repair level, consistent with the mandated requirement for an ordered recall (based on current regulations), then no further action is required. (Ford)

Agency Response: We disagree with this comment. Mandating a requirement of 80 percent for an ordered recall is unnecessary and undesirable because, thanks to the ARB/Department of Motor Vehicles vehicle registration tie-in program, ARB can guarantee that virtually every vehicle registered in California that is subject to recall, whether voluntary or ordered, will be corrected or have its registration cancelled. Accordingly, if the manufacturer determines that 80 percent of the vehicles will be remedied under warranty, the manufacturer may still be required to provide corrective action for the remaining 20 percent that have not been corrected.

83. Comment: Section 2168(d) [it is now section 2168(e)] regarding screening out voluntary recalled components from the warranty data is the only option manufacturers have for addressing emission related component failures before they reach a four percent failure level. Ford normally issues technical service bulletins or service campaigns for addressing these issues but under the new proposal, these solutions could quickly cause warranty claims to exceed the ten percent failure level. Ford recommends that the section be changed to include other solutions within the scope of corrective action and include but not limit it to technical service bulletins, service campaigns, extended warranties and recalls. (Ford)

Agency Response: We disagree with this comment and believe that this type of action is not sufficient to qualify as corrective action for emission component failures. The staff acknowledges that manufacturers publish technical service bulletins to assist service technicians in diagnosing vehicle problems. Staff disagrees, however, that service bulletins will cause a specific failure to reach a ten percent failure rate faster than expected. If dealers replace a functioning emission component with another functioning emission component and reach a ten percent replacement rate, the manufacturer can still audit the replacements and demonstrate to ARB that the actual failure rate is below four percent. If this is the case, no action would be required until the failure rate exceeds a valid four percent. Staff does not agree with Ford's recommendation to allow any corrective action solution to be screened out of the warranty reporting data. Section 2168(e) was added to allow only those components replaced under recall to be removed from the warranty reporting database if, in fact, these components were replaced with an improved part. To allow this process for emission components replaced under an internal service campaign or technical service bulletin recommendation does not adequately ensure that every vehicle will have the ability to receive the corrective action recommended by the manufacturer. Under the amendments, should an emission component failure reach the four percent valid failure rate, owners are assured repair by way of recall or an extended warranty.

84. Comment: ARB's proposal includes existing provisions under section 2148(b) that considers whether the vehicle is likely to be repaired in a timely manner, before requiring corrective action. This is based on the premise that the OBD system will quickly alert owners to a problem and cause the operator to seek repair. (Ford)

Agency Response: We removed the referenced provision 2148(b) because it was too broad. In its place, the staff inserted more specific provisions set forth in section 2168 that provide a process for screening certain vehicles when calculating whether the four percent threshold has been reached and corrective action is needed. Staff disagrees that OBD-detected failures should be considered self campaigning and no corrective action is necessary in these cases. Systemic emission component problems that arise during the emissions warranty period are likely to continue to occur outside of emissions warranty (but within the useful life of the vehicles) as well. Under the amendments, owners whose OBD systems

detect the component failures after the emission warranty periods have elapsed will be able to have them repaired under extended warranties the Executive Officer orders as corrective action. Under the commenter's suggestions, such owners would have to pay for the repairs themselves, despite the fact that the systemic nature of the defect manifested itself early on. The staff believes that this would be an unfair result.

85. Comment: Section 2166(d) should be amended to clarify what constitutes an "unwarranted burden". (Ford)

    Agency Response: We agree with this comment and modified section 2166(d) to allow the Executive Officer to waive any provision of the Article if he or she finds that it constitutes an "undue" burden on the manufacturer. The modification also provides that the Executive Officer may, but is not required to, consider economic or environmental impacts. The staff believes that added clarification should better define the process for determining whether a corrective action would impose an undue burden imposed on a manufacturer.

86. Comment: Proposed section 2174 limits manufacturers in a public hearing to contest only recall related actions but does not allow contesting other corrective action issues. (Ford, AIAM)

    Agency Response: This comment was raised at the December 7th Board Hearing and staff agreed to modify the amendments to allow manufacturers to contest any corrective action ordered by the Executive Officer under the amendments. Language was modified in proposed section 2174 to reflect this change.

87. Comment: The proposed regulation should retain Section 2142 Alternative Procedures, regardless of model year. (Ford)

    Agency Response: We disagree with this comment because alternative reporting is unnecessary. An alternative reporting section was originally, added to the current reporting procedures because manufacturers were not confident that they could acquire the emission warranty data from their dealership network to provide a timely Emission Warranty Information Report (EWIR) to ARB on a quarterly basis. Today, thanks to advances in information collection technology, manufacturers no longer require an alternative procedure for reporting EWIR data. In addition, alternative reporting was incomplete and inaccurate. Based on current database technology, the staff sees no need to use alternative reporting procedures for generating EWIR data.

88. Comment: Section 2166.1(f) defines an Emission Warranty claim as any claim for an emission-related component covered by the "warranty provisions". Industry believes that miscounting could occur if an emission-related component replacement is counted as part of a different warranty plan (e.g., extended

warranty coverage purchased by the owner) and not the mandated emission warranty covered as set forth in CCR, Title 13, section 2035. (EMA, Ford)

Agency Response: We agree with this comment and made a modification to 2166.1(e) [2166.1(f) is now 2166.1(e)] that shows that the coverage only pertains to the warranty provisions of CCR, Title 13, Article 6.

89. Comment: The quarterly reporting of the SEWIR report is not required after every calendar quarter once the EWIR establishes a ten percent emission component replacement rate. The initial screening analysis of components will establish the rate at which the warranty replacements are deemed valid failures and all corresponding SEWIRs will be supplemented based on this validation analysis. Guidance should be given to all manufacturers on how to apply the validation analysis for the initial SEWIR to subsequent quarterly SEWIRs. (Ford)

Agency Response: We object to this comment under Government Code section 11346.9(a)(3) because it is not directed at the amendments or the procedures used to adopt them. Without waiving this objection the we respond as follows. Staff has worked with manufacturers in the past on validation studies for screening warranty data to establish valid failure rates. To simply state that the first validation study is the basis for all corresponding projection failures for a given emission component is inaccurate. Manufacturers are allowed to conduct their own validation analyses and in most cases manufacturers will do this by analyzing parts from the field. For example, a manufacturer may conduct an emission component failure analysis on only ten components and state that of 600 warranty claims, only one percent was a valid failure. The ARB may reject this analysis or require that the manufacturer submit an updated SEWIR in the following quarter and establish a greater representation of analyzed components; hence recalculating the number of valid warranty claims. Validation analyses can vary by manufacturer and will be reviewed on a case by case basis. In addition, if the validation data demonstrates to the satisfaction of the Executive Officer that the valid failure rate will never reach a four percent trigger level, the manufacturer may be allowed to terminate the SEWIR report for the given emission component case.

90. Comment: Prototype vehicles (or durability vehicles) are not production vehicles. Due to inherent variability associated with the mass production of components and the assembly line process, manufacturers explicitly design the development prototype vehicles to a lower emissions level than the applicable emissions standards in order to provide a compliance cushion for production vehicles in-use. (AIAM)

Agency Response: We agree with this comment, but do not believe that it provides a reason for modifying the amendments and we incorporate Response to Comments 74 and 76 by reference. HSC section 43106 requires that production vehicles and certification vehicles be substantially the same in all material respects. The commenter asserts that the prototype durability vehicles are built so they meet

lower emissions to assure that production vehicles comply with the emission standards in-use. The staff realizes that manufacturers must build vehicles to assure themselves that vehicles meet the emission standards along with the durability standards for the vehicles useful life period. In accordance with Title 40, Code of Federal Regulations §86.1823-01(e) manufacturers shall use good engineering judgment to determine that all emission-related components are designed to operate properly for the full useful life of the vehicles in actual use. In other words, the durability program must demonstrate an accurate representation of component durability in actual use. Despite these safeguards, manufacturers continue to produce vehicles that develop systemic emission component failures. The amendments also provide an additional, necessary mechanism to ensure that manufacturers meet the emission component durability requirements. The staff incorporates its Responses to Comments 2, 4 and 5 by reference here.

91. Comment: Staff should more clearly defines a "valid defect" and a "valid warranty claim". (AIAM)

    Agency Response: We agree with this comment and re-defined the wording for this term as "valid failure" or "valid failure rate". The proposed terminology and definition appears in section 2166.1(r).

92. Comment: Since the in-use recall testing criteria only applies to 75 percent of a vehicles useful life, it is reasonable to apply this same approach to extended warranty requirements. (AIAM)

    Agency Response: We do not agree with this comment. Assuming, arguendo, that this comment is accurate, it does not constitute a reason for limiting extended warranties to 75% of a vehicle's useful life. Extended warranties make sense for some systemic failures that will be detected by vehicles' OBD systems and do not involve exhaust aftertreatment devices. The staff believes that extended warranties should extend for the whole useful life of the vehicles involved, however. Systemic failures manifest early in a vehicle's life because warranty reporting only occurs during the applicable emissions warranty period, which does not extend to the whole useful life of the vehicle. The staff believes that it is reasonable to conclude that component failures will continue to occur after the systemic failure manifests itself and that it would be unfair for owners in this situation to not have their repairs covered to the same extent that other owners whose vehicles exhibited the failure earlier in the vehicle's useful life were covered. Also, in some sense the extended warranty is a lower cost substitute for a recall. In a recall, all owners of vehicles in the affected class would have their vehicles repaired at the manufacturers with parts that must be durable enough to last the useful life of the vehicle. It would be unfair to allow owners who were covered by extended warranty to get less protection than would be the case if the Executive Officer had ordered a recall.

93. Comment: The staff did not justify the definition of a "systemic failure" as set forth in proposed section 2166.1. (DCC)

Agency Response: We disagree with this Comment and incorporate Response to Comments 77, 78 and 94 by reference here.

94. Comment: Staff removed the current regulatory information that allows the Executive Officer to determine that a recall is not necessary if the defect is likely to be corrected under the warranty program or is "limited to an emissions-related component on a less-than-substantial percentage of vehicles and does not represent a pervasive defect in design, application, or execution of such emissions-related components during the useful life of the vehicle or engines…" 13 CCR 2148(b)." DaimlerChrysler is concerned that an arbitrary threshold removes all considerations of each case without considering all the facts. (DCC)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4, 5, 77, 78 and 93 here. Staff believes that once the four percent failure rate is established as a valid failure, this represents a systemic failure that should be corrected. The staff did include a provision in section 2168 that allows the manufacturer to screen its warranty data. Once screening has been completed, and a four percent failure has been established, it is staff's position that the emission component failure is pervasive and corrective action is required. In general, based it experience dealing with the automobile industry, the staff is generally aware that in the industry standards of acceptable manufacturing quality for individual emission components are lower than a four percent defect rate. When these high quality components are installed on vehicles and experience systemic failure rates of four percent or more, the staff believes that this level of failure is unacceptable. It is unacceptable for manufacturing quality control purposes and is unacceptable for California certified in-use vehicles as well. At the December 7th hearing, Board Member Sandra Berg asked an industry representative if a four percent failure rate is excessive. Industry did not answer the question. Executive Officer Witherspoon stated, "I think if it were brakes, the auto industry would say it's excessive. And when its emission controls, they think that it's not. And there's a value difference being applied to when it's serious enough to go to full corrective action. And we think that as long as the risk exists that it's going to fail and emissions are going to be adversely affected, that we're responsible for getting it corrected, either immediately with a recall or over the vehicle's life through extended warranty." In the DaimlerChrysler catalyst case, the failing catalysts posed no safety risks like failing brakes would have but would have been very costly to recall and fix, given the many vehicles and test groups that were subject to systemic catalyst failures. Rather than correcting the catalyst problem, DaimlerChrysler instead chose to argue, among other things, that the failure represented a "less-than-substantial percentage of vehicles and does not represent a pervasive defect in design" argument, as set forth in current regulations CCR, Title 13 section 2148(b). The staff believes that refusing to repair the bulk of these catalysts was in part a financial decision by DaimlerChrysler that

the staff believes was wrong for California's air quality and wrong for owners of DaimlerChrysler vehicles affected by the defect. Chrysler is not the only manufacturer to make this argument in seeking to avoid having to correct a pervasive emission system defect. Accordingly, the staff believes that it is desirable to establish a clear standard of a four percent failure rate to encourage manufacturers to implement corrective action where defects in emissions control components occur at such levels.

95. Comment: The definitions of the terms "emission-related failure", "valid emission-related failure", and "systemic failure" be re-written because the usage of these terms are overly broad resulting in corrective action for defects that have no effect on emissions. (EMA, DDC)

Agency Response: We agree with this comment in part and disagree with it in part. In response to comments, staff made modifications to certain terms including eliminating the term of "emission-related failure". A warranty component that has been identified as a valid replacement is represented as a "valid failure" and its definition can be found in section 2166.1(r). A "systemic failure" exists when the valid failure rate has reached the four percent trigger level and its definition is located in section 2166.1(n). If manufacturers experience a systemic failure for a given component for a given test group or engine family, then corrective action would be necessary unless the manufacturer could show that no corrective action is required pursuant to section 2168.

96. Comment: Heavy-duty manufacturers request a delay in complying with the new regulations, to start with the 2013 model year, because of new sophisticated emission control technology that is expected to begin with the 2010 model year engines. (DDC, EMA)

97. Comment: Heavy-duty manufacturers should be granted a delay in complying with this proposal until 2016. (Caterpillar)

Agency Response to Comments 96 and 97: We disagree with these comments. The staff addressed this concern in the Supplemental ISOR (see page 11 of the Supplemental ISOR which is incorporated by reference here). OBD and NOx after-treatment technology are the important new technologies that will come on-line with the 2010 model year for heavy-duty vehicle and engine applications. Due to the important emission reducing significance of these technologies, staff believes that delaying effective date of the amendments for this industry is undesirable. Staff believes that heavy-duty manufacturers do have experience with these technologies and should be able to be comply with the durability requirements of NOx after-treatment devices and OBD systems required in the 2010 model year time frame. The staff further notes that updates involving OBD software calibration issues will not require corrective action as long as the calibrations are not being installed to correct an emissions exceedance issue or an OBD compliance issue (see proposed section 2168(g)).

98. Comment: Delay the ten percent trigger point for heavy-duty vehicles and engines and raising this threshold to 20 percent for the 2010-2012 model years, 15 percent for the 2013-2015 model years, and 10 percent beginning with the 2016 model year. (EMA)

Agency Response: We disagree with this comment. The agency's Responses to Comments 96 and 97 are incorporated by reference here. The staff does not believe that it is neither desirable to delay the amendments nor change corrective action threshold trigger points due to the importance of the emission control technologies that will be installed on heavy-duty vehicles starting with the 2010 model year vehicles and engines.

99. Comment: The language in section 2166(a) is not clear on the applicability of California certified heavy-duty engines covered by the proposed regulations. (DDC)

Agency Response: We disagree with this comment and believe the applicability of this proposal is consistent and clear and indicates that heavy-duty vehicles and engines certified and sold in California must comply with this rule. Section 2166(a)(1) provides that the Article applies to "heavy duty vehicles" and section 2166(a)(2) provides that the Article also applies to "California-certified engines used in such vehicles".

100. Comment: The useful life definitions in proposed section 2166.1(p)(13) and (14) should be removed because heavy-duty vehicle and engine applications do not apply to these proposed regulations. (DDC)

Agency Response: We agree and the sections were removed.

101. Comment: It is not necessary to review the warranty claim data on a quarterly basis as required by proposed section 2167 because the EWIR report only has to be filed on an annual basis. DDC explains that warranty data only needs to be reviewed and compiled on an annual basis. (DDC)

Agency Response: We disagree with this comment and believe that it is desirable for a manufacturer to review its warranty data on a quarterly basis as a matter of practice to determine if an emission component is exhibiting a high failure rate, so that corrective action can be taken promptly before the situation worsens. Quarterly review is made a requirement under section 2167(a). Also, under section 2167(c), the Executive Officer may request quarterly EWIR submissions if a specific warranty claim(s) was showing a high failure or evidence from the field indicated that an emission component was being replaced at an excessive rate.

102. Comment: There should be a limit on the time period for reporting warranty information data. (DDC)

Agency Response: We agree with this comment and, based on an established policy it developed with industry for terminating warranty reporting, staff formalized this policy in the amendments by including the "Emission Warranty Reporting Termination Point" as defined in section 2166.1(i) and established in section 2167(c). This modification was added to the proposal prior to the March 22nd Board Hearing.

103. Comment: If the heavy-duty manufacturer elects to use nationwide data for tracking EWIR data, for the purposes of determining if the numeric thresholds are exceeded, the number of nationwide claims should be proportioned by the ratio of California to nationwide vehicles. (DDC)

Agency Response: We disagree with this comment. Proportioning warranty repair leads to unauthorized screening and removing unscreened data from warranty database. If a manufacturer utilizes nationwide data, the failure rate is simply what is observed from the data collected nationwide. This is a larger sample size than just state data is and in most cases should result in a more statistically robust pool of data.

104. Comment: Staff should work with industry to develop the electronic format for the EWIR and SEWIR. (EMA, DDC)

Agency Response: We agree with this comment and have worked with each individual manufacturer in developing the current EWIR electronic file. The amendments provide for electronic submission of the reports. The new EWIR dataset will be essentially the same with the small addition of an extra field in the dataset. Staff will again work with each manufacturer to ensure that both the EWIR and SEWIR warranty files are effectively integrated into this new process.

105. Comment: The repair code in the EWIR dataset should be removed because repair of a given component could involve repair and some replacement. It is not clear how this would be handled. (DDC)

Agency Response: We disagree with this comment and believes that the industry should be well aware of how to handle this situation because the repair code has been used for over ten years in the EWIR report. Manufacturers utilize the repair code when a part has been repaired but not replaced. The manufacturer must have a method for determining when a part is repaired versus a complete replacement because the manufacturer needs to know this information when reimbursing a dealer for repair work. The staff is aware that some manufacturers use labor codes for determining the proper repair. The manufacturer will have to implement a mechanism for determining repairs versus replacements if one does not currently exist. To staff's knowledge, no manufacturer has experienced a problem doing this.

106. Comment: The warranty coverage code in the EWIR dataset should be deleted because the manufacturer offers a variety of warranty coverages and there is no single warranty coverage period associated with each component type. (DDC)

Agency Response: We disagree with this comment. Warranty coverage is the main basis used to track emission component replacements in the field. If an emission component covered under the emission warranty regulations set forth in CCR, Title 13, Article 6, is replaced during the warranty coverage period, the manufacturer should be able to indicate the appropriate emission warranty coverage period for this component in the EWIR database.

107. Comment: Section 2167(d) states that "the records" described in this section shall be made available to the Executive Officer" upon request." Industry is unclear why staff would need these proprietary records. (DDC)

Agency Response: We believe that section 2167(d) is sufficiently clear. In some instances, staff may need to investigate how manufacturers are arriving at the warranty reporting levels being reported. For example, staff may ascertain information from the field that could show a discrepancy with the manufacturers' reported data and may wish to explain the discrepancy. One way to resolve this discrepancy is to request records from the manufacturer to determine why there is a conflict with the EWIR data.

108. Comment: Section 2168(e)(5) [now section 2168(j)(5)] requires manufacturers to explain why a recalibration is being installed at systemic rates. Industry supplies running changes for the calibration updates and believes this to be an unnecessary burden for manufacturers to address. (DDC)

Agency Response: We disagree with this comment. Some manufacturers are not diligent in supplying the needed running change information to staff in a timely manner. Staff will allow manufacturers to supply the running change information to comply with the requirement of this section. Should staff have further questions regarding the running change; staff will follow up with the manufacturers on a case-by-case basis.

109. Comment: Manufacturers should not be required to provide projections of unscreened warranty claims data as part of the SEWIR. (DDC)

Agency Response: We disagree with this comment. Warranty claim projections are needed to assist in understanding what is occurring with a given emission component replacement in the field. For example, if a manufacturer reports that the unscreened replacement rate is expected to reach 70 percent but the valid failure will never reach four percent, the staff needs to know this information to perhaps further investigate this issue. Alternatively, the manufacturer may show a minimal unscreened projected failure level but the failure continues to climb well

past that amount. In this case, staff would need the manufacturer to respond to this discrepancy.

110. Comment: What is the intent of explaining when an unscreened warranty replacement rate that has exceeded ten percent is found to exist in less than four percent? (DDC)

Agency Response: Most unscreened warranty claims that exceed a ten percent unscreened replacement rate have reached a valid four percent failure level. If the manufacturer claims that a ten percent or greater warranty rate is below a valid four percent failure, the manufacturer must explain why the valid failure rate is below four percent. In other words, it explains why the owners are returning for repair at such high rates.

111. Comment: Proposed section 2168(a) and 2168(e)(6)(v) appear to be contradictory. (DDC)

Agency Response: We agree with this comment and has since removed proposed section 2168(e)(6)(v).

112. Comment: The owner notification language set forth in proposed section 2172.3(d) is misleading and prejudicial and the language should be modified to better reflect the situation being corrected. (EMA, DDC)

Agency Response: We agree with this comment and worked with the commenter to modify the language. The modification was made before the March 22nd Board Hearing.

113. Comment: The proposal pertains more appropriately to the light-duty/passenger car industry and no consideration has been given to the needs of the heavy-duty industry. EMA states that the heavy-duty industry warranty issues are unique matters that cannot be tied into the warranty reporting process. (EMA)

Agency Response: We disagree with this comment, especially given the fact that the heavy-duty industry has been subject to warranty reporting procedures since the program began in 1990. The heavy-duty industry experiences warranty issues just like other on-road vehicle manufacturers and the data from heavy-duty warranty repairs and replacements need to be compiled and reported like the rest of the on-road vehicle industry does. Nevertheless, staff has experienced reporting issues with several heavy-duty manufacturers in the past and these manufacturers have shown reluctance to provide corrective action plans for serious emission component failures, just like the manufacturers of other on-road vehicles. Despite this, the heavy-duty industry continues to insist that it is somehow different and that the heavy-duty market will somehow correct systemic emission control component failures without regulatory requirements to do so. The staff does not agree. The staff's experience indicates the contrary. Also, for example, the

commenter has stated that it should be acceptable for a heavy-duty manufacturer to refuse to provide corrective action for a particulate trap that fails and plugs at systemic rates, under the theory that because the plugged trap causes the vehicles it is installed in to cease operating, it should not be of concern because such vehicles are incapable of producing emissions. The staff disagrees. Heavy-duty manufacturers should be reporting emission component failures and be required to correct them like manufacturers of other vehicles do. The staff incorporates its Responses to Comments 2, 4 and 5 here by reference.

114. Comment: ARB should provide specific criteria for screening warranty data for parts that are not defective or where the repair was not valid. (EMA)

Agency Response: We agree with this comment and have worked with the commenter to provide new screening criteria that is now part of the SEWIR report (see proposed section 2168(c), (d), and (e)).

115. Comment: The proposed section 2172.3(f) prohibits the manufacturer from including a statement to their owners or dealers that the nonconformity will not degrade air quality. Industry believes that they should be allowed to make this statement if the repair has no impact on emissions. (DDC)

Agency Response: We disagree because corrective actions that are based on this proposal should have an overall positive influence on emissions.

116. Comment: At the December 7th board hearing, the Board heard comments that the overall extended warranty for passenger vehicles, medium-duty vehicles, light heavy-duty diesel engines, and medium-duty diesel engines were too long. However, no one expressed concerns that the 200,000 mile extended warranty limit for heavy-heavy duty diesel engines (HHDDE) was too long nor was it long enough. The clear direction by the Board was to reconsider the length of the proposed extended warranty periods except for HHDDEs. (Caterpillar, EMA)

Agency Response: We disagree with this comment. The Board was concerned about the fairness of extending the warranty beyond the useful life of a vehicle and directed staff to consider modifying the regulations so that any corrective action involving an extended warranty, under this proposed rule, would only apply to the vehicle's or engine's useful life. The staff modified the amendments in accordance with the Board's direction. It was not the Board's position that HDDEs were to remain at a 200,000 mileage limit. Instead, the Board directed staff to make extended warranties congruent with a vehicle's useful life. In doing so the Board did not distinguish between light-duty and heavy-duty vehicles.

117. Comment: Manufacturers should be provided the option to use a voluntary recall program in lieu of an extended warranty. (EMA)

Agency Response: We agree and it should be noted that recall is always a preferred option for any corrective action especially if the manufacturer voluntarily initiates such action. The staff added language to the proposal discussing voluntary recall actions in section 2168(e).

118. Comment: OBD systems that have program faults resulting in improper defect codes can be resolved within a manufacturer's service system. (EMA)

Agency Response: We agree with this comment. The staff added language regarding OBD software repairs in section 2168(g). As long as the OBD recalibration repair is not being performed for emissions exceedance or OBD compliance issues, no corrective action will be required for the affected vehicles or engines.

119. Comment: It is not clear if the mandatory recall approach is limited to after-treatment only. Clarification is needed if the repair scope is broader than after-treatment. (EMA)

Agency Response: We agree with this comment and provided a clear definition of "exhaust after-treatment" in proposed section 2166.1(f).

120. Comment: Warranty repair that is a result of cosmetic, i.e. non functional concerns should be excluded from this program. (EMA)

Agency Response: We disagree with this comment. It is difficult to see how emission control components could be repaired for cosmetic reasons. The amendments were modified to provide that warranty repairs that have no conceivable emissions impact or are done solely for customer satisfaction reasons will not require further corrective action (see section 2168). However, an emission component that malfunctions is hardly a cosmetic repair and will be scrutinized by staff before a "no corrective action" determination can be made by ARB.

121. Comment: A 25 day submittal period for EWIR reports is not practical. The reporting requirement should be increased to 90 days. (EMA)

Agency Response: We disagree with this comment. The EWIR reporting requirement has been set at 25 days since the implementation of the warranty reporting program in 1990. With a few exceptions, manufacturers have always complied with the 25 day reporting time limit for submitting these reports quarterly. With the EWIR now only required on an annual basis, the staff sees no reason to change the reporting schedule.

122. Comment: Running changes and field fixes (RC/FF) are part of the certification process that does not involve emission related repairs. Industry requests that RC/FF be removed from the warranty database. (MIC, Mitsubishi)

Agency Response: We disagree with this comment. The staff understands that some manufacturers will issue technical service bulletins that will instruct the dealer to make a repair under the guise of the RC/FF process. However, the warranty reporting process cannot allow warranty repairs to be screened prior to reaching a ten percent warranty replacement rate. Once the ten percent repair rate is reached, the manufacturer can screen parts and report that parts or software were replaced as added system improvements under the RC/FF process but that no failures were experienced with emission controls systems replaced under warranty. As long as these systems have not failed, no further action would be required by the manufacturer.

123. Comment: OBD calibration updates are installed on vehicles to correct false illuminations of the OBD malfunction indicator light (MIL). Mitsubishi requests that these warranty repairs not be reported as part of this proposal. (Mitsubishi)

Agency Response: We disagree with this comment. Manufacturers cannot prescreen warranty repairs until the repair rate reaches ten percent. If a false MIL issue is occurring, the commenter can correct this problem by recalibrating its software and will not be required to provide any further action as long as the software repair is not being performed to correct an emissions exceedance issue or an OBD compliance problem (see section 2168(g)).

124. Comment: The applicability provisions in proposed section 2166(a)(1) included off-highway motorcycles and all-terrain vehicles. These applications are not part of these proposed provisions and should be removed. (MIC)

Agency Response: We agree with this comment and modified the amendments to remove these applications.

125. Comment: Proposed section 2171 specifies corrective action for three types of vehicles: 1) those without OBD, 2) those with non-compliant OBD, and 3) those with OBD system malfunctions. Since the first category only includes motorcycles, the regulation results in inconsistent and unfair treatment of motorcycles. "MIC is concerned that the discretionary waiver is illusory and may never be granted." This section should be revised to provide consistent and fair treatment for motorcycles. (MIC)

Agency Response: We agree with this comment in part and disagrees with it in part. In response to this comment, the staff added language in section 2171(b) and (c) that applies to any manufacturer that warrants its vehicles for the full useful life. Under this section, the Executive Officer may decide that a manufacturer that warrants its vehicles for the full useful life (like motorcycle manufacturers do) and experiences a systemic failure of emissions components other than exhaust after-treatment devices may not have to provide corrective action.

126. Comment: MIC drafted changes to the proposal and discussed these changes with staff at a meeting held on January 25th. The following is a summary of each of these changes. (MIC)

MIC's Comments to Proposal:

(a) Delete sentences in section 1958(c)(5) referring to violations of the test procedures.
(b) Add wording in section 2168(f)(6) allowing a manufacturer to provide data in the SEWIR regarding the emission impacts of a defective part, and provide additional time for testing (up to 60 days) if requested.
(c) Revise sections 2169, 2170, and 2171, so that only non-OBD vehicles (motorcycles) are separated from other OBD related matters, and insert additional grounds for the Executive Officer to consider when determining if recall or other corrective action is necessary.
(d) Delete the provision in section 2174 limiting evidence that a manufacturer may present at a public hearing.
(e) Revise the definition of "defective emission-control component" in section 2166.1(e).
(f) Add a definition of extended warranty for hybrid vehicles.

Agency Response: The following is the agency's response to each sub-comment.

Comment (a). We disagree with this comment. Language was in section 1958(c)(5), but the "violations of the test procedures" language remains unchanged because it is a necessary part of the criteria for proving violations that require corrective action by identifying systemic emission component failures. Staff incorporates its Response to Comments 2, 4 and 5 here.

Comment (b). We disagree with this comment because it would make the availability of corrective action dependant on the emissions impact of the failing component. Staff incorporates its Response to Comments 2, 4 and 5 here.

Comment (c). We disagree with this comment and incorporates its Response to Comment 124 by reference here. Section 2169 was only slightly modified for clarity. Section 2170 was modified to add criteria for OBD vehicles. Section 2171 was created for non-OBD equipped vehicles or OBD vehicles that experienced non-functioning or non-compliant systems.

Comment (d). We disagree with this comment and incorporates its response to Comment 6 by reference here.

Comment (e). We agree with this comment. The definition of a "defective emission-control component" was modified in the final regulatory language to a, "valid failure" and defined in proposed section 2166.1(r).

Comment (f). We agree with this comment, which requested a definition for extended warranty on battery packs on hybrid electric vehicles. The staff utilized the commenter's suggested definition but removed the mileage constraint criteria of 150,000 miles consistent with the hybrid battery pack warranty regulations. The modification is found section 2166.1(h).

127. Comment: Proposed section 2168(f) allows for no corrective action if the manufacturer can show that the emissions failure will not have an emissions impact under any conceivable circumstances. The term emission impact is a great concern to MIC because it appears to be alternative wording to an emissions increase. "MIC interprets the new wording to mean that the Executive Officer is not authorized to forego corrective action if a defect causes any measurable increase in emissions, even where emission levels remain below the applicable standards." The MIC believes that the ARB does not have this authority. Also, the staff does not provide manufacturers enough time when reporting the SEWIR to provide emissions data to prove there is no conceivable impact on emissions as a result of a emission component failure. MIC believes additional time should be added for submitting the SEWIR report. (MIC)

    Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4 and 5 here. Staff believes regulatory language cited by the commenter is clear, speaks for itself and that ARB has ample authority to adopt it. Staff also believes that no additional reporting time will generally be necessary, but Section 2168(a) allows the manufacturer to delay submitting a SEWIR with the approval of the Executive Officer. Staff does not believe that it is appropriate to allow additional emissions testing to demonstrate that there will be no conceivable emissions impact from a failed part. The staff provided an example of the type of failure that would qualify under the cited language in the Supplemental ISOR (see Supplemental ISOR page 5, e.g., where catalysts are replaced due to a broken heat shield). In such a case, emissions testing or an engineering report is not necessary. It would be a reasonable conclusion for the manufacturer to present evidence that the problem stems from a rattling heat shield on a catalyst and that this type of situation will not cause an emissions impact under any conceivable condition. The proposed language was by no means an attempt on staff's part to provide manufacturers an opportunity to present emissions data for every identified systemic emissions component failure. In addition to the other problems that attend emissions testing, staff's experience indicates that emissions testing under the circumstances cited by the commenter can lend itself to manufacturers "cherrypicking" component failures to show that emission tests result in very minimal if any increases. Instead, under the amendment the manufacturer can present meaningful information that depicts the unique nature of a given emission component failure and why emissions could not be impacted under any conceivable circumstance.

128. Comment: Under the current regulation, staff contends that manufacturers continually submitted warranty reporting follow up data that did not provide staff the

information to fairly evaluate a failed emission component. The Executive Officer has the authority to require additional information including emission data from the manufacturer whenever he or she believes it is warranted. To state that the testing burden is entirely on the staff for demonstrating an emissions exceedance issue as a result of a systemic component failure is simply a mischaracterization by staff. (Ford)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4 and 5 here. In staff's experience, it has requested test data from manufacturers and, far too often, instead of providing the requested information, manufacturers have responded that the emission component failure is overt to the owner and that emissions are irrelevant because owners will have the vehicle immediately repaired under the emissions warranty and therefore conclude no emissions exceedance is possible. Manufacturers making this argument fail to account for what happens to these components once the warranty period has terminated. If staff persists, manufacturers have either provided meaningless data or none at all.

129. Comment: Complying with emission standards has always been the determining factor for corrective action and staff's proposal is forcing tighter standards because manufacturers will be forced to achieve certification emission levels. (AIAM)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4, 5 and 8 here. Most manufacturers build durable emissions that historically have not failed at the 4 percent systemic level that would trigger corrective action under the amendments. To avoid corrective action some manufacturers will simply have to build more durable components to meet the amendments' durability requirements.

130. Comment: Emissions testing should be considered when determining corrective action and perhaps manufacturers could conduct testing or an engineering analysis before a component reaches a ten percent replacement rate. This would allow manufacturers more time to determine the emissions' impact and work with staff to determine if further corrective action is necessary should an emission component reach systemic failure levels. (AIAM)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4 and 5 here. As stated in other responses, under the amendments corrective action will no longer be linked to an emissions noncompliance. Staff believes that manufacturers should be looking at their warranty data prior to reaching a ten percent replacement rate and this "behind the scenes" work results in providing improvements to replacement components before they reach systemic failure levels.

131. Comment: The proposal fails to recognize that warranty claims could involve separate assemblies or functions which could trigger a systemic failure when in fact no failure actually exists. (EMA)

Agency Response: We disagree with this comment. If a component fails it must fail for a reason and must be reported.

132. Comment: The language in proposed Section 2168(f) indicates that the demonstration of an already-tiny exception for "no conceivable emission benefit" must be "to the satisfaction of the Executive Officer." The proposal provides insufficient due process; manufacturers will not be allowed to contest such an "eye of the beholder" test, and thus its minimal value is further diminished by the subjectivity of the exception that staff touts, as if it were some kind of major concession." Manufacturers find this exception worthless. (Alliance)

Agency Response: We disagree with this comment and incorporate Response to Comment 6 here. The no conceivable emissions impact language was added to the amendments to allow the manufacturer to submit information that demonstrates that even with the defective emission component no emissions impact would result under any conceivable circumstance. The purpose of this addition was to allow for certain emission related component issues to avoid corrective action when it was clear that no emissions impact could occur. The example given in the Supplemental ISOR was the case where dealers replaced catalysts at systemic rates due to a cracked heat shield located on the exterior of the catalyst. Under this example the catalyst substrate material is intact and undamaged however, owners returned to the dealer for repair due to a noise issue created by the cracked heat shield. In this case, manufacturers would not have to present emissions data but simply explain the circumstance of the warranty repair and why no emissions impact is possible in this case. The staff does not agree that this portion of the amendments is worthless and instead believe it may excuse corrective action in the case of some failures.

133. Comment: "ARB cannot require manufacturers to take corrective action as to vehicles that were not properly maintained and used, if it has based enforcement action on ignoring such considerations." (Alliance)

Agency Response: We agree with this comment and modified section 2168(c) to state that "the manufacturer may be allowed to screen out or remove emission warranty claims for components that were subsequently determined to have failed due to abuse, neglect or improper maintenance…"

134. Comment: "…the status quo regulatory system allows manufacturers to make arguments based on good engineering judgment arguing based on back-of-the-envelope calculations about the likely impact of particular types of defects. Staff proposes to eliminate such demonstrations by engineering judgment as well, and provides no explanation for doing so." (Alliance)

Agency Response: We disagree with this and incorporate Responses to Comments 2, 4 and 5 here. In response to these comments, however, the staff added language to the certification test procedures that provides that a manufacturer's certification application cannot be denied based on prior warranty reporting information provided that the manufacturer has committed to correct the violation. An engineering evaluation can still be considered and reported in the Supplemental EWIR, depending on what is involved with the emission component failure. The staff agrees that most engineering judgments will no longer be required because once the four percent failure rate threshold has been exceeded; corrective action may be required. However, the manufacturer may still provide an engineering report that reveals special circumstances for a given emission component failure as set forth in proposed Supplemental EWIR language. These circumstances may be related to early failures, misdiagnosed failures, and false failures as result of overly sensitive OBD software or failures with no conceivable emissions impact (see section 2168).

7. Public Hearing

135. Comment: ARB cannot prevent a manufacturer from defending itself in a public hearing over a contested case, by submitting evidence of additional emissions testing. A manufacturer should be allowed to provide whatever evidence is necessary to support its findings. (Alliance, DDC, EMA, Ford, VW)

136. Comment: "…the staff proposal is an artificial restriction on the presentation of any evidence that could show that enforcement action being insisted on by the Executive Officer was an abuse of discretion. This proposed rule affords no meaningful opportunity to he heard, and contradicts the foundation of the government accountability. (Alliance)

137. Comment: "Manufacturers should be afforded an affirmative defense in Proposed Section 2174 to any ordered corrective action by the Executive Officer if the manufacturer can prove by a preponderance of the evidence that the vehicle engine family or group in question is, in fact, substantially the same as the prototype vehicle used for certification purposes of the engine family or group with ARB." (Alliance)

138. Comment: The Alliance comments that if vehicles that are beyond the four percent failure rate and "are substantially the same as prototype testing vehicles, then staff should have no exception to granting manufacturers as an alternative to its Proposal Rule an affirmative defense to demonstrate the substantial identically (sic) of vehicles produced in a particular engine family or test group to the prototype test vehicle. (Alliance)

139. Comment: "…the Alliance indicates that it would be willing to accept the compliance statement proposed by staff as long as the Alliance also had various

types of affirmative defenses, especially based on meeting the emissions standards." (Alliance)

140. Comment: "…staff gets to consider only what they want to consider and gets to deny those who review their decision the opportunity to consider anything else. This is a totalitarian approach which deprives manufacturers of their property without due process of law." (EMA)

Agency Response to Comments 135-140: We disagree with these comments and incorporate Responses to Comments 2, and 4-6 here. The amendments provide a fair hearing process to decide whether or not a violation of the regulatory standards has occurred. The evidence that is relevant in the administrative hearing is evidence relevant to the standard of whether the four percent failure rate has been violated that has been brought forward according to the requirements in the amendments. If the manufacturer wishes to mount challenges beyond the administrative hearing, it can do so in court.

141. Comment: The public hearing provisions (proposed section 2174) attempts to shortcut due process fairness rights and to "stack the deck" in staff's favor in the event a recall is disputed. Overall, these provisions will increase staff's burden because of unnecessary delays and increase costs due to court actions. (MIC)

Agency Response: We disagree with these comments and incorporate Responses to Comments 2, and 4-6 here. The staff does not believe that narrowing the issues involved in the requirements for corrective action will increase disputes, but instead believes that it will lessen the potential for them and that the amendments create a fair hearing process.

142. Comment: The hearing process is to operate unconstrained by its own regulations in titles 13 and 17; this means that staff is repudiating it own hearing regulations in title 17, which were recently adopted and follow the authoritative provisions of the state's Administrative Procedure Act (APA) for adjudicatory hearings. The Board should not allow this obviously illegal section to be adopted. (MIC)

Agency Response: We disagree with these comments and incorporate Responses to Comments 2, and 4-6 here. It is entirely appropriate for the amendments to limit the inquiry of the administrative hearing to matters relevant to the regulatory standard at issue in the hearings. The current regulations do it also, although in a different way. Applicable portions of established administrative hearing regulations would still come into play.

143. Comment: It infringes on manufacturers rights and conflicts with both the Health and Safety Code section 43105 and the Federal and California Constitution to limit the public hearings to recall related matters only. (Ford)

Agency Response: We disagree with these comments and incorporate Responses to Comments 2, and 4-6 here. Nevertheless, in response to comments the amendments were modified to allow manufacturers to challenge the Executive Officer's decision to order other corrective action at the administrative hearing also. It is entirely appropriate for the amendments to limit the inquiry of the administrative hearing to matters relevant to the regulatory standard at issue in the hearings. The current regulations do it also, although in a different way.

144. Comment: The proposal limits the evidence available to present at a public hearing. (Ford)

Agency Response: We agree with this comment and incorporate Responses to Comments 2, and 4-6 here. It is entirely appropriate for the amendments to limit the inquiry of the administrative hearing to matters relevant to the regulatory standard at issue in the hearings. The current regulations do it also, although in a different way.

145. Comment: The Executive Officer's authority to impose corrective action is so broad that it is given unbounded discretion in this decision. If the manufacturer presents evidence at a public hearing, the evidence is very limited by statute and creates a lopsided pro-prosecution case. This is why the proposal violates due process. (Alliance)

Agency Response: We disagree with these comments and incorporate Responses to Comments 2, and 4-6 here. The Executive Officer does not have unbounded discretion to order corrective action. He or she is only authorized to order corrective action if the component failure meets the standards that the amendments establish. It is entirely appropriate for the amendments to limit the inquiry of the administrative hearing to matters relevant to the regulatory standard at issue in the hearings.

8. Test Procedure and Compliance Statement

146. Comment: Manufacturers object to the proposed compliance statement for assuring emission component durability as part of the certification process. (Alliance, AAIM, Caterpillar, EMA, Ford, MIC, VW, DDC)

147. Comment: "…staff nowhere responds to the Alliance's core objection that ARB lacks the authority to require any kind of prediction concerning defect rates at the time a vehicle is certified. In sum, staff simply cosmetically transformed the compliance demonstration in a compliance statement, but still maintained all of the potential penalties that come from wrongly prognosticating the future based on the best facts available at the time of certification." (Alliance)

148. Comment: "Furthermore, the March 12 version of the regulatory language deletes the following language from the previous version: "over the applicable warranty

period of the vehicles or engines they are installed in." Hence, in the newest version, staff without explanation is apparently expanding the time horizon over which an unlawful compelled compliance statement must embrace." (Alliance)

Agency Response to Comments 146-148: We disagree with these comments and incorporate Responses to Comments 2, and 4-6 here.
The compliance statement is evidence submitted by manufacturers that, based on their best engineering judgment, their vehicles or engines will meet durability standards and not fail in excess of the four percent failure rate. Those test groups or engine families that exceed a valid four percent failure rate are in violation of the test procedures and this violation entitles the Executive Officer to require that the vehicles or engines in which they are installed to be recalled or subjected to corrective action. As the commenter points out, when discussing the applicable time period for reporting warranty data, the compliance statement language was modified from "over the applicable warranty period of the vehicles or engines they are installed in" to "If it is determined pursuant to title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174 that any emission control component or device experiences a systemic failure…". The compliance statement language was modified because it better defines what emission components are affected by the amendments, how long the manufacturer must report warranty failures, and what percent failure levels will trigger corrective action. The language change does not intended to expand "the horizon", rather it clarifies the process. The compliance statement is not a prediction; it is an assurance that vehicles are built properly at the time of certification.

149. Comment: Industry is at a loss as to how it can demonstrate, at the time of certification, that any given emission control device on our vehicles will not exceed a valid failure rate of four percent or 50 claims, in a test group. (AIAM, Caterpillar, DDC, EMA, Ford, MIC, VW)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, and 4-6 here. Most manufacturers already meet this standard. Showing how they do it (or plan to do it) should not be impossible. Nevertheless, in response to this comment staff modified the certification test procedure language so that manufacturers would not have to conduct a "demonstration" but rather supply a statement that based on good engineering judgment and available information, the emission control devices will be durable and operate for the vehicles' or engines' full useful life.

150. Comment: "But as the Alliance has pointed out, situations where defects exceed 4% in the file are far more likely to be situations where vehicles encounter unforeseeable driving patterns, unforeseeable road conditions, unforeseeable fuels, or unforeseeable conditions that cause particular components to fail." (Alliance)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, and 4-6 here. Most manufacturers already meet the test procedure's

4% standard for the vast majority of emissions components. Stating that they comply with this standard at the time of certification should not be impossible. Manufacturers have argued that they cannot look into the future and predict owner driving habits or other allegedly unforeseeable circumstances that would cause their vehicles serious systemic emission component failures and therefore want the compliance statement language stricken from the test procedures, but manufacturers have a wealth of experience in designing vehicles for customer use acquired over many decades. Many manufacturers are already doing an excellent job of building durable components well below the four percent trigger and constantly make engineering decisions regarding owner driving habits, fuel usage, climate conditions, and other vehicle operation criteria are considered when developing a vehicle's or engine's emission control system. It is the staff's experience, however, that while it may be theoretically possible that a well designed emission component could have failed due to unforeseen owner driving habits or poor fuel quality, these circumstances actually rarely if ever cause emission components to fail at systemic rates. Historically, emission related components that fail at systemic rates are attributable to the design, materials, production issues and/or quality control problems involving these parts. Nevertheless, the amendments were modified to allow manufacturers to screen out defects caused by abuse or neglect.

151. Comment: The certification compliance statement is a legal charade and could jeopardize a manufacturer's certification after the fact. (GM)

152. Comment: At the second hearing, Ford commented that staff is shoehorning the four percent failure rate into the test procedures without considering complying with the emission standards. Ford contends that they cannot predict the future of emission component durability and should their components fail beyond four percent they could be subject to considerable fines and jeopardize future certification. (Ford)

153. Comment: Test procedures are not "a grant of substantive authority to choose any form of procedures that staff might design." Test procedures were simply designed to measure whether a violation exists with respect to the emission standards. (Alliance)

Agency Response to Comments 151-153: We disagree with these comments and incorporate Responses to Comments 2, 4-6 and 146-150 here. In response to these comments, however, the staff added language to the certification test procedures that provides that a manufacturer's certification application cannot be denied based on prior warranty reporting information provided that the manufacturer has committed to correct violations this prior information disclosed.

154. Comment: "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." (Alliance)

155. Comment: The Alliance disagrees with staff that warranty reporting data "can qualify as a "test procedure" within the meaning of Health & Safety Code Sections §43105 and 43106…Legally, it is insufficient because it does not attempt to explain how a 4% substantive defect reporting threshold for requiring corrective action is a "test procedure" procedure within the meaning of the Health & Safety Code. And practically, the concessions that components that are failing but have no actual effect on emissions begs the questions: (1) why minimal emissions benefits, should trigger ordered corrective action; or (2) why any emissions effect that does not cause an exceedance of the emission standard to which a vehicle is certified and this is still within the field of manufacturer "headroom" built into vehicle emissions systems as a whole should trigger further action." (Alliance)

156. Comment: ARB's interpretation of the Health & Safety Code for defining a test procedure is flawed. (Alliance)

157. Comment: "The point of a "test procedure" in this precise context of the state law and regulating mobile sources is to objectively test whether a group of vehicles comports with the "emissions standards," not to authorize ARB to regulate beyond the area of emissions standards,…" (Alliance)

158. Comment: "Section 43106 directly adverts to the testing of a particular "test vehicle" for compliance with the emissions standards. It does not indicate that the Board may adopt "test procedures" to regulate in any substantive way or degree it sees fit." (Alliance)

159. Comment: If a four percent failure is reached, this should only create a rebuttable presumption of defect and manufacturers should be allowed to challenge this presumption with evidence demonstrating lack of an emissions impact. The burden would be on the manufacturer, but at least this would provide a process consistent with due process. (AIAM)

160. Comment: A "test procedure" must be a specific assessment methodology or protocol that is used to make an objective determination of whether numeric certification standards or other requirements have been met." (DDC)

161. Comment: ARB is establishing the four percent valid failure rate as a new and separate emissions-related certification standard (i.e., a new emissions durability standard). (EMA)

162. Comment: "The purposes of Section 43104 to establish test procedures as a measurement mechanism "to determine whether the vehicles or engines are in compliance with the emission standards" could not be clearer. Nowhere is the power to set "test procedures" described by the Legislature as embracing the power to enact a substantive product reliability "standard," whether of a "performance" or a prescriptive" nature. "(Alliance)

163. Comment: "Section 43104's meaning is clear. A test procedure is a procedure for performing a test. And the test in question is that "necessary to determine whether the vehicles or engines are in compliance with emissions standards established pursuant to Section 43101." In other words, "test procedures" are ancillary to substantive "emission standards"." (Alliance)

164. Comment: Manufacturer strenuously objects to ARB's attempt to define warranty rates as "test procedures"," and deem warranty rates exceeding the 4% threshold to be "violations" of those test procedures." (Caterpillar)

165. Comment: The staff created a basis for recall by inserting the warranty failure threshold as a criterion of the certification procedures. This step is an obvious "boot-strap" amendment which artificially inserts criteria applicable to in-use vehicles into procedures governing new vehicles, and does not pass legal muster for a number of reasons:

(a) Health & Safety Code Section §43104 defines "test procedures" as methods for determining compliance with the emission standards not emission component durability;
(b) The manufacturer cannot be expected to determine with certainty prior to certification, if a component will meet the defect threshold;
(c) The Board has no authority to require corrective action where no emissions compliance issue is being resolved;
(d) Manufacturers must "demonstrate" compliance with the defect rate threshold prior to certification, but staff has neither provided nor referenced a method for making the determination;
(e) The threshold must be cost effective and necessary to qualify as an enforceable regulation;
(f) Health & Safety Code Section §43106 provides no support to this proposal because its intent is to prevent misbuilds; defective parts are not a misbuild criterion. (MIC)

166. Comment: The four percent failure rate is a rebuttable presumption because presently manufacturers can look at emissions effects, the number of actual valid failures, and other methods for determining necessary corrective action but staff has proposed an irrebuttable corrective action process for the sole reason of convenience. (Ford)

167. Comment: The re-write of proposed section 1958(c)(5) is unclear to what is being required. There is no evident antecedent for the term "all applicable requirements". Does it refer to other sections of 1958 or other test procedures, or both, or neither? Also, within this section, the wording states that it is a "violation" of the "foregoing test procedures" for a device to exceed a four percent / 50 vehicles defect rate. There is no evident antecedent for the term "foregoing test procedures", and no actual, identifiable test procedure containing a four percent / 50 vehicles defect

rate limitation, which makes this new wording unworkable. "MIC is concerned that the staff has re-written this section to hide or obfuscate what manufacturers must do, in order to make it appear feasible. By not stating what the "applicable requirements" are, and by declaring a "violation" or unspecified "test procedures", this new wording makes compliance impossible and puts MIC's members unacceptably at risk. The new convoluted wording proves that is it not possible to write a feasible, enforceable requirement for a defect rate limitation to be enforced against in-use vehicles as a test procedure requirement for initial certification." (MIC)

Agency Response to Comments 154-166: We disagree with these comments and incorporate Responses to Comments 2, 4-6, 8 and 146-153 here.

The compliance statement (quoted in its entirety in the Response to Comment 4 and below) was modified in response to comments (e.g., it was changed from a compliance demonstration to a compliance statement; the conclusive presumption was eliminated; a provision was added that subsequent certification applications will not be withheld if a manufacturer commits to correcting a prior systemic defect and, the maintenance interval was added). The compliance statement is indeed a test procedure that guarantees that emissions control components on production vehicles will be durable and function properly throughout the useful lives of the vehicles they are installed on, and guarantees that production vehicles are substantially similar in all material respects to the vehicles that manufacturers test to prove that their production vehicles pass emission standards and are entitled to ARB's certification. This is entirely appropriate and well within ARB's statutory authority.

The amendments do not establish emission standards. Instead, as describe in section 2166(e) in accordance with ARB's statutory authority, establish:

> "….procedures for reporting emissions warranty information and procedures for determining, and the facts constituting, compliance or failure of compliance with and violations of emission standards and 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" Emphasis supplied.

The amendments accomplish this by adopting the following requirement in the durability provisions of the ARB's test procedures:

> "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 and in compliance with all applicable requirements for the full useful life (or allowable maintenance interval) of the vehicles or engines. Also, vehicles and engines tested for certification shall be, in all material respects, substantially the same as production vehicles and engines. If it is determined pursuant to title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174 that any emission control component or device experiences a systemic failure because valid failure for that component or device meet or exceed for percent or 50 vehicles (whichever is greater) in a California-certified engine family or test group, it constitutes a violation of the foregoing test procedures and the Executive Officer of the Air Resources Board may require that the vehicles or engines be recalled or subjected to corrective action as set forth in title 13 CCR, Division 3, Chapter 2, Article 5, sections 2166 through 2174. Certification applications may not be denied based on the foregoing information, provided that the manufacturer commits to correct the violation."

ARB has wide discretion to adopt test procedures to determine whether vehicles are in compliance with the emission standards and this requirement is well within ARB's statutory authority. (See, e.g., HSC section 43104 and 43105.) The pitfalls of basing corrective action for systemic emission component defects are well described in the ISOR at pp. 4-10. The amendment establishes a test procedure that will allow ARB to determine whether vehicles certified to ARB's emission standards comply with those emission standards at the time of production and throughout their useful lives, i.e. whether the vehicles and engines tested for certification are, in all material respects, substantially the same as production vehicles or engines (HSC 43106) and, that the emission control components or devices on the production vehicles or engines continue to operate properly throughout the useful lives of the vehicles or engines.

Federal test procedures have durability requirements and HSC section 43104 requires ARB to base its test procedures on their federal counterparts. These durability requirements guarantee that vehicles will continue to meet the emission standards they were certified to over their useful lives. HSC section 43105 prohibits manufacturers from producing vehicles that violate emission standards or test procedures, unless the manufacturer takes corrective action which may include a recall, "specified by the state board in accordance with regulations of the state board." "The procedures for determining, and the facts constituting, compliance or failure of compliance shall be established by the state board." This is precisely what the amendments do. They establish test procedures for determining that emissions components will operate properly throughout the useful lives of the vehicles they are installed on and they establish the procedures for determining compliance with them. They also establish the corrective action that may be required in the event of violations of the test procedures. ISOR pp. I-iv, 1-

4, 6-21, 27-29, 31; Supplemental ISOR pp. 1-2, 7-10, which are incorporated by reference here.

Most manufacturers already meet the test procedure's 4% standard for the overwhelming majority of emissions components. Showing how they do at the time of certification should not be impossible. Staff revised the test procedures so that manufacturers provide only a statement in their certification documentation that based on good engineering judgment, the emission control devices on their vehicles or engines are durable and are designed to operate properly and in compliance with all applicable requirements for the full useful life (or allowable maintenance intervals) of the vehicles or engines. Manufacturers already supply a statement with their certification documentation that indicates their vehicles meet all the regulatory requirements for selling new vehicles in California. That stated, manufacturers who fail to comply with the warranty reporting regulations and whose specific emission components exceed the four percent failure threshold are in violation with the test procedures and subject to corrective action. Manufacturers have argued that they cannot look into the future and predict owner driving habits or other unforeseen circumstances that would cause their vehicles serious systemic emission component failures and therefore want the compliance statement language stricken from the test procedures. Manufacturers have successfully accounted for these factors for many years in their product designs. Many manufacturers are already doing an excellent job at building durable components well below the four percent trigger where engineering decisions regarding owner driving habits, fuel usage, climate conditions, and other vehicle operation criteria are considered when developing a vehicle's or engine's emission control system. It is the staff's experience, however, that while it may be theoretically possible that a well designed emission component could have failed due to unforeseen owner driving habits or poor fuel quality, these circumstances actually rarely if ever cause emission components to fail at systemic rates. Historically, most emission related components that fail at systemic rates are attributable to the design, materials, production issues and/or quality control problems involving these parts. Nevertheless, the amendments would allow manufacturers to screen out defects caused by abuse or neglect.

The amendments do not create a rebuttable presumption. Staff believes that the amendments are cost effective and necessary. Staff also believes that the test procedure in the amendments is clear on what it requires— that manufacturers provide a statement in their certification documentation that based on good engineering judgment and available information, the emission control devices on their vehicles or engines are durable and are designed to operate properly and in compliance with all applicable requirements for the full useful life (or allowable maintenance intervals) of the vehicles or engines. The other aspect of the test procedure is that it embodies the requirement in HSC 43106 that production vehicles must be substantially similar in all material respects to vehicles tested for certification. If emissions components on the vehicles fail at systemic levels in use, it is a violation of both aspects of the test procedure. Manufacturers already supply

a statement with their certification documentation that indicates their vehicles meet all the regulatory requirements for selling new vehicles in California.

9. Cost Benefit Analysis

167. Comment: In regards to the staff's cost estimate of the proposed regulations, the Alliance comments, "Staff goes on to assert that the full 61% increase from $41 million to $66 million will not occur because the warranty program will generally become less costly by 2010 when, by staff's prediction, approximately 43% of vehicles will be PZEVs…Respectfully, this explanation makes no sense…whatever effects the PZEV program will have on the costs of the defect reporting program will occur whether the form of that program is the status quo or the one in the Proposed Rule. Hence, any cost reductions associated with that program cannot be taken credit for under the Proposed Rule." (Alliance)

168. Comment: Staff provides no evidence that "the cost of improving a part is relatively small compared to the total cost of the parts and labor levied for corrective action." (Alliance)

169. Comment: "…Staff must respond to the expert analysis performed by Dr. Carr, a professor on leave from the University of California system – UCLA Anderson Graduate School of Management. He concludes that staff's cost analysis is "fundamentally flawed and should be given no weight" because it: (1) is based on insufficient data; (2) uses unrealistic and inappropriate assumptions; (3) ignores large and important categories of cost, thereby biasing downwards the estimates in predictable ways; (4) disregards information specifically submitted to ARB in public comments or otherwise readily available to ARB. (Alliance, LECG)

Agency Response to Comments 167-169: We disagree with these comments and incorporate Response to Comment 8 by reference here. Moreover, the staff reviewed Dr. Carr's analysis and disagrees with the conclusions made in his report. Dr. Carr contends that the staff's cost analysis was based on insufficient data, inappropriate assumptions, and excluded various cost factors, but Dr. Carr's conclusions were supported by little, if any, objective data and instead appear to be based to a great extent on faulty assumptions and opinions of the auto industry. The staff believes that not only was the proper data utilized in its analysis; it was the most accurate data to use for this analysis. Dr. Carr's analysis relies heavily on the fact that staff did not apply the cost savings estimates to the 2002 model year vehicles as was shown for the 2010 model year vehicles. He contends that this analysis is misleading and flawed and manufacturers will experience a 54 percent increase in corrective action costs for the 2010 model year vehicles. Dr. Carr's interpretation misses the entire point of staff's analysis. The staff's point was that manufacturers will spend similar amounts in corrective action costs (possibly lower amounts with better emission component quality expected) for 2010 model year vehicles under the proposed amendments as they did for the 2002 model year vehicles under the current program. For example, PZEV-certified

vehicles have full useful life warranties and, therefore, are not subject to non exhaust after-treatment corrective action under the proposal. Since 43 percent of new vehicles sold in 2010 will be PZEVs, the number of vehicles affected by the amendments will be greatly reduced. This results in costs roughly equal to 2002 costs, despite the increased of the amendments. Applying the current program costs (as Dr. Carr proposes) to the 2010 model year vehicles ignores the reality of the PZEV program, and renders his analysis unpersuasive.

Dr. Carr's analysis is also unconvincing because it never adequately accounts for the purpose of the staff's proposal. Dr. Carr makes several comments to the effect that emission reductions can be better achieved by not following the amendments' approach, and indicates that he does not fully understand the amendments. The manufacturers are held to certification emission standards and test procedures and vehicles shall comply with these standards for the useful life of the vehicles or engines they build. The warranty reporting program was designed to ensure that manufacturers build durable emission components to meet the certification test procedure requirements for these vehicles. The amendments are designed to accomplish this. Dr. Carr's analysis fails to acknowledge this and betrays the fact that he misunderstood the amendments and what they will do.

Additional comments by Dr. Carr are misleading, highly speculative and appear to be based on biased assumptions. Among such statements are: "Is it possible that this (proposal) would lead to heavier vehicles and reduced fuel economy? Might this improved durability come at the expense of increased emissions from those more durable parts? Might it be better to tighten emission standards than to require improved durability?" Staff does not believe that any of these things will occur and believe that these comments raise serious questions with Dr. Carr's ability to independently and objectively evaluate the amendments. Other aspects of bias are apparent in Dr. Carr's use of cost estimates from Ford Motor Company regarding discussions for maintaining a 96 percent component reliability program along with manufacturers' costs for launching corrective actions. Dr. Carr used this data in his analysis but never questions the validity of the data or sought to have the data confirmed by other more objective sources. Dr. Carr makes reference to interviews he had with engineers from industry but never once contacted ARB staff to discuss either the amendments or the staff's cost analysis. At the March 22nd Board Hearing, the Alliance mentioned Dr. Carr's analysis in it opening comments but never presented his data in its testimony. Nor did Dr. Carr himself appear at the Board Hearing to discuss or defend his findings. The staff believes that Dr. Carr's analysis is incomplete and biased towards industry's position to this proposal and that the cost analysis presented by staff is accurate.

170. Comment: "Staff recognizes that the year 2002 is not representative because it included no recalls whatsoever….Additionally, the staff's analysis does not account for the reservation in the Proposed Rule of the "sole discretion" of the Executive Officer to require recalls in his option." (Alliance)

Agency Response: We disagree with this comment. Staff accounted for current recall costs for the 2002 model year vehicles and engines in the calculation for actual costs under the current program. However, when evaluating the costs to the 2002 model year vehicles and engines under the proposed program, none of the components with a ten percent unscreened replacement rate would have been clear candidates for recall (i.e., there were no exhaust after-treatment devices failing at systemic rates). The staff believes that in general, manufacturers do an excellent job of building exhaust after-treatment devices because 1) it is one of the most important emission components for reducing emissions on a vehicle or engine and 2) the manufacturers' in-use enforcement liability is too great to consider if faulty systems are discovered by the agencies (i.e., ARB and U.S. EPA). Staff did consider the Executive Officer's "sole discretion" to order recalls and it does not affect staff's analysis. The staff incorporates its Response to Comment 8 by reference here.

171. Comment: That the staff's negligible cost estimate on manufacturers based on this proposal is unreasonable. DaimlerChrysler believes the cost to a manufacturer to be over $5 million annually. (DCC)

Agency Response: We disagree with this comment and incorporate Response to Comment 8 by reference here. DaimlerChrysler's cost estimate was submitted before the staff published the Supplemental ISOR. The Supplemental ISOR provided the cost proposal estimate based on current warranty reporting data. The staff believes this is the most accurate data for performing this analysis and DaimlerChrysler's annual cost of this proposal of $5 million/manufacturer is over simplified and not representative. For example, DaimlerChrysler stated that an average of 35,000 units per manufacturer would experience an extended warranty on an annual basis. This number has no firm basis because the volume of corrective actions can vary by manufacturer and cannot be calculated in this manner.

172. Comment: GM presented a confidential comment discussing repair costs due to recall and extended warranty actions. GM claims that the proposal will not be insignificant and will be very costly to manufacturers. (GM)

Agency Response: We disagree with this comment and incorporate Response to Comment 8 by reference here. Staff responded to GM's claims in the Supplemental ISOR (see Supplemental ISOR page 14). As pointed out in the Supplemental ISOR, the data provided by GM is not current and mostly represents voluntary actions taken by GM. The extended warranty costs as reported in the "Cost Impact Study" are based on a 15 year/150,000 mile extended warranty which is no longer part of the amendments, so the reported numbers are inflated. One reason why this analysis failed to provide a fair representation of the amendments' cost impact to GM's is because GM failed to consider current warranty data that is greater than ten percent, and did not determine which of those failures represented components with a valid four percent failure rate. The failure to do this prevented

GM from accurately determining the cost of corrective action and projecting that number to the 2010 model year while taking into account that more and more PZEV vehicles will be sold in California (another fact that GM's analysis does not account for).

173. Comment: The Alliance commented in the first hearing that it was absurd for ARB to contend that increasing extended warranties from 300 to 500 percent beyond the useful life of vehicles will have absolutely no cost impact on manufacturers. (Alliance)

Agency Response: We disagree with this comment and incorporate Response to Comment 8 by reference here. To reiterate, the staff's analysis was based on comparing current corrective action costs versus future projected costs. The future costs to manufacturers should be similar and in fact could be lower than costs they incur under the current regulations. This is in part because under the amendments manufacturers will be cognizant that they need to build durable emission components to avoid future corrective actions and because vehicle technologies and emission warranty in general will continue to improve over time and result in improved durability. As more and more PZEVs are introduced to California, the number of potential systemic emission component action items will continue to decline. The cost of the proposal to individual manufacturers ultimately comes down to the ability of certain manufacturers' to implement quality control and quality assurance comparable to their competitors.

10. Miscellaneous

174. Comment: The Alliance suggests that First Amendment issues arise based on "unlawful restrictions on manufacturers stating, where true, that particular corrective action will not degrade air quality remains." This statement is directed at proposed CCR, Title 13, section 2172.3(d) and 2172.3(f). (Alliance)

Agency Response: We disagree that these provisions infringe on manufacturers' First Amendment rights even as they were originally drafted. They are reasonable requirements, narrowly drawn and have a reasonable basis—to guarantee that owners of vehicles with systemic emission component defects obtain the corrective action they need. Nonetheless, language in section 2172.3 was modified in response to manufacturers' concerns and now reads: "the California Air Resources Board has determined that your (vehicle or engine) has an emission control component problem that requires corrective action."

175. Comment: "Staff is amending all in-use recall programs, not simply those in the Article 2.4 concerning defect and warranty-reporting, without explaining why such change is necessary." (Alliance)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4,5 and 9 by reference here.

176. Comment: "…we note that the Supplemental Staff Report issued in connection with the Nov. 18, 1988 Board hearing on the status quo version of these regulations clearly stated that any requirements of these rules should be waivable (sic) "if they constitute an unwarranted burden on manufacturers without a corresponding emission reduction." (Alliance)

Agency Response: We disagree that this comment warrants changing section 2166(d). The staff believes that the amendments' modified language is superior because under the amendments corrective action is not tied to emissions increases but to violations of test procedures that occur when emissions components fail at systemic levels. Nevertheless, under section 2166(d) of the amendments the Executive Officer can still waive any requirement of this proposal if he or she determines that the requirement constitutes an undue burden on the manufacturer.

177. Comment: The ARB must provide a four year lead time and three years of regulatory stability for new emissions durability standards. Not doing so is unlawful. (EMA)

Agency Response: We disagree. Manufacturers are already required to meet durability standards as set forth by statute and regulation and have been required to meet durability standards for many years. The warranty reporting regulations simply ensure that manufacturers meet the durability requirements that have been in place since 1990 and provide a measurable standard for making the determination. These changes only strengthen the current process.

178. Comment: CAWA contends that staff does not have the authority to alter the emission warranty periods for passenger cars and trucks that are set at three years or 50,000 miles and seven years or 70,000 miles. They claim that these warranties are set by HSC section 43205 and cannot be changed. (CAWA)

Agency Response: We disagree with this comment and incorporate Response to Comment 7 by reference here. The amendments do not change the emission warranty periods for new passenger cars and trucks. Corrective action can come in many forms and includes providing additional warranty on specific components for a given vehicle or engine. In the past, these extended warranties were negotiated between staff and the manufacturers. The amendments simply formalize these remedies and make them available as an alternative to recall. Extending the warranty is an accepted corrective to ensure systemic failures are repaired but does not alter the mandated warranty periods set for new vehicles and engines.

179. Comment: At the continued hearing, a commenter stated that the California Attorney General provided a brief opinion (Attorney General Opinion 64 Opinions of the Attorney General 425) regarding warranty failures. It states, "if there's a rule

by the Board that provides a warranty for failure to perform at any time during the useful life of a vehicle without regard to any defect in material or workmanship, then in constitutes a substantial departure from and finds no counterpart enabling statutes." The commenter believes that Legislature neither envisioned nor intended to authorize any such performance warranty. The warranty is going beyond the classical definition of defects. (Alliance)

Agency Response: We disagree with this comment and incorporate Responses to Comments 2, 4, 5 7 and 167 by reference here. Obviously the staff believes that if an emissions component fails during the useful life of the vehicle it is installed in that it constitutes a defect. The amendments do not establish an additional vehicle warranty. They establish procedures for implementing corrective action for systemic failures of emissions components. One corrective action is extended warranty, which is an extension of existing vehicle warranties.

180. Comment: Continually extending the length of mandated automotive warranties will ultimately cause vehicle prices to go up considerably. (iATN)

Agency Response: We disagree with this comment and incorporate Response to Comment 8 by reference here. Under current regulations, manufacturers are required to build vehicles so that they show durability for the certified useful life period of the vehicle. The amendments only require that systemic component failure be remedied under corrective action. With the proposed regulations not taking affect until the 2010 model year, the Board believes that increases to vehicle pricing as a result of this proposal will be negligible.

181. Comment: ARB lacks the authority to regulate for consumer protection purposes. (AAIA*)

182. Comment: "The standards the Health & Safety Code authorizes ARB to set are "emission standards." ARB is not empowered by the Health & Safety Code to set product reliability standards. For it to have that kind of authority, it would have to be delegated the power to regulate for consumer-protection purposes." (Alliance)

Agency Response to Comments 181 and 182: We disagree with this comment and incorporate Responses to Comments 2, 4 and 5 by reference. The purpose of the amendments is to ensure that manufacturers build vehicles and engines with emission components that will withstand the useful life durability requirements and should they fail at systemic rates, will be corrected. That consumers may be incidentally protected by the amendments does not invalidate ARB's underlying authority to adopt them.

183. Comment: "The Alliance also hereby requests that staff consider and designate as an official part of the record (which it is based on this request, regardless of what action staff takes) all of the documents that were part of the records for the past rulemakings in this area, especially the one in 1988." (Alliance)

Agency Response: We added the referenced documentation to the Board package file including the staff report (dated September 8, 1988 and November 18, 1988) involving the past rulemaking for the warranty reporting program. The information provided in these documents and other related information from these past hearings was considered by the staff when developing this proposed rule.

184. Comment: ARB's proposal would make remedial action more likely and will discourage manufacturers from including safeguards or headroom in their vehicle designs, which would have the affect of adversely impacting air quality. (AIAM, Ford)

Agency Response: We disagree with this comment. Several commenters stated that the use of headroom is critical to meeting the emission standards. Nothing in the amendments will discourage manufacturers from building such safeguards to ensure that their vehicles will comply at levels significantly below the emission standards. Given expectable deterioration in emissions components, manufacturers need these safeguards to ensure that their vehicles will comply with the emission standards for the duration of the vehicle's useful life. If manufacturers did not build headroom into their in-use emissions designs, manufacturers risk failing in-use test programs which could result into very costly recall programs required by the ARB or U.S. EPA . Without headroom, manufacturers also risk vehicle owners failing Smog Check outside of the warranty period but still within their vehicles' certified useful life. This could have serious consequences for the public perception of a manufacturer's ability to build durable vehicles and turn owners away from their products. All of these circumstances indicate the amendments will not deter manufacturers from building headroom in their emissions control systems.

185. Comment: There "is no simple way to assure that every part/system will behave as predicted before production begins without substantial increases in testing to be sure the behavior of all components in combination with each other are represented." This would be especially true when having to take into account the suppliers to Ford that must scrutinize their products to ensure a 96 percent reliability rate. (Ford)

Agency Response: We agree with this comment, but do not believe that it provides a reason to modify the amendments. Most manufacturers already meet the test procedure's 4% standard for the overwhelming majority of emissions components. Manufacturers have argued that they cannot look into the future and predict owner driving habits or other unforeseen circumstances that would cause their vehicles serious systemic emission component failures and therefore want the compliance statement language stricken from the test procedures. Many manufacturers are already doing an excellent job at building durable components well below the four percent trigger where engineering decisions regarding owner driving habits, fuel usage, climate conditions, and other vehicle operation criteria are considered when

developing a vehicle's or engine's emission control system. It is the staff's experience, however, that while it may be theoretically possible that a well designed emission component could have failed due to unforeseen owner driving habits or poor fuel quality, these circumstances rarely if ever actually cause emission components to fail at systemic rates. Historically, most emission related components that fail at systemic rates are attributable to the design, materials, production issues and/or quality control problems of these parts. Nevertheless, the amendments would allow manufacturers to screen out defects caused by abuse or neglect.

186. Comment: The proposed regulations can delay/or discourage the introduction of new technology because such technologies have not been proven. (Ford)

Agency Response: We disagree with this comment. This is similar to arguments that have been advanced by manufacturers over the years to oppose the introduction of new technologies such as air bags, OBD and cleaner burning vehicles. The manufacturers' fears in these areas proved to be unfounded and the staff believes that similar concerns voiced in regards to the amendments are unfounded also. Manufacturers will introduce new technologies because they need them to remain competitive. With PZEV vehicle requirements also pushing the technological designs of emission control systems, manufacturers are or will be acquiring a great deal of experience in developing these newer technologies. In addition, in July 2006, Ford introduced a five year/60,000 mile powertrain warranty for all its new models that was followed by a five year/100,000 mile powertrain warranty by GM and, just recently, Chrysler introduced a limited lifetime powertrain warranty. These warranties replaced the three year/36,000 mile new vehicle warranties offered by these manufacturers and may result in increased warranty costs. In no way will the increased powertrain warranties cause these companies to slow down their technological development, and in fact should have just the opposite effect. Ford, GM, and Chrysler have obviously looked at the financial rewards from increased sales created by these extended warranties while considering the potential increase in warranty costs. Any costs or liabilities associated with the corrective actions provided for in the staff's proposal will be minor compared to these increased powertrain warranties and similarly will not slow down the introduction of new technologies. The amendments only consider specific systemic emission component failures while the extended powertrain warranties will cover any vehicle that experience powertrain problems and/or failures. Staff expects other companies to likely increase their powertrain warranties in order to remain competitive in the marketplace.

187. Comment: DaimlerChrysler was surprised and disappointed to read in the ISOR that "DaimlerChrysler would not agree to recall all of the affected light-duty trucks" for the catalyst problem experienced on their vehicles. DaimlerChrysler contends that ARB and DaimlerChrysler recognized that not all of the light-duty trucks with the catalyst design at issue were failing and that staff reached a mutual agreement as to the appropriate correction action taken with these vehicles. Mr. Vaughn

Burns of DaimlerChrysler reported at the March 22nd Board Hearing that staff's analysis of DaimlerChrysler catalyst issue was flawed. He reported that of the 150,000 vehicles in question, staff reported that only 41,000 vehicles were recalled when ARB's own press release showed that DaimlerChrysler recalled 91,000 vehicles. In addition, Mr. Burns stated that staff overstated the excess emissions in the ISOR caused by this failure and mislead the Board by an order of magnitude. (DCC)

Agency Response: We disagree with these comments, stand by our comments about the DaimlerChrysler case and incorporate ISOR pp. 6-8 by reference here. The facts of that case are: 151,000 subject vehicles had EWIR rates greater than four percent but only 41,000 of them (27%) were actually recalled. Of these 41,000 vehicles, some 28,000 were recalled for deficient OBD systems—not necessarily for defective catalytic converters. Additionally, about 90,000 vehicles received extended warranty coverage specifically for the catalytic converter because DaimlerChrysler would not agree to recall in part because it claimed that ARB could not demonstrate that those vehicles on average exceeded emission standards. The commenter also claims that the staff overstated the excess emissions caused by DaimlerChrysler's catalytic converter failures. The staff disagrees with these comments. The catalytic converter failure rates were, in fact, excessive. DaimlerChrysler reported catalytic converter failure rates of well over ten percent for numerous models over many model years with some individual engine families experiencing warranty claims exceeding 72 percent. Once the catalyst cracks or deteriorates, the problem becomes worse over time and eventually causes an excess emissions problem. As ARB's test data indicates, once the catalyst becomes defective, emissions increase by an order of magnitude beyond the emission levels of a properly operating DaimlerChrysler vehicle and more than four times the applicable standards. The ARB firmly believes that the incomplete remedy obtained in this case resulted in significant excess emissions levels and that this furnishes a reason why exhaust after-treatment failures will be subject to recall under the staff's proposal.

188. Comment: DDC would consider the possibility of opting in to the proposed regulations providing that they can do this on an engine family basis. (DDC)

Agency Response: We will allow manufacturers to an early opt-in of these procedures prior to the 2010 model year provided that all the test groups or engine families are covered under this proposal for the model year(s) being considered.

189. Comment: MIC drafted a letter dated January 4, 2007, after the December 7th Board Hearing, stating that staff was contacted on December 20th for scheduling meetings with staff in January but had not heard back on potential meeting dates. MIC contended that because a meeting date had not been set (by January 4th) that it was evident that the matter of the regulatory proposal was already behind schedule and that the proposed hearing date of March 22nd was too early for the Board to hear this item again. (MIC)

Agency Response: We disagree with this comment. The staff responded to this letter on January 5th and assured MIC that the follow up hearing was on schedule. The staff mailed a Supplemental ISOR on January 23rd and made arrangements to meet with all of industry including a meeting with MIC on January 25th. Staff held a workshop on February 14th in preparation for the hearing and provided industry with regulatory language updates on January 23rd, February 8th, and March 12th. Many of these updates were a result of meetings held with manufacturers and included many of their requested changes.

190. Comment: At the second hearing, a discussion took place regarding failed emission components and how excess emissions caused by these failures can cause a shift in the emission factor calculations. Mitsubishi responded that emission factors are based on surveillance testing and other in-use emission tests results; not certification data. This is why vehicles are certified below the emission standards because they know emissions will deteriorate during the useful life of their vehicles. (Mitsubishi)

Agency Response: We agree with this comment in part and disagree with it in part and incorporate Responses to Comments 2,4 and 5 here by reference. The staff understands that vehicle emission levels to increase over time but manufacturers are projecting these factors based on functioning emission control systems, not defective systems. Whether these emission increases are accounted for by the emission inventory calculation is irrelevant to these amendments. Manufacturers will continue to use headroom to certify their production with ARB in spite of the amendments because it is critical to achieving compliance with ARB's emission standards.

191. Comment: At the second hearing, in regards to discussions on DCC's catalyst issue, DCC contended that under the current regulations they have the right to demonstrate that their vehicles on average pass the emission standards for the full useful life and they believe they demonstrated that fact. Also, DCC stated that over thirteen different sources were considered including ARB's data, EPA's data and a vast majority of other data regarding these test groups. DCC believes that staff unfairly represented the emissions impact of the DCC's catalyst problem. (DCC)

Agency Response: We disagree with this comment and incorporate Response to Comment 186 by reference here. Staff calculated a range of emissions failure in the original ISOR (please see ISOR page 7). The point that is lost in DCC's comment to the Board was raised by ARB Deputy Executive Officer Tom Cackette when he stated to the Board at the March 22nd hearing, "this was such an egregious case…there was just no reason why we had to go through all these arguments when catalysts were physically deteriorating and blowing out the tailpipe of these cars…There's no way of concluding that the emission impact was small or something that we shouldn't worry about it in this kind of situation." The

bottom line is that DCC's catalysts were defective and DCC utilized the weaknesses in the current law to avoid a major and costly recall. The new proposal will avoid this outcome in the future.

192. Comment: At the second hearing, a private citizen, presented that staff should focus on getting back to a zero-emission vehicle mandate. (PC- Doug Kortof)

Agency Response: We object to this comment pursuant to Government Code section 11346.9(a)(3) because it is not directed at this rulemaking action or the procedures followed in it.

B. Summary of Public Comments Submitted During The 15-day Comment Period and Agency Responses

During the 15-day supplemental comment period, written comments were received from:

Aaron Lowe	Automotive Aftermarket Industry Association	AAIA*
John Goodman	Automotive Engine Rebuilders Association	AAIA*
William Gager	Automotive Parts Remanufacturers Association	AAIA*
Bob Constant	Automotive Services Councils of California	AAIA*
David McClune	California Autobody Association	AAIA*
Martin K. Keller	California Automotive Business Coalition	AAIA*
Rodney Pierini	California Automotive Wholesalers Association	AAIA*
Pamela Amette	Motorcycle Industry Council, Inc.	MIC

1. Aftermarket Vehicle Repair Industry

193. Comment: The AAIA indicates that the RAND Corporation study and Penway Corporation report show that extended warranties will have a greater negative impact on small independent repair shop businesses than staff is assuming. (AAIA*)

Agency Response: We object to this comment pursuant to Government Code section 11346.9(a)(3) because it is not directed at this rulemaking action or the procedures followed in it. Without waiving this objection the we respond as follows.

As with the Air Improvement Resource, Inc. study, the RAND Corporation study and Penway Corporation report are based on the PZEV program which is a part of ARB's low emission vehicle program. PZEV vehicles are a component of the low emission vehicle program and have augmented warranties which simply are not comparable in terms of economic impact to the occasional extended warranty on one part of the entire vehicle that may occur under the amendments. The staff

quoted the RAND study only to show that the independent repair industry is a $15 billion dollar a year industry that will continue to grow over time. The financial impact on independent repair facilities based on this proposal will be very small by comparison (please see Supplemental ISOR page 11).

2. Regulatory Procedures

194. Comment: MIC commented that since the Board Hearing was held on March 22, 2007, and based on the multiple changes by staff, that a large amount of new explanatory and technical material that had never been presented before were put forth to industry without 45 days to comment. MIC contends that they had not had any advance opportunity to review the material and prepare comment, and were even precluded from even making comments at the hearing due to the short time limit that was placed on oral comments. MIC explains that staff's process does not meet the requisites of the California Administrative Procedure Act or basic fairness tenets of due process. (MIC)

Agency Response: We disagree with this comment and incorporate Response to Comment 34 by reference here. The commenter and all others had adequate notice of all aspects of the rulemaking.

3. Regulatory Development

195. Comment: MIC commented that the 15-day provision provides new wording that insert economic impact as something to be considered by the Executive Officer at several points in the regulatory process. MIC supports the idea of this change but is concerned that the term "economic impact" is not defined and therefore the Executive Officer's authority is overbroad and unguided and subject to abuse of discretion. (MIC)

Agency Response: We disagree and believe that the Executive Officer can determine what "economic impact" means. See, e.g. Response to Comment 8.

196. Comment: MIC commented that proposed section 2166(d) states that the Executive Officer may consider the economic impacts "except as provided in 2168(f)". MIC explains that 2168(f) as now re-written does not refer to economic impacts, so the cross reference to 2168(f) is meaningless. MIC believes the same problem affects cross-references to 2168(f) in new section 2168(k) and the new wording in section 2174. MIC recommends that the wording "but is not required" and "except" be deleted from section 2166(d) and the first sentence in 2168(f) be revised as: (f) If a manufacturer demonstrates to the satisfaction of the Executive Officer that a systemic emission component failure will not have an emissions impact under any conceivable circumstance, or that correction of the failure will have an undue economic burden on the manufacturer, then no corrective action shall be required for the affected vehicles or engines." The underline wording shows MIC's recommended language change.

Agency Response: We disagree with this comment. The cited language clearly means that the Executive Officer if free to, but need not, take economic impact into account in making the determinations.

4. Miscellaneous

197. Comment: The AAIA continues to insist that staff cannot extend warranties beyond the mandated three year or 50,000 mile California emissions warranty as set forth by law in H & S Code section 43205. (AAIA*)

198. Comment: The AAIA contends that staff does not have the authority impose extended warranty corrective action based on HSC section 43105. This provision only allows for recall of vehicles or engines and does not specify that any corrective action can be imposed by staff. (AAIA*)

199. Comment: The AAIA contends that HSC section 42400.2 defines corrective action as "the termination of the emission violation or the grant of a variance from the applicable order, rule, regulation or permit." HSC section 43105 clearly demonstrates that extended warranties are not corrective actions as contemplated by the legislature. (AAIA*)

Agency Response to Comments 197-199: We object to this comment pursuant to Government Code section 11346.9(a)(3) because it is not directed at this rulemaking action or the procedures followed in it. Without waiving this objection the we respond as follows. The staff incorporates its Response to Comment 7 by reference here. HSC section 42400.2 resides in Part 4 of Division 26 of the Health and Safety Code. Part 4 is entitled "Nonvehicular Air Pollution Control", so section 42400.2 has no applicability to the amendments which are concerned with vehicular air pollution control.

5. Cost Benefit Analysis

200. Comment: The AAIA presented data from Air Improvement Resource, Inc., stating that they concluded that there are no in-use emissions benefits from extended warranties. (AAIA*)

Agency Response: We objects to this comment pursuant to Government Code section 11346.9(a)(3) because it is not directed at this rulemaking action or the procedures followed in it. Without waiving this objection we respond as follows. The staff incorporates its Response to Comment 7 by reference here. The Air Improvement Resource, Inc. study was based on an evaluation of the PZEV program in response to staff's low emission vehicle program proposal. The study shows a side-by-side comparison of SULEV and PZEV vehicles as they deteriorate over time where it is estimated that emissions will be relatively equal and consumers that pay $100 more for PZEVs will equivocate into a cost effectiveness

of $100,000 dollars per ton of pollutant saved. Based on this comparison, the Air Improvement Resource, Inc. believes that there is no benefit from warranty extensions. The staff does not agree that this study is relevant for this proposal because the conclusions sought in the Air Improvement Study do not address systemic defects; it is based on normal vehicle deterioration with no unforeseen and significant emission component problems.

C. Miscellaneous Comments Received Between Publication of the October 20, 2006 Notice and the January 23, 2007 Supplemental ISOR

201. Comment: The amendments should allow "light-heavy" duty engines to be considered in the medium-duty category when determining extended warranty time and mileage periods. (EMA)

Agency Response: We disagree with this comment. At the December 7, 2006 hearing the Board directed staff to modify the proposed amendments so that the extended warranty time and mileage periods should not exceed the certified useful life period. As a result the staff added language that limits or increases the extended warranty periods to the applicable useful life period for all vehicle and engine categories as they were certified. (See: Section 2166.1(j).)

202. Comment: The ARB had previously agreed in other regulations 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. (Alliance)

Agency Response: We agree with this comment. After reviewing HEV-certified vehicle warranty requirements, language has been added to the amendments that limits the extended warranty time and mileage period for propulsion battery packs to 10 years or 150,000 miles (whichever first occurs) (See: Section 2166(j).)

203. Comment: 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 read, "…would not exceed a failure rate greater than four percent or 50 vehicles (whichever is greater) within the warranty period." (Alliance)

Agency Response: We agree and has made changes to the applicable test procedures.

204. Comment: Manufacturers of partial zero emission vehicles should 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. (Toyota)

Agency Response: We agree with this comment and added regulatory language has been added to reflect this change. (See Section 2167(a)(4).)

Appendix 1: Supplement to Final Statement of Reasons

A. Revisions to Regulation Text

Nonsubstantive revisions were made to the regulation text for clarity, consistency and to correct punctuation errors.

B. Incorporation by Reference

Various documents (in particular vehicular test procedures which are lengthy and voluminous) are incorporated by reference in the regulation text. Due to the length and volume of these documents, publishing them in the California Code of Regulations would be cumbersome, unduly expensive and otherwise impractical. All of these documents are and were made available upon request from the Air Resources Board and are available on the ARB's website, arb.ca.gov.

C. Statement of Reasons

1. The term "allowable maintenance interval" as it appears in Section 19589(c) and the amended test procedures is a term of general usage in the automotive industry that applies to certain vehicular components that need regular maintenance at intervals designated by vehicle manufacturers. These intervals are well understood by the vehicle manufacturers who in fact determine them based on their engineering judgment and inform members of the automobile service industry of them through vehicle service manuals and bulletins. The concept of "allowable maintenance intervals" was added to the regulation at the request of vehicle manufacturers who pointed out during the rulemaking process that there are certain vehicle components, including emissions components, that must be serviced at regular intervals and that it would be undesirable to consider these events to be evidence of emission component failures that could possibly trigger recall or other corrective action pursuant to the regulation. The term was added to the test procedures in response to these comments. No comment was received that questioned the meaning of the term because the term is so well known and understood in the automotive industry. Members of the public do not need to understand the term because they rely on vehicle maintenance specialists to provide proper maintenance at the intervals.

2. The definition of "useful life" that appears in section 2166.1(p) was revised for clarity and consistency in two respects, both of which are nonsubstantive. First, subsections 2166.1(p)(4), 2166.1(p)(6), 2166.1(p)(7), 2166.1(p)(13) and 2166.1(p)(14) were deleted. These subsections had been inadvertently included in the regulation, but did not actually belong in it because they concern vehicles

such as vehicles certified to the Optional 100,000 Mile Certification Procedure (2166.1(p)(4), which were certified pursuant to 13 CCR section 1960.1 which is only applicable to vehicles manufactured in the model years 1981-2006), vehicles certified under 13 CCR sections 1960.1.5, 1960.1(f) and (g) (2166.1(p)(6) which also were certified pursuant to 13 CCR section 1960.1 which is only applicable to vehicles manufactured in the model years 1981-2006) and off-road motorcycles and all-terrain vehicles (2166.1(p)(7)), off-road compression ignition engines (2166.1(p)(13)) and inboard and stern-drive marine engines (2166.1(p)(14)) which are not subject to the new Article 5, which only applies to California-certified 2010 and subsequent model-year passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles and motorcycles. Again, the deleted sections concern vehicles and engines that were certified only in model years prior to 2010 or vehicles and engines that are not passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles and motorcycles, so they are not subject to Article 5. Similarly the language in section 2166.1(p)(5) referring to "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)" was deleted because it referred to vehicles which, since they were certified in the 1992-1994 model years will not be subject to Article 5 with its model year 2010 effective date. Second, the introductory language of section 2166.1(p) was revised to read: "For the purposes of this article, 'useful life' means the following, however, nothing in this subsection alters the applicability provisions of section 2166:" This revision was done for clarity. Several of the subsections of 2166.1(p) refer to classes of motor vehicles by referring to the definitions of "useful life" that exist in ARB's certification standards. These standards were enacted for classes of vehicles beginning in certain model years and by necessity the definitions contain references to these model years so, these definitions contain references to vehicle model years predate the current regulation and it effective date, the 2010 model year. The introductory language of 2166.1(p) was also revised to prevent any confusion that the regulation applied to model years prior to the 2010 model year that may have arisen over the appearance of the other model years in some of section 2166.1(p)'s subsections. Both of the revisions are nonsubstantive because the applicability language in section 2166 determines the scope of the regulations and it is clear that the regulations pertain to 2010 and subsequent model-year passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles and motorcycles, not other types of vehicles or vehicles manufactured in model years prior to 2010.

3. The Response to Comment 167 is supplemented as follows. The regulatory language the comment is directed at ("foregoing requirements") exists in the vehicle exhaust emission standards and test procedure requirements for certification. There are many requirements that apply to vehicles in the certification process. If a vehicle fails one of those requirements, it is considered to have failed the test procedures as a whole. The term "foregoing test procedures" is used in this wider sense and in the narrower sense that if the class of vehicles exceeds the 4% failure trigger, it is a violation of the compliance

statement requirement and the requirement that production vehicles be substantially similar in all material respects to the vehicles which are tested for certification. Both of these test procedure requirements guarantee the durability of the production vehicles that manufacturers sell in California.

4. The amendments were made to section 2136 to clarify that, despite the adoption of the new Article 5, the Executive Officer may still use his authority under Article 2.3 to conduct in-use vehicle enforcement after the 2010 effective date of the new Article 5.