

ATTACHMENT A



September 22, 2006

VIA ELECTRONIC & FIRST CLASS MAIL

EMISSION-RELATED COMPONENTS

Dear Mr. Oliver:

On behalf of the Alliance of Automobile Manufacturers¹, I wanted to thank you for hosting the September 7 meeting to discuss Mail-Out #MSO 2006-01 concerning possible amendments to the procedures for reporting failures of emission-related components. As we agreed, this letter follows up on the broad discussions at that meeting with a more detailed analysis, in the form of a legal memorandum, of the issues posed by the possible amendments staff has described.

At the September meeting, you indicated that a follow-up meeting would be held to discuss the our legal analysis once the ARB staff's position is firmed up in concrete regulatory text, but before an Initial Statement of Reasons is issued. We are available at your convenience to for that follow-up meeting. In fact, if you believe additional meetings would be helpful, including one before draft regulatory text is available, we would be happy meet in El Monte or Sacramento for that purpose.

Thank you again for the September meeting. If you have questions about our positions as stated at the meeting or in the attached memorandum, please do not hesitate to contact me at (916) 266-4532 or via email at sdouglas@autoalliance.org.

Sincerely,

A handwritten signature in dark ink that reads "Steven P. Douglas".

Steven P. Douglas
Director, Environmental Affairs

Encl.

¹ The members of the Alliance are BMW Group of North America, Inc., DaimlerChrysler Corporation, Ford Motor Company, General Motors Corporation, Mazda North American Operations, Mitsubishi Motor Sales of America, Inc., Porsche Cars North America, Inc, Toyota Motor North America, Inc., and Volkswagen of America, Inc.

**LEGAL MEMORANDUM CONCERNING POSSIBLE AMENDMENTS
SUGGESTED IN MAILOUT 2006-01 TO THE PROCEDURES
FOR REPORTING FAILURES OF EMISSION-RELATED COMPONENTS**

INTRODUCTION

No specific regulatory text for the amendments proposed in #MSO 2006-1 is yet available, because that stage in the administrative process has not yet been reached. This memorandum is therefore based on information obtained at workshops and meetings held on May 2, June 8, August 9, and September 7, 2006, as well as through #MSO 2006-1 itself (the "Workshop Process"). In response to requests ARB staff have made to representatives of the Alliance of Automobile Manufacturers ("Alliance"), this memorandum addresses many of the legal issues that have been created by the staff proposal, which for convenience is called here the "Proposed Amendments." In particular, this memorandum explains the legal parameters relevant to the Proposed Amendments. We discussed some of the issues described below concerning limits to ARB's authority in more general terms at the September 7 meeting.

This memorandum is divided into four parts. Part I describes the current system for reporting failures of emission-related components, and explains why the Alliance believes that system functions well and does not warrant significant change. Part II describes the content of the Proposed Amendments as currently understood, both as the Proposed Amendments were initially put forth and as they seem to have evolved throughout the Workshop Process. Part III describes the relevant limits on ARB's authority under the Health & Safety Code. Finally, Part IV describes the procedural and certain related substantive rules that apply to the Proposed Amendments under the California Administrative Procedure Act ("CAPA"). Part IV also presents questions that we believe would need to be addressed under CAPA as the rulemaking moves forward, particularly as judged against the backdrop of the limits on ARB's legal authority.

I. THE STATUS QUO SYSTEM CONCERNING THE FAILURE OF EMISSION-RELATED COMPONENTS FUNCTIONS WELL AND IS NOT IN NEED OF SIGNIFICANT AMENDMENT.

The current system for regulating emission-related component failures is contained at Title 13 California Code of Regulations, Division 3, Chapter 2, Article 2.4 "Procedures for Reporting Failures of Emission-Related Components," §§ 2141-2149; *see also* portions of Article 2.1, 13 C.C.R. § 2111-2112 (the provisions of which, under section 2141(a), are also applicable to Article 2.4, §§ 2141-49). This system has been in place for more than 16 years, and has functioned well. The Alliance and its members are unaware of evidence that the existing system has failed to achieve its current goals, that there is any systematic noncompliance with its provisions, or that the current system has failed to provide ARB with the information it needs in this area, thereby hindering effective enforcement efforts by the Executive Officer.

The current emission-related component regulation has two basic elements: (1) a system of reporting emission-related defects, and (2) a system providing for enforcement remedies involving cases where systemic defects appear (i.e., a subset of all cases). *Compare* 13 C.C.R.

§§ 2141-42, 2144-2146 (reporting obligations) with §§ 2143, 2147-49 (enforcement actions, defenses, and remedies). As demonstrated below, the Proposed Amendments would largely conflate these two separate functions into one, converting the numerical thresholds for reporting defects to the staff that could be used as the basis for discretionary enforcement action into the near-equivalent of defect ceilings that, once exceeded, would lead to enforcement consequences except in the most unusual cases.

The overarching purpose of emission-related component regulation as presently constituted is clear from 13 C.C.R. § 2111(c) -- preventing the frustration of emissions standards while avoiding unwarranted corresponding cost and other compliance burdens on manufacturers. This is consistent with the broad reach of the system for regulating emissions-related components. See 13 C.C.R. § 2112(d) (defining "emission-related failure" to mean "a failure of a device, system, or assembly described in the approved application for certification which affects any parameter, specification or component listed in [the lengthy] Appendix A to this subchapter or listed in the Emission Warranty Parts List . . . except for failures of devices, systems, and assemblies which the Executive Officer has deleted from the manufacturer's list of warranted parts . . .") (emphasis added). The purpose of the existing system to focus on emissions standards is particularly clear. The current regulations define "nonconformity" or "noncompliance" as a situation where:

a substantial number of a class or category of vehicles or engines, although properly maintained and used, experience a failure of the same emission-related component within their useful lives which, if uncorrected, results in the vehicles' or engines' failure to meet the applicable standards

13 C.C.R. § 2112(h)(1) (emphasis added).

Section 2112(h)(1) brings out several key features of the existing system for regulating emissions-related component failures. *First*, enforcement is to be focused on situations where "a substantial number" of vehicles have failing components. *Second*, the focus is not on individual defects, but on class- or category-wide defects. (The term "class or category" is ubiquitous throughout the whole of Article 2.4.) *Third*, the failure must appear classwide in vehicles that are "properly maintained and used." In other words, manufacturers are not to be held responsible for damage brought on by improper vehicle usage and maintenance. *Fourth*, the ultimate touchstone of any enforcement is to be whether the failure of an emissions-related component, if not corrected, will cause the class of vehicles to fail the applicable emissions standards.

On the reporting side, the present system of regulation establishes an obligation to file three different types of reports with ARB: (1) an emission warranty information report ("EWIR"), (2) a field information report ("FIR"), and (3) an emissions information report ("EIR"). See 13 C.C.R. § 2141(b)-(c). EWIRs focus manufacturers on providing information to ARB about warranty claims for each engine family or test group, and prohibits manufacturers from screening invalid claims from their EWIRs. See 13 C.C.R. § 2144. The current level for EWIR reporting is 1% or 25 claims (whichever is greater) of the vehicles or engines of a California-certified engine family or test group. See 13 C.C.R. § 2144(a)(1)(3). FIRs are required where unscreened warranty claims exceed the governing numeric threshold set in

section 2143. See 13 C.C.R. § 2145. Finally, EIRs are required where actual component failures (i.e., *valid* warranty claims) exceed the applicable section 2143 numeric threshold. See 13 C.C.R. § 2146. Most importantly, EIRs focus on the bottom-line for ARB's purposes under the controlling statutes -- whether attainment of emissions standards will be negatively impacted by the component failure in question. See 13 C.C.R. § 2146(c)(6)-(7). The current numeric threshold for purposes of FIR and EIR reports is 4% failure level or 50 screened claims (whichever is greater). See 13 C.C.R. § 2143; #MSO 2006-1 at 1.

The reporting obligations in the current system last three different lengths of time, depending on the emissions warranty coverage period, up to but not exceeding the period of useful life. See 13 C.C.R. § 2141(b)-(c). Alternative reporting procedures to EWIRs and FIRs are available if they "will produce substantially equivalent results." See 13 C.C.R. § 2142(a). A sampling plan of representative California dealerships is specifically allowed for this purpose if approved by the Executive Officer. See 13 C.C.R. § 2142(b).

The enforcement system for emissions-related component failure is straightforward. Engine families, test groups, or subgroups are "*subject to a recall when the number of failures*" exceeds the 4% threshold. See 13 C.C.R. § 2143 (emphasis added); see also 13 C.C.R. § 2148(c) (subgroups of vehicles can be treated as the equivalent of engine families). A recall is not automatic, however. The Executive Officer must analyze whether "a recall is unnecessary pursuant to the criteria set forth in Section 2148(a) and (b)." *Id.* Section 2148(a) requires the Executive Officer to consider a variety of factors such as validity of the data, the level of the failure rates, and emissions impacts. Most importantly, however, the Executive Officer also faces an external constraint, since she is not permitted to order a recall if the manufacturer submits information demonstrating that the failure:

- (1) is limited to an emission-related component on a *less-than-substantial percentage of vehicles* and does not represent a *pervasive defect in design, application, or execution* which is likely to affect a substantial number of such emission-related components during the useful life of the vehicle or engines, and
- (2) is *likely to be corrected under a warranty program* or other in-use procedure shortly after the inception of the problem.

13 C.C.R. § 2148(b) (emphasis added). The important features of Section 2148(b)'s internal constraint on Executive Officer discretion is that, (1) consistent with section 2112(h)(1), a substantial number of vehicles must be affected by the component failure in question; (2) the inquiry is whether the equivalent of a design defect is present; and (3) warranty programs must be taken into account, as these programs may lead to repair of the defective emissions-related components within a reasonably short period of time. As we demonstrate in Section III, below, we believe each of these constraints is required by the Health & Safety Code and the logic of allowing a pollution-control agency to regulate a species of product-defect law.

In addition to imposing constraints internal to staff action in ordering a recall based on an emissions-related component failure, the current system of enforcement gives manufacturers the right to present and prove an affirmative defense to a recall -- a form of external constraint that manufacturers are also free to present to a neutral tribunal. See 13 C.C.R. § 2147; see also *In re*

Toyota Motor Corp., Case No. 519, OAH No. N1999020144 (Feb. 22, 2000) (Administrative Law Judge Román). That provision is central to the lawful operation of the emissions-related component failure regulation. Specifically, manufacturers are permitted to “overcome the presumption of noncompliance set forth in . . . Section 2123(b) [by demonstrating that] the average emissions of the vehicles and engines with the failed emission-related components must comply with the applicable emission standards.” 13 C.C.R. § 2147(a) (emphasis added). Once again, several key features emerge: (1) Section 2123’s numerical threshold operates as a legal “presumption,” meaning that exceeding the 4% threshold operates merely as a signal to staff as to where enforcement might be appropriate, but not as a dispositive requirement or authorization to enforce; (2) emissions standards are the touchstone of whether a particular rate of component failure will trigger a recall remedy; and, in fact, (3) a demonstration that the “average emissions” comply with governing standards is enough for manufacturers to avoid recall.

Section 2147(b) then goes on to specify the test procedures to be applied to “properly maintained in-use vehicles with the failed emission-related component,” and the deterioration factors that may be employed. See 13 C.C.R. § 2147(b). Lastly, to avoid situations where performing actual emissions testing would be unnecessarily burdensome, the Executive Officer may permit a manufacturer to perform an engineering analysis that would demonstrate the emissions effect of the failure in question. See 13 C.C.R. § 2147(c).

Should the Executive Officer face a situation where a substantial number of vehicles (section 2148(b)(1)) have a defective emissions-related component that is causing a failure of emissions standards on average (section 2147(a)) that cannot be remedied by the availability of a manufacturer’s contractual warranty program (section 2148(b)(2)), then a recall may be ordered. Depending on the sources of information used to create the presumption in favor of recall, the Executive Officer can obtain an influenced recall, if there is no voluntary recall. See 13 C.C.R. § 2149(a)(1) (voluntary recalls where manufacturer EIRs are exclusive source of creating presumption), § 2149(a)(2) (influenced recalls where ARB has ordered additional reporting and the presumption is based in part on ARB-developed data). Finally, manufacturers that are ordered to perform recalls are entitled to contest Executive Officer decisions under 17 C.C.R., Division 3 Air Resources, Chapter 1 Air Resources Board, Subchapter 1.25 Administrative Procedures – Hearings.

Having surveyed the existing system for emissions-related component failure regulation, and canvassed the experience of its members, the Alliance and its members are not aware of any evidence that the present system is failing in any of its objectives. Taking section 2142 as a proxy for the purposes of regulation in this area, the Alliance sees no evidence that the existing system fails to: (1) ensure early detection of failing components within the useful life of the vehicles or engines; (2) track failing components by engine family; (3) assure prompt notification of the Executive Officer when a systematically failing component is indicated; (4) provide objective, complete and easily monitored data; or (5) allow proper auditing by the Executive Officer. If there is any evidence of a problem requiring a change in the regulatory text, we would appreciate it if the staff would be prepared to identify that evidence and discuss it with us.

II. THE PROPOSED AMENDMENTS AND THEIR STATUS AFTER CONCLUSION OF THE WORKSHOP PROCESS

Mail-Out #MSO 2006-01 is the initial document that proposed altering the current system. The Attachment to Mail-Out #MSO 2006-01 mentions changes only to the *reporting* obligations, suggesting that this may be the focus of the staff's reform efforts. If so, the Alliance and its members would be less concerned about the nature of the proposal. The body of the attachment, and subsequent workshop presentations and discussions, however, have indicated that the staff is considering radical changes in the enforcement system, while making what amount to only minor changes to the reporting system.

On the reporting side, the Attachment to Mail-Out #MSO 2006-01 indicates that the staff intends to propose regulatory amendments that would: (1) increase the initial trigger for an EWIR from unscreened 1%/25 claims to unscreened 10%/100 claims (or screened 4%/50); (2) reduce the frequency of requiring EWIRS; and (3) generally eliminate the intermediate-level FIR reporting obligation. *See* Attachment, Mail-Out #MSO 2006-01, at 1. These changes would reduce reporting burden and eliminate the redundant FIR, which largely duplicates information in EIRs.

On the other hand, the Attachment to Mail-Out #MSO 2006-01 appears to contemplate significant changes to the existing enforcement system that concern the Alliance and its members. Specifically, the Attachment indicates that the staff is considering requirements that would include (1) emissions testing once the EIR reaches the 4%/50 claims level; (2) that such testing must occur in "the worst-case failure mode;" and (3) that the vehicles to be tested should be those "with a minimum mileage accumulation of 40 percent of the vehicle's certified useful life." *Id.* Additionally, the remedies to be ordered are altered. The Executive Officer would have the ability to affirmatively order extended warranties if the numerical "true" threshold of 4% is exceeded. Most importantly, the staff seeks power to require recalls under three new conditions: if (1) a "[d]efect causes secondary component damage;" (2) the defect is not being detected by the onboard diagnostic ("OBD") system; or (3) "[t]he failure mode of the defect occurs gradually, resulting in excess emissions prior to detection by the vehicle/engine system" *Id.* at 2.

At the May 2, 2006 Workshop, staff presented a slide show that is consistent with the April 6, 2006 Mailout, and that adds or clarifies additional details that represent still more proposed changes unfavorable to manufacturers. Specifically, (1) secondary component damage does not have to cause an emissions exceedance; and (2) manufacturers bringing an adjudicatory challenge to staff's determinations in applying the new regulations would be limited to the information obtained from the EIR and test program. *See* Staff Slide Presentation, at Slides 20, 23 (May 2, 2006). In other words, data showing that a substantial number of vehicles or average vehicles were in compliance with the emissions standard would be disallowed, and data generated after the manufacturer knew the full scope of the remedy desired by the Executive Officer -- i.e., at a time most meaningful to manufacturer decisions about how many resources to invest in testing activity -- would be excluded. Furthermore, at an August 9, 2006 meeting, staff made clear that ARB would always remain free to do its own testing with vehicles and parts from dealerships or from manufacturers. Thus, the restriction on manufacturers being able to run testing programs at more meaningful times and places so as to defend itself from a recall order is

asymmetrical to the powers of investigation and evidentiary presentation that staff would propose to retain.

The only situation in which remedial action would apparently not be required, if the 4% true defect rate is exceeded, is if (1) OBD software is being updated and the update is not correcting an "emissions exceedance situation" or the software is not correcting an OBD requirement; or (2) the component failure is not required to be detected by the OBD system. See *id.* at Slide 21.

We summarize how some of those proposals are different from the current rules in the table below.

**Table A. Summary of Unfavorable Proposed Changes
in 4/6/06 Mailout and 5/2/06 Workshop**

<u>Proposed Changes in Mailout #MSO 2006-01</u>	<u>Current Provisions</u>
1. Once 4% level is reached, emissions testing is required.	Testing is optional and in the form of an affirmative defense to recall for manufacturers. Engineering analysis can be performed in lieu of testing, if the Executive Officer approves. 13 C.C.R. § 2147(a), (c).
2. "With ARB approval, the manufacturer must then test the component with the worst-case failure mode on one in-use vehicle with a minimum mileage accumulation of 40 percent of the vehicle's certified useful life to quantify the emissions impact of the defective component." Attachment 1, at 1 to Mailout #MSO 2006-01.	Testing that is submitted is of vehicles "with the failed emission-related component." 13 C.C.R. § 2147(b). In other words, the real-world failure or "typical failure mode" is the condition under which testing would presently occur. Manufacturers may test multiple vehicles and project emissions to the end of the vehicle's useful life based on deterioration factors.
3. Extended warranties may be ordered and in fact, either an extended warranty or recall must be ordered in every case where the 4% threshold for "true" defects is exceeded.	Extended warranties were offered voluntarily by manufacturers in an attempt to settle cases where recalls were inappropriate. Also, the ability of a warranty to solve for emissions impacts was required to be considered by ARB before it could order a recall. 13 C.C.R. § 2148(b)(2).
4. Recalls are required if the 4% "true" defect rate is exceeded and one of three conditions holds true: (1) a defect causes secondary component damage, which does not need to cause an emissions exceedance; (2) the defect is not being detected by OBD; or (3) the failure	Recalls can be required only if they: (1) affect a substantial number of vehicles; (2) the equivalent of a pervasive design defect has been uncovered; (3) manufacturer warranty programs will not lead to correction of the problem within a reasonable time; and (4)

mode of the defect occurs gradually, resulting in excess emissions prior to detection by the vehicle/engine system.	emissions standards on average for the engine family, test group, or subgroup, will be violated because of the defect, with the burden of proof on the last point resting with the manufacturer. 13 C.C.R. §§ 2147-2148.
5. In contesting recall and extended-warranty orders, manufacturers will be limited to evidence from the testing they perform and submit to ARB in the course of the reporting process. Thus, the choice of how extensive a testing program will be run must be made by manufacturers near the beginning of the emissions-related component regulatory process.	Manufacturers have available an affirmative defense that can include offering new testing data to show that the failed component would not cause an emissions-standard violation on average. 13 C.C.R. § 2147(b). Manufacturers are permitted to introduce defensive evidence at the time of a hearing. California Health & Safety Code § 43105.

The Alliance is particularly concerned about the two proposed core changes to the enforcement system, namely: (1) apparently requiring, in the ordinary course, a remedy of some kind (i.e., recall or extended warranty) to be ordered in *every case* in which an exceedance of the 4% "true" defect rate occurs for a particular component for a particular engine family; and (2) allowing a class-wide engine family recall based on the failure of potentially only one tested vehicle with the relevant failed component in worst-case mode, without regard to whether a substantial number of vehicles exhibit that defect in practice, and without regard to whether the engine family would pass the applicable emissions standard in real-world or even worst-case component-failure conditions.

These are extreme changes to the status quo system for regulating emissions-related component failure. In the Workshop Process, the Alliance offered an alternative process to the one suggested by staff. *See Alliance Flowchart* (attached) (May 30, 2006). To avoid the level of regulatory burden that would be created by formal vehicle testing in every situation in which a true defect rate exceeded 4%, the Alliance proposed to continue to allow engineering analyses (*see* 13 C.C.R. § 2147(c)), but to augment the level of detail provided in such reports. Specifically, the Alliance proposed that engineering evaluations would include: (1) a description of the defect, (2) a description of potentially affected vehicles, (3) the projected failure rate at useful life, (4) evaluation of the emissions impact of the defect, (5) other available data, (6) a description of the indicators that will notify the driver to the problem (e.g., drivability, MIL illumination), and (7) a projected repair rate due to overt indication. *See also Alliance, Details to Include in an EIR Report* (May 31, 2006).

Additionally, rather than requiring some form of a remedy whenever the 4% "true" defect threshold was crossed, the Alliance proposed that if the projected failure rate and level of emissions over useful life considering vehicle miles traveled exceeded some threshold multiple of the emissions standard, then and only then would a remedy likely be required. *See Alliance Flowchart*. The Alliance sketched the proposed threshold-multiple approach in the form of a detailed equation with examples provided to staff on May 31, 2006. *See California Warranty*

Failure Reporting Proposal: Examples for Passenger Car and Light Duty Truck Process (see Flowchart) (May 31, 2006). Finally, the Alliance offered that if the failure using the threshold-multiple approach was not overt, then a recall would be required, but otherwise, an extended warranty would be required in situations where more than 20% of the population would be expected to fail during the projected useful life for the vehicle remaining outside of the contractual warranty period. And in that case an extended warranty would provide coverage for a period to remedy 90% of expected failures or coverage for useful life (whichever was less).

The Alliance proposal was intended to address the concerns of the staff. At an August 9, 2006 meeting with the staff, (1) it was conceded that engineering evaluations should be allowable, but that they should conclude with an estimate of the defect's impact in grams/mile terms;¹ (2) there was some recognition by ARB staff that typical failure modes should be usable at least in some situations; (3) ARB staff applied the term "infant mortality" to refer to certain defects occurring within the warranty period, even though they disagreed with the "20% of the projected useful life" figure proposed in the Alliance's flowchart for purposes of extended-warranty remedies; and (4) ARB staff accepted the time periods proposed on the Alliance's flowchart with the exception of requiring a test program, if one is initiated, to be completed in 120 workdays instead of 150 workdays.

As the Alliance indicated in its meeting with staff on August 9, 2006, the main sticking point in discussions thusfar in the Workshop Process has been an insistence by ARB staff that some level of projected failure rate for an identified component should *always* be sufficient to result in a recall or extended warranty being required. For reasons of policy, principle, and law, the Alliance cannot agree that ARB can so completely separate its emissions-related component defect program from whether actual emissions standards are being met in use.

III. ARB LACKS AUTHORITY UNDER THE HEALTH & SAFETY CODE AND OTHER SOURCES OF LAW TO ADOPT THE MOST FAR-REACHING ASPECTS OF THE PROPOSED AMENDMENTS.

A. ARB Lacks the Authority to Order Recalls in Situations Where the Engine Family Has Not Been Shown to Fail Applicable Emissions Standards.

The statutes referenced in some form in connection with past rulemakings as authority for its Article 2.4 emissions-related component failure regulation are all statutes based on emissions standards as applied to *classes* of vehicles. This is the nature of an "emissions standard." See California Health & Safety Code § 43105. Classes of vehicles are certified on the basis of testing representative vehicles, and all vehicles in the class are required to conform to the standard. This means that the classwide emissions standards are the ultimate touchstone of

¹ Staff should consider requiring that grams-per-mile impacts be set out in engineering analyses only to the extent that doing so is practicable without performing full-blown emissions testing. To require grams-per-mile emissions estimates is impracticable in many instances. Thus, an unadorned authorization to use engineering analyses only if they include grams-per-mile emissions estimates would amount to what would functionally become a ban on using engineering analyses.

regulation for ARB. Those standards are also plainly at the heart of ARB's regulatory program, and programs like this defect-reporting program are ancillary in that they are designed to ensure that in-use vehicles continue to meet emissions standards throughout their useful lives, and that predictions about emissions from a class of vehicles over some period of time are stable and predictable. The defect-reporting program is not an end in itself, which is precisely why the Health & Safety Code does not expressly authorize a defect-reporting and compliance program. The Article 2.4 program is designed to support and make workable the emissions-standards program, which is why ARB has in the past cited a pastiche of statutes to support its claim to legal authority. *See, e.g.,* 13 C.C.R. § 2141 (citing 14 separate California Health & Safety Code provisions).

More specifically, the *California Code of Regulations* reflects that ARB relied most heavily on three statutory provisions: Health & Safety Code §§ 39600, 39601, and 43105. Sections 39600 and 39601 are catch-all provisions that grant only gap-filling authority to ARB to take all steps necessary to guarantee the effectiveness of other powers specifically granted elsewhere. *See Western Oil and Gas Ass'n v. Air Resources Bd.*, 37 Cal. 3d 502, 520 n.9 (1984) (recognizing the nature of sections 36900-36901, and looking elsewhere for the specific authority ARB was citing to support the regulations at issue); *Air Quality Prods. v. State*, 96 Cal. App. 3d 340 (4th Dist. 1979) (construing section 39600 as a general statute that related back to more specific statutes and stating: "In the first place, the express authorization in the statute for the Board to enter into certain types of contracts suggests that had the Legislature intended the Board to have the general contractual authority argued for, the statute would expressly so provide."). Hence, sections 39600 and 39601 cannot alone settle the question of whether ARB possesses the authority to issue revised Article 2.4 regulations.

That leaves section 43105 as the controlling statute. Therefore, it will be useful to set that statute out in its entirety:

Manufacturer's violation and failure to correct; recall; hearing

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.

California Health & Safety Code § 43105 (emphasis added).

Section 43105 grants recall authority when there is a violation of new motor vehicle emissions standards. Thus, the first point to see is that Section 43105 does not even explicitly grant ARB the authority to recall in-use vehicles, as is relevant here. Accordingly, the simplest possible conclusion is that ARB lacks the authority to recall vehicles in use. Even if one passes that question, the next point is that the notion that the Legislature conferred authority on ARB to regulate in-use vehicles must be approached with caution, as it is based on an inference about what power ARB necessarily must have. The Article 2.4 defect-reporting program is a further inference from that vague statutory mandate, leaving ARB at least two places removed from a clear statutory authorization to use recalls as a remedy for Article 2.4 enforcement.

Accordingly, it strains all of the charitable inferences that must be made to conclude the Legislature has conferred the claimed authority on ARB past the breaking point to read section 43105 as authorizing ARB to recall vehicles when: (1) there has been no violation of "emissions standards," which are specifically mentioned as a pivotal requirement in section 43105, the most specific ostensible source of ARB's power in this area; and (2) any emissions violations that are present are shown purely on an individual-vehicle basis and not on the traditional multi-vehicle sampling basis that allows valid inferences to be drawn about an entire engine family, test group, or subgroup.

This conclusion is reinforced by a statute that is not cited as direct authority by ARB, but which the *California Code of Regulations* codifiers recognize is relevant -- Health & Safety Code section 43009.5. That statute specifically conferred recall authority on ARB in connection with defects found in an emissions system component. Hence, it is far more specific than section 43105, and certainly a more precise indication of legislative intent than either sections 39600 and 39601. Section 43009.5 notably requires a demonstration of a "significant increase in emissions" and is unmistakably a statute targeted at regulating vehicles as a "class" or "category." It is not a statute based on an emissions standard exceedance by a single vehicle.

It is true that section 43009.5 creates recall authority only in connection with the optional standards set under Health & Safety Code section 43101.5, and that it is stated that "[n]othing in this section shall limit or otherwise affect the recall authority of the state board . . .," but to emphasize that point is a double-edged sword for the staff. On the one hand, that point can easily turn into the basis for an application of the *expressio unius* canon -- that section 43009.5 shows that the Legislature knew how to confer recall authority in connection with emissions-related defects when it wanted to, and that the absence of such authorization other than in connection with the optional standards under section 43105.5 shows that the Legislature had no such intention. See *O'Grady v. Superior Ct.*, 139 Cal. App. 4th 1423, 1432-33 (6th Dist. 2006) (applying canon). This would leave ARB without any source of authority for even the existing emissions-related defect system. Even if one does not adopt that structural reading of sections 43105, 43105.5, and 43009.5, however, section 43009.5 at least shows what the Legislature had in mind in terms of exercises of recall authority in the defect area, and the staff is not free to ignore such guidance from the Legislature. See, e.g., *SWANCC v. Army Corps of Engineers*, 531 U.S. 159 (2001) ("The term 'navigable' has at least the import of showing us what Congress had in mind as its authority for enacting the [Clean Water Act].").

The system of statutes set out by the Legislature to address the issue of extended warranties is also instructive in terms of the limits on ARB's authority to regulate in a fashion that separates emissions-component regulation from the issue of whether a vehicle as a whole meets emissions standards. The relevant statutes demonstrate that component regulation is a subject ancillary to the primary purpose of emissions regulation by means of performance standards. Component regulation is not authorized for its own sake. Consider section 43205.

Commencing with the 1990 model-year, the manufacturer of each light-duty and medium-duty motor vehicle and motor vehicle engine shall warrant to the ultimate purchaser and each subsequent purchaser that the *motor vehicle* or motor vehicle engine meets all of the following requirements:

- (1) *Is designed, built, and equipped* so as to conform with the applicable *emissions standards* specified in this part.
- (2) *Is free from defects* in materials and workmanship which cause the motor vehicle or motor vehicle engine to fail to conform with applicable requirements specified in this part for three years or 50,000 miles, whichever first occurs.

California Health & Safety Code § 43205(a) (emphasis added).

First, this provision of California law bifurcates the emissions warranty into two parts; (1) a so called "performance warranty" wherein the entire "motor vehicle" must meet the "emissions standards," and (2) a so called "defects warranty" wherein the vehicle must be free of defects. Compare Health & Safety Code § 43205(a)(1) with § 43205(a)(2); compare also 13 C.C.R. § 2037 (defects warranty) with § 2038 (performance warranty). Both warranties are linked back to the governing emissions standards. The performance warranty is linked to the "applicable emissions standards specified in this part," and the defects warranty is linked with the "applicable requirements specified in this part." Compare Health & Safety Code § 43205(a)(1) with § 43205(a)(2). In both instances, ARB has not been conferred in section 43205(a) with a free-ranging authority to set extended warranties divorced from emissions standards.

Additionally, section 43205(a)(1) clearly applies to the entire "motor vehicle," not any particular component, and unlike section 43205(a)(2), it does not require the vehicle to be "free" of defects. Therefore, even if an individual component were to fail, this performance warranty does not activate so long as the "motor vehicle" as a whole continues "to conform with the applicable emissions standards." This fact appropriately encourages redundant design by manufacturers, such that although individual components may fail or be degraded, the system as a whole will continue to meet the emissions standards, relieving the manufacturer of unnecessary warranty costs, and the vehicle owners of the need to seek repair more frequently. In contrast, section 43205(a)(2) does require the "motor vehicle" to be "free" of defects, but only during a specific period of time, and therefore mandates warranty coverage of individual component when they fail during that time.

Next, contrast section 43205.5 with section 43205. When addressing the subject of ARB's regulatory powers over heavy-duty vehicles, instead of requiring, as it did in the case of

light- and medium-duty vehicles, that such vehicles be free of design defects and that they be free of manufacturing defects (i.e., component-performance defects) only for a specific period (three years or 50,000 miles), the Legislature instead delegated to ARB the power to set a period of use in which vehicles would be free of design defects, and provided as to manufacturing defects that vehicles be free of those defects for "the same or lesser period of use." Compare Health & Safety Code § 43205(a)(1)-(2) with § 43205.5(a)-(b). The contrast is striking and shows that the Legislature knew how to delegate to ARB the power to set warranty periods when it wanted to do so. The fact that such a delegation to ARB is absent from section 43205 thus shows that ARB may not separate defect regulation as an ancillary program from the main program of emissions regulation by means of performance standards. Indeed, the qualifier in section 43205.5(b) shows that as to heavy-duty vehicles, even where ARB has more freedom, ARB is not free to set a period of use in relation to manufacturing defects that exceeds the period of use for design defects. This clearly demonstrates that policing against design defects -- i.e., defects leading to a conclusion that a vehicle has not been "designed, built, and equipped so as to conform with the applicable emission standards," §§ 43205(a)(1), 43205.5(a) -- are a predominating concern over policing against manufacturing defects. Most importantly, the regulation of both design defects and manufacturing defects in section 43205 and 43205.5 shows that both types of defects tie back to the emissions-standard program and cannot be divorced from that central purpose.

It is not an answer to these points to note that vehicles must be certified to have durable components and that ARB possesses additional authority in the defect-reporting and warranty area by virtue of the authority it possesses to ensure such durability. The statutes that control vehicle certification as a precondition to the sale of vehicles in California obviously tie exclusively to ensuring that the emissions standards are met for the vehicle class as a whole and for the vehicle itself as a whole. See generally Health & Safety Code §§ 43100-43105; see especially §§ 43101, 43102(a) ("No new motor vehicle or new motor vehicle engine shall be certified by the state board, unless the vehicle or engine, as the case may be, meets the emission standards adopted by the state board pursuant to Section 43101 under test procedures adopted by the state board pursuant to Section 43104.").

Vehicle certification under sections 43100, 43102, and 43104 is not component certification. Section 43100 states, "The state board may certify new *motor vehicles* and new *motor vehicle engines* pursuant to this article." Clearly then, ARB may not set emissions standards at a level of product design beneath the level of an engine as a whole. Further, sections 43102 and 43104 elaborate on the emission standards, conditions for certification, and test procedures to certify "new motor vehicles." No section requires certification of components. To the contrary, all sections complement a process by which the entire "new motor vehicle" shall conform to the emissions standards for the entire "new motor vehicles" established under section 43101. Indeed, the Executive Orders of the Air Resources Board, which provide this certification, are vehicle certifications, not component certifications. Such Executive Orders name no individual components, but instead identify the vehicle and its test group. Therefore, there is no "component" certification under the Health & Safety Code. There is only a "motor vehicle" certification.

Further, at no place in sections 43100, 43101, or 43102 is certification required at emission levels below the "emissions standards." A "motor vehicle" may only be certified by

ARB to meet the "emissions standards" under section 43102. Therefore, any measure of emissions that contributes to the determination of a defect or to the initiation of a remedial action must exceed the emissions standard, and not the level of emissions accounted for in the test group for certification.

It is also no answer to these points to note that in section 43105, ARB possesses the authority to recall vehicles that not only violate emissions standards, but "test procedures." This is not a grant of authority to adopt any procedure of any kind having a nexus to emissions. The test procedures specified under section 43104 are clearly test procedures designed to regularize and make precise the measurement of compliance with the substantive emissions standards. It is not possible to interpret "test procedures" to give ARB the authority to regulate beyond the necessity to set scientific and technically objective test procedures designed to measure emissions-standard compliance, and therefore, measure the effect of the vehicle on air quality. Test-procedure authority is limited to specifying the duration of the emissions test, the fuel to be used, the sequence of measurements, the measurement protocols, etc. Test-procedure authority does not remotely authorize recalls or extended warranties for emissions-component-related failures. A violation of a test procedure occurs if the specified procedural steps are not followed. Such a violation does not occur if months or even years later (after the test has been conducted), a vehicle develops a defect in an emissions-related component. Indeed, since not every vehicle in a particular engine family can be feasibly tested pursuant to the testing procedures, the juxtaposition of emissions standards and test procedures makes clear that emissions-standard compliance is to be regulated on a classwide basis. Thus, if anything, the presence of the phrase "test procedures" at numerous places in the statutory scheme constrains and does not widen ARB's regulatory authority.

Finally, as a policy matter, it is hard to see why the Legislature would want to confer authority on ARB to require remediation of *all* defects based on a small percentage of a category of vehicles having defects, simply because the defects have a nexus to emissions control. There is no strong evidence that the Legislature authorized ARB to abandon or supplement its traditional mission to police emissions control, instead authorizing ARB to design remedies for component defects not associated with any violation of classwide emissions standards.

B. 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.

As noted above, the relevant statutes in the Health & Safety Code are all class- or category-based and tied back to emission standards. See California Health & Safety Code §§ 43105 ("emissions standards"), 43009.5 ("substantial percentage of any class or category of vehicles . . . exhibits . . . an identifiable, systematic defect [as compared to vehicles] of the same class or category"), 43106 (authorizing running changes that do not have the effect of increasing "emissions above the standards under which those motor vehicles or engines, as the case may be, were certified"), 43108 ("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"). Note as well that section 43009.5, adopted in 1982, is plainly modeled on Clean Air Act section 207(c), and therefore should be interpreted in accord with that statute. See also *Kahn v. Kahn*, 68 Cal. App. 3d 372, 387 (1st Dist. 1977) (even interpretations of federal law that are rendered

after a state law modeled on the federal law is adopted are persuasive authority California courts must consider following). ARB would therefore be limited to regulating defects of exclusively a classwide nature, even if there were no other legal reasons to constrain ARB's legal authority in that way. But in fact, there are several other reasons to do so.

Recall authority grows out of the common law of torts, and specifically the sub-field within torts of product liability. In product liability law the distinction between manufacturing and design defects is critical. Equally critical is the fact that product liability law must not be allowed to descend into a form of insurance-by-tort-law. See, e.g., *Fieldstone Co. v. Briggs Plumbing Prods.*, 54 Cal. App. 4th 357, 368-69 (4th Dist. 1997) ("we would still conclude that no duty existed. If a duty of care to avoid economic injury existed in the circumstances of the present case, every manufacturer would become an insurer, potentially forever, against economic loss from negligent defects in a product used for its intended purpose.").

The common law of torts generally authorizes a classwide remedy for product defects only against design defects or against widespread and recurring manufacturing defects. Isolated manufacturing defects are to be remedied by individual tort suits providing individualized relief. The Health & Safety Code itself recognizes this distinction in at least one provision, which contrasts with the classwide approach of most emissions statutes codified there. See California Health & Safety Code § 43210.5 ("The state board shall, by regulation, require manufacturers of motor vehicles . . . to determine the extent to which emissions-related defects exist in each engine family and to recommend the diagnostic and repair procedures that can result in the identification and correction of these defects [i.e., on an individual basis] under vehicle inspection and maintenance programs."); *id.* § 43205(a)(1), (a)(2), (a)(4) (contrasting design defects, (a)(1), with manufacturing defects, (a)(2) and (a)(4), calling the latter "defects in materials and workmanship"). See *Heater v. FTC*, 503 F.2d 321, 326 (9th Cir. 1974) (if Congress had intended the Federal Trade Commission to be able to use retrospective-type remedies as opposed to only future-oriented compliance remedies, it would have spoken more clearly; the alternative is that common-law rescission remedies would be rendered superfluous -- a step Congress would not have taken lightly). Note as well that the FTC's authority to remedy "unfair trade practices" is inherently more vague and open-ended than ARB's mandate to set and enforce emissions standards, especially given the precision with which the latter must be measured in accordance with the law on representative and objective test procedures. See *supra* Section I.A. and Section III.E., *infra*.

In short, the background principles of law are that classwide remedies are only appropriate for classwide defects. For this reason, it is not surprising to see reflected in statutes authorizing product recalls notions about proving defects in a "substantial number" of vehicles, or, in the words of section 43009.5, a "pervasive" defect. See also *General Motors Corp. v. Ruckelshaus*, 742 F.2d 1561, 1568 (D.C. Cir. 1984) (en banc) ("section 207(c) [of the federal Clean Air Act] provides for classwide remedies of classwide defects."). Cf. Jeffrey A. Lamken, Note, *Efficient Accident Prevention as a Continuing Obligation: The Duty to Recall Defective Products*, 42 Stan. L. Rev. 103 (1989) (recognizing that the common law duty to recall adopted in some states, stemming from a reverse fertilization tracing to statutory recall processes, needs to be approached with caution and kept within careful limits so as to avoid inefficient recalls and ballooning administrative costs); *Restatement (Third) of Torts: Products Liability* § 11 (1998) (severely limiting common law duty to recall).

Hence, ARB is not at liberty, at least not without a far clearer indication of legislative authority, to depart from the traditional common-law and statutory principle of "classwide remedies of classwide defects." In other words, to gain the benefits of classwide remedies, ARB must demonstrate *classwide* defects actually exist. Traditionally, ARB has demonstrated that classwide defects exist by way of the requirement that a substantial number of vehicles exhibit the defect. Thus, under the law, the "substantial number" criterion of 13 C.C.R. § 2111(h)(1) and § 2148(b)(1) is not optional. These references tie back to ARB's asserted statutory authorization, to similar statutes, and indeed back to the common law foundations concerning tort liability for product defects.

At the September 7, 2006 meeting, it was asserted that the record of the 1988-89 rulemaking in this area definitively established that a 4% "true" defect rate threshold, when crossed, shows the existence of a classwide defect or a defect in a "substantial number" of vehicles. Given both the presence of the preconditions to an enforcement action established in section 2148 of the current regulations *and* the section 2147 affirmative defense, such an assertion by ARB staff is not accurate. This is particularly clear as a logical matter considering the section 2148(b) limitations on ARB's authority, which preclude enforcement where the defect in question "does not represent a pervasive defect in design." *Ipsa facto*, crossing the 4% threshold could not, therefore, by itself prove the existence of a pervasive design defect. The 4% threshold is a mere presumed violation in the regulatory status quo -- a necessary, but *not* a sufficient condition to enforcement. And hence, the rulemaking record will not and could not contain evidence that is contrary to the text and function of section 2148(b).

In the status quo system of regulations, the 4% "true" defect rate actually serves merely as a warning system to ARB -- i.e., as a triggering signal for ARB enforcement authorities -- to go on to apply the section 2148 criteria. The 4% "true" defect level is not self-sufficient to lead to any enforcement consequences by itself, if the section 2148 criteria cannot also be met. And even where those criteria can be met, at most the 4% defect level together with the satisfaction of section 2148 criteria become a rebuttable presumption that manufacturers can contest through the section 2147 procedures. If the staff suggestion to turn the 4% "true" defect rate into an absolutely enforceable threshold is proposed by the Board, the Alliance reserves the right to submit technical and other evidence into the record to show that a mere 4% level of screened claims cannot demonstrate that a classwide defect exists.

Hence, since the 4% "true" defect number lacks fully independent significance, it cannot be used as a basis to justify eliminating the very procedural restrictions that make a threshold as low as 4% appearing anywhere in the regulatory regime consistent with the law. Put differently, a 4% or greater "true" defect rate *coupled with* satisfaction of the section 2148 criteria, and the failure of manufacturers to present or meet their burden under section 2147, is what presently establishes that a systemic, classwide violation resulting in a "substantial number" of vehicles test exists. Accordingly, there is no rulemaking record that establishes that a 4% "true" defect rate, standing alone, equates to a systemic, classwide problem in a "substantial number" of vehicles. The limitations in sections 2147 and 2148 were not provided as a matter of charity, but in order to allow the enforcement triggers suggested by the 4% threshold to function within the constraints of the law.

Finally, here the Alliance reserves its right to assert that a full examination of the history of the 1981 and 1988-89 rulemakings in this area will reveal statements by ARB similarly acknowledging the necessity for and wisdom of issuing remedies only against classwide defects. For present purposes, we note that the Alliance's review process of the 1981 and 1988-89 past rulemakings is underway and has revealed the key points that:

- the 1981 rulemaking's purpose was to permit ARB to exercise recall powers similar to those available to EPA -- this should add to ARB's burden to explain why it now wishes to decouple from the federal approach (see Section IV.D. below);
- when ARB appealed, in connection with the 1981 rulemaking, a decision of the Office of Administrative Law, ARB argued that its newly proposed regulations would not permit recalls without exceedance of the emissions standards, *see* Letter from David Nawi to Hon. Edmund G. Brown, Jr., at 5-6 (Sept. 22, 1981);
- in 1988-89, ARB attempted initially to change its regulations to grant it the authority to order recalls even without demonstrating violations of the emissions standards, but retreated from the position, confirming that the regulation as promulgated tied "recalls based on emission component failures to exceedance of an emissions standard," ARB, Final Statement of Reasons for Rulemaking, Agenda Item 88-12-1 and 88-12-3 at 22-23.

All of these points also obviously reinforce other legal analysis in this memorandum. There is a reason that ARB confirmed in 1981 that violations of an emissions standard as a whole was required before recalls could be ordered in this area, and why ARB receded in 1988-89 from an attempt to change that principle: ARB lacks the authority to proceed otherwise under existing law.

C. ARB Lacks the Authority to Regulate for Consumer-Protection Purposes.

Where the Legislature wanted ARB to regulate in the vein of consumer protection, the Legislature specifically conferred that authority. In connection with the OBD program, the Legislature specifically provided ARB with the authority to require manufacturers to provide certain service information to independent repair shops and equipment manufacturers. *See* California Health & Safety Code § 43105.5. The obvious purpose of this statute was to make third-party repair services and parts more readily available to consumers. Indeed, subsection (g) specifically links ARB implementation with the California Department of Consumer Affairs, requiring the two agencies to jointly report to the Legislature on the progress of the service-information statute in achieving its goals.

By operation of the *expressio unius* canon, and the specific statements that the purpose of ARB regulation is to assist in providing a "suitable living environment for every Californian," Health & Safety Code § 39601(c), ARB has power to regulate so as to curb automobile emissions that cause harm to humans and the environment. It is the Department of Consumer Affairs that possesses a different (and arguably broader) authority to act to protect consumers from financial harm in connection with normal marketplace transactions.

Additionally, there is no need for the staff to attempt to protect vehicle purchasers from defective emissions components. Defects arising during warranty coverage can be repaired at

the consumer's option, free of charge. And malfunctions arising outside of that period simply leave consumers to make rational choices about whether and when to repair their vehicles. Staff can surely take such rational consumer behavior into account in making predictions about the emissions consequences of particular component failures, and can set its predictions against those of manufacturers for purposes of determining whether enforcement is appropriate. But what the agency may not do is regulate in an attempt to shield consumers, in a paternalistic fashion, from bearing any of the financial costs for the repair of malfunctioning emissions components in their vehicles.

To the extent any authority of an analogous nature exists in ARB's organic statutes, Health & Safety Code section 43205 demonstrates that such authority is carefully cabined. *See, e.g., California Health & Safety Code § 43205(a)(4)* (requiring vehicles to be free from defects in materials and workmanship for a period of no more than 7 years or 70,000 miles). ARB has plainly *not* been granted free-ranging power to advance consumer-protection goals.

D. Ordering Extended Warranties Is Not Within ARB's Authority.

Consistent with the fact that ARB is not a regulator that possesses consumer-protection authority, Section 43205 *directly* mandates the minimum warranties that manufacturers are required to place on their vehicles. ARB was not delegated the authority to revise such legislative directives. ARB is given the exclusive and limited role in that statute of issuing regulations that revise the \$300 deductible to account for inflation. Accordingly, such a limited source of authority may not be expanded by ARB to give it the power to require extended warranties of whatever duration staff sees fit.

The legislative history of section 43205, which was part of the so-called "I/M bill," is fully consistent with the conclusion that ARB was not delegated authority here to expand the statutorily fixed warranty periods. That legislative history reveals that the issue of the economic cost of imposing mandatory warranty periods on manufacturers was hotly contested. Perhaps even more importantly, ARB was an integral part of the negotiation process that resulted in section 43205 as enacted, reinforcing even more the conclusion that ARB lacks regulatory authority to require extended warranties. ARB, as a direct participant in the legislative negotiations, would have been given a delegation to define future mandatory warranty periods by regulation, if the Legislature had so intended. *See Bill File of the Assembly Committee on Transportation* containing an analysis by the I/M Review Committee, at AP-102, and entitled "Explanation of Statute Changes Recommended by the I/M Review Committee," at 2 (Jan. 12, 1988) ("5% of vehicles experiencing \$1,000 repair costs could be repaired under an extended warranty, with a \$300 deductible, that would increase the cost of new cars by only \$35. The Review Committee and ARB have agreed to cut back the 'full coverage' warranty from 5 years to 3 years in order to obtain service industry support for this significant new warranty coverage for the failure of expensive components. ARB and the Review Committee are very close to a compromise with the California Automotive Service Council (ASC) on the warranty proposal."). *See, e.g., City of Moorpark v. Superior Ct.*, 18 Cal. 4th 1143, 1150 (1998) (legislative compromises should be enforced).

E. ARB Lacks the Authority to Order Remedies on the Basis of "Worst-Case" Failures.

Again looking to the guidance that section 43009.5 provides as to what the Legislature had in mind for recalls based on defects existing in emissions-related components, one quickly sees the requirement that a recall must be based on "a statistically valid and representative sample of vehicles." Additionally, section 43009.5 instructs ARB to exclude "failures which are the result of abuse, neglect, or improper maintenance."

Based on these requirements and the classwide basis of emissions regulation, which is the ultimate source of ARB's authority here, staff is not at liberty to test on the basis of "worst-case" failures. Such failures are not necessarily representative of real-world failures, and the staff has not to date attempted to provide a justification for such a requirement.

Attempting to test based on worst-case failures would undo the great progress in ensuring objectivity created by the seminal federal cases that form the foundation for the establishment of test procedures by EPA, which itself stands in the necessary legal background of the Health & Safety Code and ARB's existing regulations. See, e.g., *Sierra Club v. Costle*, 657 F.2d 298, 341 n.157 (D.C. Cir. 1981) (Wald, J.) ("We see no basis on this record which would justify extrapolating from the pilot scale data to the conclusion that dry scrubbing is adequately demonstrated for full scale plants throughout the industry. See and compare our discussion of the representativeness of EPA's pilot scale data for baghouses . . ."); *National Lime Association v. EPA*, 627 F.2d 416, 432-34 (D.C. Cir. 1980) ("The Agency's failure to consider the representativeness along various relevant parameters of the data relied upon is the primary reason for our remand."); *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 392 (D.C. Cir. 1973) (agency acted unlawfully in not making available the test results and procedures that formed the basis for the agency action in question); *International Harvester Co. v. Ruckelshaus*, 478 F.2d 615, 647 (D.C. Cir. 1973) (see under heading "Statistical reliability of assumptions").²

F. ARB Cannot Prevent a Manufacturer from Defending Itself in a Contested Case by Submitting Evidence of Additional Emissions Testing.

The staff has proposed to limit the evidence that manufacturers can submit to defend themselves in contested recall (and presumably contested extended warranty) cases to information contained in the EIR and emissions-testing data submitted during that same period. Staff proposes to do this even while ARB enforcement personnel themselves would be able to use any source of information available to it at any time to prove individual or classwide defects or violations of emissions standards. Such an uneven field of adjudication would be fundamentally unfair and contrary to basic tenets of law.

² We also note that *International Harvester* recognizes the fundamental difference in terms of applying test procedures to design defects versus manufacturing defects: "The first issue is whether the automobile built with rigid adherence to specifications will perform as predicted. The issue of quality control, whether cars will indeed be built in accordance with specifications, raises a separate and additional problem." *International Harvester*, 478 F.2d at 647.

Additionally, such a regulation adopts a rule of evidence that is incompatible with the nature of the possible proof in situations where every vehicle in use cannot feasibly be examined and, of necessity, some inference must be drawn of classwide compliance or noncompliance. Finally, even if construed as a regulation that simply requires manufacturers to introduce all evidence they might offer in their defense earlier in a sequential reporting and enforcement process, such a proposal still could not stand because it would impose unreasonable burdens on manufacturers to engage in costly emissions testing before they had a full appreciation of the likelihood of enforcement or even the nature of the charges leveled against them. Such a proposal, if adopted, would thus also eviscerate the benefits ARB staff have now agreed are associated with allowing engineering evaluations.

The most fundamental reason ARB cannot restrict the evidence manufacturers may use in contesting recall remedies ordered in connection the Article 2.4 program is that the only source of specific authority ARB relies on for that program is Health & Safety Code § 43105. That statute specifically states (emphasis added) that, "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." The Alliance has questioned above, in Section III.A., whether ARB possesses the authority to order recalls of vehicles in use at all. But even assuming section 43105 (in conjunction with sections 39600 and 39600) does authorize ARB to recall in-use vehicles, and that recall remedies may also be used to enforce the Article 2.4 program, section 43105 plainly allows manufacturers to introduce their objections *at a hearing* and not be limited to evidence artificially restricted by ARB regulations.

Moreover, the strictures of due process bind ARB and all California agencies. "[S]tate and local governments cannot mandate which procedures they unilaterally deem adequate to protect an individual's due process rights; the minimum requisite procedures are federally mandated." *Burrell v. City of L.A.*, 209 Cal. App. 3d 568, 576-77 (2d Dist. 1989). Mandated guarantees of federal due process are plainly relevant here, as the analysis in the United States Supreme Court decision of *Hamdi v. Rumsfeld*, 542 U.S. 507, 533 (2004), provides:

"Parties whose rights are to be affected are entitled to be heard; and in order that they may enjoy that right they must first be notified. It is equally fundamental that the right to notice and an opportunity to be heard 'must be granted at a meaningful time and in a meaningful manner.'" *Fuentes v. Shevin*, 407 U.S. 67, 80 (1972) (quoting *Baldwin v. Hale*, 1 Wall. 223, 233 (1864); *Armstrong v. Manzo*, 380 U.S. 545, 552 (1965) (other citations omitted)). These essential constitutional promises may not be eroded.

The meaningful time for generating formalized testing data will arise in many instances only after ARB orders a recall or other remedy. And the manner of evidence that a manufacturer should be required to generate should also vary with circumstance. Estimation processes and minimal evidence should be accepted at the early stages of a potential process of law enforcement, whereas after the government has decided to formally prove that a violation has occurred, greater and more far-reaching evidentiary inquiries should be permitted by regulated parties.

This result flows even from the balancing test of *Mathews v. Eldridge*, 424 U.S. 319, 335 (1976), which ARB has relied on in the past to revise its adjudicatory processes. The three elements to be weighed in the balance of the *Mathews* test are as follows: "First, the private interest that will be affected by the official action; second, the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, of additional or substitute procedural safeguards; and finally, the Government's interest, including the function involved and the fiscal and administrative burdens that the additional or substitute procedural requirement would entail." *Id.* at 333. The private interest here is obviously in avoiding enormously costly potential recall and extended warranty campaigns that are unnecessary to achieve any real or legally required emissions benefit. The risk of an erroneous deprivation obviously increases when manufacturers are precluded from offering the best evidence of compliance they have long been allowed to offer under the affirmative defense currently available in 13 C.C.R. § 2147. Finally, it is hard to see how the burden on ARB here of retaining the status quo rules of the relevant evidence in contested recalls is onerous to agency staff. It cannot be because evaluating emissions testing is too burdensome, otherwise staff would not be proposing to reserve for itself the right to introduce any form of new evidence desired in a contested recall. It would seem that the proposal would allow ARB Executive Officer to prevail more easily in any contested recall, but that is not a legitimate pro-governmental interest for *Mathews* balancing purposes, since *Mathews* requires neutrality as to whether the government or a private party is correct on the merits of the underlying dispute to which alternate procedures might be applied.

The issue of parity in the evidence rules vis a vis the government and regulated manufacturers is an important issue. Allowing ARB to introduce evidence at any time creates an uneven field for a purportedly neutral litigation and converts such proceedings into the equivalent of a lay down by ARB enforcement authorities. "[A] standard that provides that if the petitioner adduces substantial evidence it wins, no matter how compelling the contrary evidence, is the antithesis of due process." *NRDC v. California Fish and Game Comm'n*, 28 Cal. App. 4th 1104, 1126 (3d Dist. 1994) (holding that the evidentiary process at issue there was not of such a constitutionally suspect nature).

An attempt to cut off the evidence that manufacturers may present to defend themselves in contested cases is also inconsistent with the very nature of the regulatory scheme at issue. Manufacturers must be allowed an affirmative defense of presenting additional testing data -- i.e., additional data from which better and more accurate inferences may be drawn about the underlying class of vehicles -- especially where ARB is permitted to benefit from an evidentiary presumption that a violation subject to recall has occurred for a class of vehicles whenever defects exceed some small proportion (4% "true" rate) of the total vehicle class.

Therefore, permitting the affirmative defense in 13 C.C.R. § 2147 is constitutionally compelled, for it is unconstitutional to create an irrebutable presumption where the conclusively presumed facts are not universally true, or where the State possesses reasonable means of making the relevant determination. See *Vlandis v. Kline*, 412 U.S. 441 (1973). Here, the Alliance asks only that the Article 2.4 regulations allow regulated parties, just as the staff apparently would allow itself, the introduction of any relevant evidence bearing on compliance with the relevant defect regulations and emissions standards.

It is possible that what ARB staff has in mind here is not eliminating the Section 2147 affirmative defense entirely, but rather requiring all testing data to be submitted earlier in the enforcement process rather than for the first time in connection with the commencement of a contested recall. If this is what ARB has in mind, it would still be impermissible to impose such an obligation here. Staff would then be unable to establish that avoiding the burdens on it of reviewing testing later will create *environmental* benefits, which it is required to do under Health & Safety Code section § 57005(a).

By contrast to the Proposed Amendments, the reasonableness of the existing system becomes even more apparent. Under 13 C.C.R. § 2127(c) manufacturers can seek Executive Officer approval to perform and submit engineering evaluations and less costly forms of testing, yet for purposes of overcoming the presumption of noncompliance, manufacturers are permitted under § 2127(b), especially at a hearing, to submit evidence in their defense from full-blown emissions testing. This rational system allows manufacturers to tailor their level of testing effort to the nature of the proceedings at issue. What is at issue is whether there are any emissions impacts.

A proposal to restrict the evidence available for manufacturers to defend themselves in contested cases would also run contrary to accepting engineering evaluations, as ARB staff agreed to continue doing during the Workshop Process. An engineering evaluation is essentially an estimate. Estimates are not precise, but they have value nevertheless. The value of an estimate lies in the fact that it is less costly, burdensome, and time-consuming to prepare than to perform full-blown, formal emissions testing to obtain a more precise answer. In short, estimates recognize the trade-off in developing information efficiently, requiring burdensome attempts to obtain greater accuracy only when the effort to do so is worth the candle.

But if manufacturers are required to make a one-time election to perform an emissions test or submit an engineering evaluation, or be forever held to that choice and limited in future to defending themselves only on the basis of an estimate or a less costly testing program, manufacturers will be incentivized inefficiently to deploy costly formalized and fulsome testing procedures as early as possible so as to avoid the risk that ARB would ultimately order a remedy, and the manufacturer would then be left with no effective options to mount a defense. That is precisely the reason why the status quo permits manufacturers an affirmative defense to introduce any new testing data they desire to generate in connection with a contested recall or other remedial order. ARB is spared the cost and time required to run the tests by the allocation of the burden of proof to manufacturers. But while ARB's ability to win recall cases would improve greatly if the ability to mount an affirmative defense were constricted or eliminated, that is obviously not a proper basis on which to encroach on the opportunity manufacturers must be afforded as a matter of statutory and constitutional law to perform and offer up defensive testing at a meaningful time and in a meaningful place.

IV. APPLICATION OF RELEVANT REQUIREMENTS OF THE CALIFORNIA ADMINISTRATIVE PROCEDURE ACT

The California Administrative Procedure Act, California Government Code, Title 2, Division 3, Part 1, Chapter 3.5, §§ 11340-11365 ("CAPA"), provides the procedural and general substantive constraints that ARB faces in promulgating any rulemaking. *See also* California

Health & Safety Code § 39601(a) (commanding that ARB rulemakings comply with Chapter 3.5 of the Government Code). For purposes of the analysis in this memorandum, CAPA contains four basic sets of requirements ARB must abide by:

- its proposed regulations must satisfy a means-end fitness test;
- in considering whether to adopt regulations, a California agency must consider alternatives that are presented to it for consideration along with reasonably self-evident alternatives, particularly the no-action alternative of the regulatory status quo;
- California agencies cannot issue regulations that will cause undue economic harm or impose costs far out of proportion to expected benefits;
- ARB, specifically because it is an environmental agency, must explain why it chooses to depart from the approach to emissions-related defect regulation under federal law.

See California Gov't Code § 11346.2(b)(1),(3)(A), (4), (5). The Alliance questions whether the staff has met or could meet any of these four sets of requirements as to the most controversial provisions of the Proposed Amendments under consideration here. See California Gov't Code § 11340.5 (noncompliance with CAPA leads to void regulations); *Tidewater Marine W., Inc. v. Bradshaw*, 14 Cal. 4th 557, 570 (1996) (same). But for purposes of this memorandum, our purpose is only to remind the staff of CAPA's requirements and the specific duties of explanation and analysis that statute imposes in connection with this rulemaking.

At the outset, it is important to note the fundamental purposes of CAPA:

One purpose of the APA is to ensure that those persons or entities whom a regulation will affect have a voice in its creation (*Armistead v. State Personnel Board* (1978) 22 Cal.3d 198, 204-205, 149 Cal.Rptr. 1, 583 P.2d 744 . . . as well as notice of the law's requirements so that they can conform their conduct accordingly (*Ligon v. State Personnel Bd.* (1981) 123 Cal.App.3d 583, 588, 176 Cal.Rptr. 717 The Legislature wisely perceived that the party subject to regulation is often in the best position, and has the greatest incentive, to inform the agency about possible unintended consequences of a proposed regulation. Moreover, public participation in the regulatory process directs the attention of agency policymakers to the public they serve, thus providing some security against bureaucratic tyranny. (See *San Diego Nursery Co. v. Agricultural Labor Relations Bd.* (1979) 100 Cal.App.3d 128, 142-143, 160 Cal.Rptr. 822.)

Tidewater Marine Western, 14 Cal. 4th at 568-69.

A. CAPA Requires Proposed Regulations to Meet a Means-End Fitness Test.

In the Initial Statement of Reasons, an agency must include: "A statement of the specific purpose of each adoption, amendment, or repeal, and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose for which it is proposed." California Gov't Code § 11346.2(b)(1). Additionally, where specific technologies or equipment must be used, "a statement of reasons why the agency believes these

mandates or prescriptive standards are required” must also be included. *See id.* ARB must provide “adequate information concerning the need for, and consequences of, proposed government action.” *Id.* § 11346.3(a)(1). And uniquely in connection with business regulation, ARB must “make[] a finding that [such regulation] is necessary for the health, safety, or welfare of the people of the state that the regulation apply to businesses.” *Id.* § 11346.3(c).

The analysis required by CAPA begins with a specification of ends and then assesses proposed means against that foundation. *See id.* § 11346.5(a)(3)(C) (agency should include in its notice of proposed adoption a “policy statement overview explaining the broad objectives of the regulation, and, if appropriate, the specific objectives.”). Hence, the specification of purposes is to be as specific as possible. ARB may not specify a purpose at a high level of generality when in full candor there are more specific purposes the agency has in mind for any individual proposed “reforms.”

CAPA is also clear that when assessing potential means to achieve the same ends, an agency must be able to accurately state in the course of the rulemaking process that it has determined that “no reasonable 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 action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.” Gov’t Code § 11346.5(a)(13); *see also id.* § 11346.9(a)(4) (similar). Moreover, at the conclusion of the regulatory process, ARB must do more than simply attest and explain why the alternative it prefers can achieve the same goals most effectively. Instead, ARB must summarize “each objection or recommendation regarding the specific adoption, amendment, or repeal proposed, together with an explanation of how the proposed action has been changed to accommodate each objection or recommendation, or the reasons for making no change.” *Id.* § 11346.9. Hence, ARB cannot operate at a vague and unhelpful level of generality when considering alternatives and measuring them against stated objectives. Instead, it must consider in detail any alternatives that are obvious or presented to it, and explain specifically why any such alternatives were rejected.

B. CAPA Requires ARB to Consider Reasonable Alternatives to the Proposed Amendments.

Also, from the very inception of a rulemaking, ARB must include in its Initial Statement of Reasons under CAPA a “description of reasonable alternatives to the regulation and the agency’s reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or *prescribe specific actions or procedures*, the imposition of performance standards shall also be considered as an alternative.” California Gov’t Code § 11346.2(b)(3)(A) (emphasis added).

ARB is not required to consider alternatives that are artificial or unreasonable, or justify not describing every conceivable alternative. California Gov’t Code § 11346.2(b)(3)(C). But two things are clear -- ARB must consider alternatives that are presented to it by regulated parties and other commenting members of the public and ARB must consider self-evident alternatives, especially including the most obvious alternative of all in any case involving regulatory amendment -- that is, the alternative of *not* amending the regulation. *See also* 1996 Economic Analysis Guidance (see below), at 3 (“Agencies should use their best technical

judgement [*sic*] to both independently identify reasonable alternatives, and also to consider alternatives submitted by stakeholders during the workshop process.”).

C. CAPA Requires ARB to Consider the Economic Impacts and Burdens of Proposed Rules, and to Avoid Unreasonable Imposition of Costs.

Again, beginning with its Initial Statement of Reasons, ARB must provide “[f]acts, 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 economic impact on business.” California Gov’t Code § 11346.2(b)(4). Additionally, “State agencies proposing to adopt, amend, or repeal any administrative regulation shall assess the potential for adverse economic impact on California business enterprises and individuals, avoiding the imposition of unnecessary or unreasonable regulations or reporting, recordkeeping, or compliance requirements.” *Id.* § 11346.3(a) (emphasis added). ARB is also required to consider competitive impacts. *See id.* § 11346.3(a)(2). Job-creation, business-creation, and business-elimination purposes must be considered as well. *See id.* § 11346.2(b)(1). Economic impacts must be considered in the form of cost analyses, and these cost analyses must consider impacts on a “representative business.” *See id.* § 11346.5(a)(9). ARB’s analysis of these issues also must be based on data and real-world documents that must be periodically updated as the process of a final rulemaking unfolds. *See id.* §§ 11346.2(b)(4), 11346.5(a)(8), 11346.9(a)(1).

Moreover, as ARB recognized most recently in 2001, in performing the economic analysis required by the CAPA, it is also bound by a 1996 Guidance Document issued by California-EPA. *See* Economic Analysis Requirements for the Adoption of Administrative Regulations, Memorandum from Peter M. Rooney, Undersecretary, to Executive Officers and Directors (Dec. 9, 1996) (“1996 Economic Analysis Guidance”). Indeed, ARB legal and economic staff members were themselves central to the formulation of the 1996 Economic Analysis Guidance. *See id.* at 11 (recommending that questions or comments concerning the guidelines be presented to ARB’s Robert Jenne or Reza Mahdavi). Hence it is clear that ARB is firmly bound by the 1996 Economic Analysis Guidance.

The 1996 Economic Analysis Guidance requires ARB to “conduct an *incremental* cost-effectiveness analysis.” *Id.* at 2 (emphasis added). What California-EPA means by that is as follows: “Using the information obtained during the workshop process, the agency should identify a reasonable number of alternatives, or combination of alternatives, that would fulfill the agency’s statutory mandates and accomplish the purpose of the regulatory action. An incremental cost-effectiveness analysis should then be conducted to examine the cost difference in alternatives that have been identified.” *Id.* Lack of optimal data is not a reason for not performing such an analysis. Instead, the “best data that is reasonably available,” *id.* at 3, must be used. Here, since the members of the Alliance and the Alliance itself stands ready to respond to any reasonable request for cost data concerning different options for emissions-related component reporting and compliance, there should be no reason that a robust incremental cost-effectiveness comparison cannot be done in connection with this rulemaking.

In a similar fashion, section 6680 of the State Administrative Manual requires ARB to complete an Economic Impact Statement (“EIS”) in connection with the Proposed Amendments. This “EIS”, sometimes called a Form 399 or “Fiscal Impact Statement,” requirement is

applicable here. The California Trade and Commerce Agency, Regulation Review Unit, has prepared guidelines on completing the EIS. See Economic Impact Statement Guidelines (June 1999) ("EIS Guidelines"). Under the EIS Guidelines, ARB is required to identify "affected parties," to assess the "value of costs" and to analyze competitiveness issues in connection with their regulatory proposals.

Finally, ARB must subject its economic analysis and its analysis of emissions benefits to peer review. See California Health & Safety Code § 57004(b) ("The agency, or a board, department, or office within the agency, shall enter into an agreement with the National Academy of Sciences, . . . or any similar scientific institution of higher learning . . . or with a scientist . . . of comparable stature and qualifications that is recommended by the President of the University of California, to conduct an external scientific peer review of the scientific basis for any rule proposed for adoption by any board, department, or office within the agency."). ARB is entitled to disagree with the results of any peer review on economic or environmental science questions, but must set those objections out in the record so that they are capable of public scrutiny and subject to judicial review. See *id.* § 57004(d)(2).³

In a closely related provision, ARB also must comport with Health & Safety Code § 57005. This provision requires regulations that will cost more than \$10,000,000⁴ to be justified by the adopting agency as the product of the selection of the least costly alternative that "would be equally as effective in achieving increments of environmental protection in a manner that ensures full compliance with statutory mandates within the same amount of time." *Id.* § 57005(a). These provisions of law have been hailed by notable economist and Director of the AEI-Brookings Joint Center for Regulatory Studies as important contributions to law and the application of economic science to regulatory analysis. See Robert W. Hahn, *State and Local Regulatory Reform: A Comparative Analysis*, 29 J. Legal Studies 873, 893-98 (2000) ("California has laid a solid foundation by amending the California Administrative Procedure[]

³ It was suggested at the September 7, 2006 meeting that this provision may be inapplicable because ARB has not cited any scientific studies in the Mailout or the more detailed slides. But staff cannot free the agency of its need to submit scientific evidence for peer review merely by maintaining that scientific evidence is unnecessary. In situations where scientific evidence is required, an agency must both produce such evidence (pursuant to its duties of explanation appropriate to the relevant context under CAPA), and submit it for peer review pursuant to section 57004. Additionally, manufacturers commenting upon this proposal may submit scientific studies with which staff may take issue. That would clearly trigger ARB's section 57004 duty. Manufacturers note they reserve the right to submit their own scientific studies in connection with this proposed rulemaking. Examples of expert studies that may be relevant here, depending on how the formal proposal emerges (if it all) from this process are (1) studies of the emissions benefits of alternative procedural designs for defect and warranty reporting; (2) economic studies of the costs of various alternative procedural designs; as well as (3) a systematic comparison of costs and environmental benefits.

⁴ The Alliance assumes that ARB staff will not contest the fact that this is a major rulemaking imposing greater than \$10 million in costs because any single recall or warranty campaign required by the new rulemaking, where no such campaign otherwise would have occurred, could result in millions of dollars of added cost for a single manufacturer. In the aggregate, of course, the Proposed Amendments here will have much greater economic impacts than those felt by any single manufacturer.

Act to encourage agencies to analyze the economic effects of regulation and to improve oversight processes.”).

D. CAPA Requires ARB, as an Environmental Agency, to Explain Departures from the Federal Approach to Similar Regulation.

The initial-statement-of-reasons requirement also mandates that any environmental agency within California government “describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues.” California Gov’t Code § 11346.2(b)(5). *See also id.* § 11346.5(a)(3)(B). As staff is well aware, the Clean Air Act permits EPA to require manufacturers to submit plans to remedy nonconformities only where “a substantial number of any class or category of vehicles or engines, although properly maintained and used, do not conform to the regulations prescribed under section 202, when in actual use throughout their useful life.” CAA, Section 207(c)(1), 42 U.S.C. § 7541(c)(1). Under the shadow of section 11346.2(b)(5), ARB’s existing approach is wisely similar to the longstanding approach under federal law. Indeed, the Article 2.4 regulations began precisely as an attempt to mirror EPA’s recall powers concerning defects. Hence, ARB is obligated here to explain why it would decouple its approach from its current starting point of symmetry with federal law, and impose the differential burden on manufacturers that the separate system described in the Proposed Amendments would have on compliance costs and manufacturer burdens.⁵

It is true that ARB may justify departures from the regulatory approach used under federal law, *see* California Gov’t Code § 11346.2(b)(5)(A)-(B), but ARB cannot not depart from federal law lightly. Instead, it must explain why the “cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.” *Id.* § 11346.2(b)(5)(B).

ARB should interpret the CAPA provision permitting it to decouple from federal law where the “differing regulations are authorized by law” as meaning where “specifically authorized by state law.” Any other interpretation would gut the procedural requirement because it is a truism that any set of proposed regulations by ARB must be authorized by California law. The obvious purpose of Government Code section 11346.2(b)(5)(A)-(B) is to require a California agency to justify not regulating in parallel to the federal approach, so as to avoid creating differential burdens on regulated parties. This purpose is eviscerated and the duty of explanation imposed by section 11346.2(b)(5) rendered superfluous, if the need to justify a departure from federal law may be avoided based simply upon a restatement by an agency as to

⁵ We recognize that representatives of EPA participated in one of the Workshops, and that one such EPA employee stated that EPA may possess the power under CAA Section 207(c)(1) to alter the federal regulatory status quo in this area because the term “regulations prescribed under section 202” may give EPA more leeway than if the term read “emissions standards under section 202.” We doubt whether that is an interpretation that would comport with the Clean Air Act, federal administrative law, or the seminal case of *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837 (1984). But the important point for present purposes is that EPA has not adopted or even attempted to adopt such an interpretation of the Clean Air Act, and that the only baseline that is relevant for the duty of explanation imposed by Government Code § 11346.2(b)(5) on ARB here, is the baseline of current federal law *as it is*, not as it might be.

why it believes it possesses legal authority to adopt its regulations. *See People v. Johnson*, 28 Cal. 4th 240, 246-247 (2002) ("We will avoid an interpretation that makes surplusage of a portion of a statute."). And as staff is aware, and we explain below, there is no specific authorization by the Legislature to either regulate in fashion in this area differently than the federal EPA or even a specific authorization to conduct recalls of this type or to order extended warranties. Hence, ARB must explain and document why it believes imposing differential regulatory burdens based on an approach very different to EPA's approach is necessary to benefit the environment.

E. Application of CAPA to the Proposed Amendments

The Alliance respectfully requests that staff explain in detail, in light of the CAPA (and related) duties identified above, the specific reasons why it believes that *each* proposed change in the current regulation is necessary. Prior to the issuance of an Initial Statement of Reasons, the Alliance needs this information in order to understand the background of the ARB staff's proposal and for purposes of assessing whether there are any additional, less-burdensome alternatives the Alliance might suggest beyond those it has already offered. At the moment, the staff's discussion of the purposes for each change has been at a very high level of generality, scant, or completely non-existent. For this reason, holding the follow-up meeting ARB staff promised at the September 7, meeting -- after at least some concrete regulatory text has been framed, *but before* staff has submitted the matter to the Board -- is essential.

At a minimum, staff should address each of the identified CAPA duties against the matrix of issues presented on Table A in Section II above. To recap, the Alliance needs to understand the detailed purposes for at least each of the following changes in the regulatory status quo for emissions-related component failure: (1) the conversion of the 4% report-screening threshold into a much more hard-and-fast remedial threshold; (2) why testing in the worst-case failure mode (if this becomes part of the formal proposed regulatory amendment) is necessary or appropriate, or an accurate model of real-world component failures; (3) why the existing system of in-use deterioration factors in testing as applied to a group of vehicles should be replaced by testing of a single vehicle at the 40% mark of its useful life; (4) why extended warranties must be ordered even in situations where ARB deems recalls inappropriate, but the 4% threshold is exceeded; (5) why recalls and extended warranties can be ordered even if there is no violation of the emissions standards as a consequence of a component failure; (6) why secondary component damage that does not even cause an emissions exceedance on the vehicle with the defective component can or should trigger a recall; and (7) why manufacturers should be required to run all costly test procedures they would ever be able to run at the outset of any case where an enforcement order is possible, at the risk of otherwise being barred from introducing later and more detailed testing to resist an enforcement order. In addition, as discussed in Section III above, each of these purposes must be proper purposes that tie back to and are actually explained by ARB in terms of the specific statutory authority claimed by the agency.

A sufficient factual justification for the status quo emissions-related component failure regulations failing to achieve ARB's lawful purposes is not made out simply by providing a listing of manufacturer EIRs and suggesting that their low level of detail speaks for themselves. *See Examples of Manufacturers' Emissions Information Reports (EIR) Emissions Impact Engineering Analysis*, Prepared by Tom Valencia, ARB (undated). In each instance, ARB

personnel could have requested additional information from the manufacturer about a particular EIR and associated component failure. The manufacturers have never been told, prior to receiving news of the Proposed Amendments, that ARB believed existing EIRs to be insufficiently detailed or that the current regulatory system was inadequate to empower ARB to request additional information.

In fact, under her powers in section 2148(b), the Executive Officer easily could have required manufacturers to provide additional information and even objective testing data, or ordered a recall if a manufacturer refused to or could not do so. Section 2148(b) plainly confers a presently authority to provide information along with an EIR that is sufficient to "demonstrate[] to the satisfaction of the Executive Officer that" a recall should not be required for some reason. A later document produced by Tom Valencia at ARB provides helpful suggestions of the level of detail ARB is now looking for in an EIR. See Emissions Information Report (EIR), Details to Include in an EIR Report, Prepared by Tom Valencia, ARB. Putting aside the worst-case failure mode issue, which was addressed above, that very document demonstrates that the staff can use its existing regulatory powers to request more information. Had staff done so, instead of devising a new burdensome regulatory regime in the Proposed Amendments, they would have found manufacturers willing to work with ARB to provide the level of detail reasonably desired. Indeed, at a June 9, 2006 meeting between representatives of the Alliance and ARB staff, it was asserted by ARB staff that the current regulations require a more robust engineering analysis than ARB has actually been receiving. A failure by ARB staff to insist on what current regulations already require demonstrates either that the ARB staff, in the past, actually perceived no real problem to address, or that existing regulatory tools were not being properly used. Either way, such a failure does not demonstrate that the current regulatory system is flawed.

The June 9, 2006 meeting also saw ARB staff member Tom Valencia indicating that he had developed his own formula based on pre- and post-warranty vehicle miles traveled estimates and calculations concerning various emission impact results. As the Alliance representatives indicated at that meeting, such an approach needed some adjustments because it failed to account for the fact that several smog checks under the I/M program might occur over the course of the periods of time being posited by Mr. Valencia. But the fact that ARB staff agreed conceptually that such a formula was possible proves the Alliance's point that no one should lose sight in the course of analyzing potential amendments to the defect-reporting program that the limiting purpose of regulation in this area is to determine how vehicles are performing against the applicable emissions standards.

In addition to explaining the basis and purpose of each of the significant adverse changes in the regulatory status quo, and tying those to specific, lawful statutory purpose, ARB must also undertake an analysis of reasonable alternatives (self-generated and as suggested by the Alliance) as to each of these issues. The Alliance has done its best up to this point to imagine the purposes that staff has in mind for each of the changes, and to propose alternatives accordingly, but the Alliance is prevented from doing a full job of providing alternatives until the staff specifies the precise objectives it is seeking to achieve with the Proposed Amendments. An assessment of the means-end fit of CAPA and the analysis of whether staff has sufficiently considered alternatives therefore logically must await staff clearly defining those purposes.

Once the staff has clearly defined its purposes in detail for each of the significant adverse changes, and generated alternatives on its own to its current preferred alternatives, then staff must assess the "means-end" fit of its alternatives as compared against those alternatives and the Alliance's proffered alternatives. At the end of the day, as noted, ARB must be able to explain why its selected alternative best achieves the specific objectives of the rulemaking, as compared to each potential alternative identified.

Going further, staff must estimate the cost impacts and other economic and competitive impacts of the rulemaking for its preferred alternative and for other reasonable alternatives. These cost impacts must then be compared on an incremental basis to the environmental benefits to be obtained by the changes in the rules. All of these economic and technical emissions-benefit questions should be referred to a peer review in accordance with California law.

Finally, in the process of specifying and evaluating alternatives, staff must pay particular attention to the status quo alternative, especially because it is linked to existing federal law. Agencies must meet a heightened duty of explanation when they alter existing explanations as compared to adopting new regulations on a clean slate. See, e.g., *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42 (1983) ("an agency changing its course by rescinding a rule is obligated to supply a reasoned analysis for the change beyond that which may be required when an agency does not act in the first instance."). Hence, here staff must explain in some detail why imposing a differential regulatory burden on manufacturers by decoupling from federal law is truly necessary.

September 2006

ATTACHMENT B



October 30, 2006

Via E-mail and FedEx

Ms. Catherine Witherspoon
Executive Officer
California Air Resources Board
1001 I Street
Sacramento, California 95814

Re: Initial Statement of Reasons ("ISOR") Concerning Proposed Amendments to California's Emission Warranty Information Reporting and Recall Regulations for Emission Test Procedures

Dear Ms. Witherspoon:

I write on behalf of the Alliance of Automobile Manufacturers ("Alliance")¹ to call your attention to several procedural flaws in the Initial Statement of Reasons Concerning Proposed Amendments to California's Emission Warranty Information Reporting and Recall Regulations for Emission Test Procedures ("Proposed EWIR Regulations"), released publicly on October 20, 2006. Both of the procedural flaws identified trace to the agency's obligation to consider alternatives at the ISOR stage -- one set of alternatives tracing to specific Alliance proposals during the public workshop process that staff has ignored (*see* Section I., below) and the other set representing a kind of alternative that must be considered in all situations where an agency is proposing *not* to use flexible performance standards (*see* Section II., below). The Alliance requests that in light of these flaws, the staff should defer the hearing for the rulemaking proposal and issue a revised Initial Statement. We also respectfully request that the Executive Officer respond to this letter on or before November 7, 2006.

I.

Staff has failed to prepare an ISOR that considers the reasonable alternatives specifically presented by the Alliance during the public workshop process. An agency must always consider reasonable alternatives that are brought to its attention prior to the issuance of the ISOR. These obligations are clear both from California Government Code §§ 11346.2(b)(3)(A) and 11346.5(a)(13), and other sources of law. Indeed, as staff indicates, one of the past rulemakings in this very area saw the agency make changes to the recommendations first formulated by staff, based on comments and alternatives proposed during the workshop process. *See* ISOR at 2-3

¹ The members of the Alliance are BMW Group of North America, Inc., DaimlerChrysler Corporation, Ford Motor Company, General Motors Corporation, Mazda North American Operations, Mitsubishi Motor Sales of America, Inc., Porsche Cars North America, Inc., Toyota Motor North America, Inc., and Volkswagen of America, Inc.

**BMW Group • DaimlerChrysler • Ford Motor Company • General Motors
Mazda • Mitsubishi Motors • Porsche • Toyota • Volkswagen**

("After meeting with industry and conducting a public workshop, the staff proposed changes to their original recommendations that included: (1) linking recalls based on component failures to emission standard exceedances instead of excess emissions; and (2) withdrawing a provision which linked new vehicle/engine certification to in-use failures. These two actions are related to staff's current proposed modifications.""). Having taken that required procedural route before, staff currently gives no reason for departing from it in this new rulemaking. Moreover, because the proposals the Alliance presented were drawn from and/or informed by past industry proposals actually adopted by the Board, it is obvious that their "reasonableness" -- for California Administrative Procedure Act ("CAPA") purposes -- has been already established.

Government Code § 11346.2(b)(3)(A) requires staff and the Board here to include in the ISOR "[a] description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives." And Government Code § 11346.5(a)(13) (emphasis added) is even clearer: "The notice of proposed adoption, amendment, or repeal of a regulation shall include the following: . . . (13) A statement that the adopting agency must determine that no reasonable 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 action is proposed or would be as effective and less burdensome to affected private persons than the proposed action." It is plain from this language that an agency cannot await the FSOR stage to discuss alternatives for the first time, otherwise these two *separate* requirements would not make no sense, attached as they are specifically to an agency's obligations when disseminating the *ISOR and initial proposal for a rule*.

Recognize as well the structural difference between Government Code § 11346.2 and § 11346.5. Only Section 11346.5, in subsection (c), includes language indicating that "[t]he section shall not be construed in any matter that results in the invalidation of a regulation because of the alleged inadequacy of the notice content or the summary of cost estimates, or the alleged inadequacy or inaccuracy of the housing cost estimates, if there has been substantial compliance with those requirements." But no such proviso appears anywhere in Government Code § 11346.2. The obvious conclusion of that structural comparison is that rules may be invalidated for procedural noncompliance with Government Code § 11346.2(b)(3)(A)'s required analysis of alternatives without regard to whether the notice materials for the particular rule otherwise substantially comply with CAPA. "When Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." . . . (*Brown v. Gardner*, 513 U.S. 115, 120 (1994)). *Garfield Med. Ctr. v. Belshe*, 68 Cal. App. 4th 798, 807 (2d Dist. 1998). By placing the requirement to consider alternatives in two separate statutory sections, only one of which is associated with a "substantial compliance" defense for regulators, the California State Assembly plainly determined that the consideration of alternatives was particularly important to the mandatory process for rulemakings being legislatively established. Hence, the Board and its staff may not ignore those statutory requirements.

In this connection, we also request staff to provide us with a copy of the administrative record as it currently stands. See Notice of Public Hearing to Consider Amendments to California's Emission Warranty Information Reporting and Recall Regulations and Emission Test Procedures (Oct. 10, 2006), at 6 ("The Board has compiled a record for this rulemaking, which includes all information upon which the proposal is based. This material is available for inspection upon request to the contact persons."). We note that the plain text of Government Code § 11347.3(b)(11) requires the agency to include in the rulemaking file (i.e., the administrative record) "[a]ny other

information, statement, report, or data, that the agency is required by law to consider or prepare in connection with the adoption, amendment, or repeal of a regulation." Obviously, the material and analysis concerning regulatory alternatives that must be prepared to comply with Section 11346.2(b)(3)(A) and 11346.5(a)(13) must be afforded Section 11347.3(b)(11) treatment. Material presented to staff during the workshop process thus obviously qualifies for such treatment because it was "otherwise been identified and brought to the attention of the agency." Government Code § 11346.5(a)(13). Hence, the alternatives presented by the Alliance during the public workshop and meeting process must be included in the record. We seek confirmation of the fact that the Alliance proposals and workshop submittals have been deemed by staff to be part of the record and therefore request a copy of the actual record as it currently stands. We would also like to obtain a copy of the record as it currently stands for our own general reference as the rulemaking unfolds.

Returning to consideration of the alternatives the Alliance submitted, staff can seek no refuge in California Government Code § 11346.2(b)(3)(C) ("Notwithstanding subparagraph (A) or (B), an agency is not required to artificially construct alternatives, describe unreasonable alternatives, or justify why it has not described alternatives."). This is plainly a reference to alternatives that the agency must self-generate, and not to alternatives that come to it from the outside world, and in particular from interested parties. Compare Government Code § 11346.5(a)(13) (using not the verbs "construct" or "describe," but the verbal concepts of the agency "consider[ing]" alternatives that other actors have "brought to the attention of the agency"). The Alliance does not seek exclusively to force staff to "construct" or "describe" on its own initiative any alternatives in the ISOR. Rather, the Alliance seeks in Section I of this letter to have staff discharge their procedural obligation under CAPA to make the required statement under Government Code § 11346.5(a)(13), which requires consideration of alternatives, including those that are not self-generated within the agency.

Furthermore, the Board and all of its staff are bound by their own actions to apply the above-described interpretation of Government Code §§ 11346.2 and 11346.5 in terms of considering material submitted at public workshops. That is because the Board, and indeed, the entirety of the California Environmental Protection Agency, bound itself to this interpretation in 1996 when it adopted the so-called *Economic Analysis Guidance* issued by California EPA. See *Economic Analysis Guidance* at 2 ("HOLD ONE OR MORE PUBLIC WORKSHOPS. Before proposing a major regulation, each agency should conduct one or more public workshops to consult with affected parties. Stakeholders are encouraged to provide input on how the regulation should be structured, supply information to the agency on potential economic impacts, and suggest regulatory alternatives.") (emphasis added) (Air Resources Board staff member identified as instrumental in drafting Guidance). See also *id.* at Appendix C ("CAL/EPA Guidelines for Evaluating Alternatives to Proposed Major Regulations (SB 1082 Guidelines)) ("If the proposed regulation is a major regulation, the agency shall determine if any submitted alternative is equally as effective as the proposed regulation. The agency shall also determine whether any combination of submitted alternatives is equally as effective as the proposed regulation.") (emphasis added).

It is possible that the 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. See ISOR at 30 ("costs are expected to be negligible"). If this is staff's position, we ask that staff clarify that point in response to this letter. We ask the staff to reconsider even at this time, however, whether it is remotely credible to claim a rulemaking that requires every emissions-

related component to perform at a greater-than-96%-reliability level does not impose significant costs on manufacturers, but instead would leave manufacturer costs largely unchanged from the regulatory status quo.

II.

Just as 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." The Alliance alerted staff to the fact that the "prescriptive" vs. "performance standards" difference was relevant to this rulemaking. See Alliance Legal Memorandum Concerning Possible Amendments Suggested in Mailout 2006-01 to the Procedures for Reporting Failures of Emission-Related Components, at 11 (Sept. 22, 2006) ("The relevant statutes demonstrate that component regulation is a subject ancillary to the primary purpose of emissions regulation by means of performance standards."); see also *id.* at 12 ("The fact that such a delegation to ARB is absent from section 43205 thus shows that ARB may not separate defect regulation as an ancillary program from the main program of emissions regulation by means of performance standards."); see also *id.* at 22-23. (This Memorandum should also be contained in the file or administrative record for this rulemaking.)

In the context of the environmental statutes from which staff's recommendation to the Board proceeds from here, it is clear that "performance standards" are "emissions standards," and thus that any attempt to regulate at a level of specificity beneath emissions standards requires a precise and comparative justification.² Such a justification is wholly lacking in the ISOR.

Section 11346.2(b)(3)(A) (emphasis added) unambiguously requires as follows:

Every agency subject to this chapter shall prepare, submit to the office with the notice of the proposed action . . . and make available to the public upon request, all of the following: . . . (b) An initial statement of reasons for proposing the adoption, amendment, or repeal of a regulation. This statement of reasons shall include, but not be limited to, all of the following: . . . A description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives. *In the*

² See, e.g., Stephan Schmidheiny, *Changing Course: A Global Perspective on Development and the Environment*, 19 n.3 (1992) ("Traditionally, governments have used command-and-control regulations to achieve environmental objectives. 'Performance' standards set a target -- often for emissions -- and allow companies flexibility in meeting it; 'prescriptive standards' may prescribe the actual technology to be used, assuming it will achieve the desired result. The former allows companies more scope for innovation and efficiency.") (emphasis added). The specificity that a prescriptive standard can operate at obviously works along a continuum. For that reason, the fact that staff is not mandating the use of particular components here does not make the Proposed EWIR Regulations any less a prescriptive standard. The prevailing view in the academic community that in the environmental area emission standards are performance standards and standards operating at a greater level of specificity are not is the perspective that obviously informed legislative intent in CAPA and the Health & Safety Code, as is clear from those statutes generally, and from Health & Safety Code § 43106 in particular.

case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific actions or procedures, the imposition of performance standards shall be considered as an alternative.

Section 11346.2(b)(3)(A) is clearly a reference to CAPA's dichotomy between "performance standards" and "prescriptive standards." A "Prescriptive standard" is defined as "a regulation that specifies the sole means of compliance with a performance standard by specific actions, measurements, or other quantifiable means." Government Code § 11342.590. By contrast, a "performance standard" is defined as "a regulation that describes an objective with the criteria stated for achieving the objective." Government Code § 11342.570.

Here, the Proposed EWIR Regulations clearly "prescribe specific actions and procedures" (use of components meeting a greater-than-96%-reliability threshold, or alternatively, submission by manufacturers to automatic recalls or extended warranties) and do not merely state a general objective that gives manufacturers flexibility as to how to meet that objective. Staff admits that they seek to reduce emissions. *See, e.g.*, ISOR at 7-8 (especially Table 1). But nowhere does staff explain why manufacturers are being denied the traditional flexibility they would possess to meet a changed emissions standard, but instead should be forced to ensure that every emissions-related component part meets a quantifiable, measurable reliability standard. Indeed, the fact that this rulemaking applies by its nature only to emissions-related parts shows what the only possible objective to pursue here can be -- namely emissions reductions, and thus the nature of this rulemaking means staff cannot deny the primacy of emissions standards over the components of manufacturer emissions systems designed to meet those standards.

In connection with its ISOR duties under Government Code § 11346.2(b)(3)(A), staff should also consider California Health & Safety Code § 43106 (emphasis added).³ Staff relies on Section 43106 in both the Proposed EWIR Regulations Notice and its ISOR. This provision obviously establishes that the Legislature has mandated the use of performance standards in the form of an emissions standards, and disallowed agency attempts to require every component part in a vehicle to be identical to the test vehicle or engine, if an emissions standard otherwise continues to be met despite the differences between vehicles in actual construction as compared to the underlying test vehicles or engines. At the very least, however, putting aside the substantive issue the Alliance will address in its comments of whether the Proposed EWIR Regulations are *ultra vires* under Section 43106, *procedurally* Section 43106 at least stands for the proposition that the Air Resources Board must especially sensitize itself to the performance-vs.-prescriptive-standard issue. And that duty under Government Code § 11346.2(b)(3)(A) and Health & Safety Code § 43106 has been completely shirked here because there is no discussion in the ISOR of a performance-standard alternative to the Proposed EWIR Regulations.

³ "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.*"

The difference between “performance standards” and “prescriptive standards” is that “performance standards” allow regulated parties to decide for themselves how to meet an objective enunciated in relatively broad terms by an agency, whereas “prescriptive standards” indicate more precisely how a regulated party is to proceed by way of “specific actions, measurements, or other quantifiable means” identified by regulators. Here, the Alliance submits that the classic emissions standards that have been employed to great positive environmental effect by the Board and the federal Environmental Protection Agency since the earliest days of regulating mobile sources are appropriately described as “performance standards.” Manufacturers are generally free to decide exactly what equipment to install on vehicles in order to meet the numeric emissions limits fixed by the Board.

Such an approach carries with it all of the economic benefits of regulating at lower cost without sacrificing the defined objective of reducing emissions because it allows manufacturers who can design cheaper and more reliable means of complying with numeric emissions standards to retain the benefits of their innovations. It is clear that by enacting this dichotomy first analyzed in various scholarly works, the Legislature was enshrining such economic analysis into California law. See, e.g., Stephen Breyer, *Regulation and Its Reform* 105-06 (1982) (explaining the dichotomy and the economic advantages of performance standards over prescriptive standards); James J. Anton & Dennis A. Yao, *Standard-Setting Consortia, Antitrust, and High-Technology Industries*, 64 Antitrust L.J. 247, 248-49 (1995) (many economic studies have shown that performance standards are superior to prescriptive standards in encouraging innovation). One-size-fits-all regulatory approaches, however, are more costly because they deny manufacturers the flexibility that can reduce comparative costs and spur innovation in designing emissions systems. Furthermore, it is inherent in the economic tradeoff involved between performance standards and prescriptive standards that prescriptive standards are easier to enforce. See, e.g., Cary Coglianese, et al., *Performance-Based Regulation: Prospects and Limitations in Health, Safety, and Environmental Protection*, 55 Admin. L. Rev. 705, 714 (2003) (“regulators who are accustomed to enforcing relatively straightforward prescriptive standards are frequently uncomfortable with the discretion inherent in loosely specified performance-based standards.”). Hence, it is not sufficient here for staff to simply claim they are looking for a regulatory approach that is easier for it to enforce. The Legislature obviously knew about what regulators might claim are the benefits of prescriptive standards, but nevertheless placed a thumb on the scale of regulation by performance standards.

In the Proposed EWIR Regulations, staff proposes to depart from the classic emissions-performance-standard approach by decoupling defect regulation from emissions standards and instead requiring that defects cannot exceed a particular level (a 4% “true” defect rate), or enforcement action will swiftly follow. Such a requirement, if adopted, would be equivalent to the Board requiring manufacturers to build every emission-related component in a vehicle’s emissions system to a reliability level of greater than 96% and thus make manufacturers the guarantors of any failure to meet such a prescriptive standard.

Conceptually, some degree of emissions reductions would appear to result from adopting the greater-than-96% emissions-related component design guarantee mandate which staff is proposing. But what staff has failed to do is to explain why it must proceed in that fashion as

opposed to simply attempting to obtain equivalent emissions reductions by way of tightening the applicable emissions standards, which then leaves manufacturers their traditional, CAPA- and Health & Safety Code-preferred, flexible route of deciding how to achieve a new emissions standard by way of designing individual emissions components with particular reliability levels.⁴

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. See, e.g., Reuven Y. Rubinstein, et al., *Redundancy Optimization of Static Series-Parallel Reliability Systems Under Uncertainty*, at 1 (Nov. 10, 1998) ("Most books on reliability engineering . . . include a chapter on redundancy models and redundancy optimization."). Indeed, here the flaws of the staff's Proposed EWIR Regulations go beyond *ignoring* design redundancy, but instead make design redundancy a strategy that actually would *penalize* manufacturers, rather than reward them. That is because the Proposed EWIR Regulations appear to seek to penalize *any* case that yields a 4% failure rate in emissions-related components. That means that manufacturers that introduce design redundancy in emissions systems are only introducing more components that must meet the greater-than-96%-reliability threshold. This is self-defeating for manufacturers because at no point does building in design redundancy allow manufacturers to be sure they have met a regulatory objective. Instead, building in greater redundancy only multiplies the steepness of the regulatory hurdles involved.

Those general observations about product design are readily applicable to the automotive industry, and also particularly to emissions systems. Manufacturers employ various strategies for reducing emissions to ensure that over a vehicle's useful life it continues to meet emissions standards, even as the vehicle encounters different environmental hazards and different levels of proper maintenance by its owner or drivers. That means that if one (or sometimes even multiple) components within a manufacturer's individual emissions-compliance strategy for a vehicle fails, emissions standards can still be met. In other words, vehicles are not designed right up to the

⁴ We are not suggesting that there should be any revision to the emissions standards. Our point is that there are two alternatives to accomplish the same goal of emissions reduction – the proposed method of requiring greater-than-96% emissions-component reliability or the hypothetical alternative of simply increasing the emissions standard to achieve identical emissions benefits. The legal problem identified in this part of the Alliance's letter is that the ISOR does not even attempt to meet the Board's procedural duty under Government Code § 11346.2(c)(3)(A) to attempt to explain why a prescriptive standard like the greater-than-96% emissions-component reliability approach is superior to the performance-standard approach of simply changing the emissions standard. We note that recognizing this choice of alternatives exists means that staff has also failed to attempt to justify what is functionally an emissions standard increase by application of the traditional criteria for such a rulemaking including analysis of economic and technological feasibility. But this is a substantive flaw in the Proposed EWIR regulations that we intend to address later, as necessary. It is not a procedural flaw in failing to comply with the requirement for ISORs in the Government Code. Again, this letter is focused on certain facial procedural defects that we bring to staff's attention to avert a regrettable situation in which an entire rulemaking is invalidated in the future for failure to perceive a procedural error that could have been corrected much earlier, or that, if avoided, could have led to discussion in the ISOR that could have altered the Board's mind about how to act on staff's recommended course of action here.

razor's edge of applicable emissions standards, such that if one emissions-related component fails, the emissions standard will be exceeded. Instead, manufacturers deliberately build systems that in their pristine condition will have a cushion of compliance which places their vehicles well within the current applicable emissions standard, such that if there are equipment malfunctions in use in the emissions system on particular vehicles, the emissions standard can still be met in practice, especially for the average vehicle. Some manufacturers colloquially call the difference between a vehicle working perfectly and the emissions standard that vehicle's regulatory "headroom." Indeed, manufacturers also build regulatory "headroom" into individual emissions-related components, as well as into the emissions system as a whole.

It is unwise and wasteful for staff to propose, as it has, a set of regulations that would attempt to seize this emissions "headroom" and claim such emissions reductions on the public's behalf. There is a superior regulatory approach – one which can achieve the very same objective, but at lower cost, while allowing manufacturers greater flexibility in vehicle design – namely, the Board using the traditional mechanism of attempting to revise the emissions standard to achieve equivalent emissions reductions. The point for present purposes, however, is not whether staff has met its burden to propose regulations that can avoid being set aside under the substantive "arbitrary and capricious" test of judicial review. The point is that the staff has made no attempt whatever to explain why it has opted for a prescriptive standard (the greater-than-96% reliability standard for emissions-related components) over a performance standard (a simple amendment in the emissions standards).

Staff may respond that its goals are more than just emissions reductions and that unremedied defects in emissions components affect the agency's reputations as regulators and the integrity of the program – concerns adverted to in the ISOR for this proposed rulemaking and in the workshop process in which the Alliance participated. We doubt whether California's citizenry judges the agency other than by the criteria of air quality in practice. We also doubt that the public would fail to understand, if the agency only undertook to explain, that a regulatory approach that allows manufacturers their traditional flexibility to meet emissions standards by design redundancy is a superior approach because it reduces the costs and burdens of regulatory compliance on manufacturers and on the California economy, especially by helping to minimize vehicle prices.

In any event, staff's claims to the contrary are insufficiently explained because the ISOR currently says little on this subject – offering only the conclusory statements that component failures, regardless of the nature of the component or its impact on emissions-standard compliance, threaten the integrity and perception of the program. But far more fundamentally, the Board cannot justify its regulations based on mistakes in public perception. Few in the general public have probably ever devoted much thought to whether regulation in this area is best framed in terms of prescriptive or performance standards. *But the California Legislature in CAPA has done so* (taking advantage of the best learning in economics and in the legal academy concerning in the optimal design of agency regulations). And the Board and its employees are called upon to meet the CAPA standard, not to deviate from that standard by arguing (even without any supporting factual evidence) that the public has a different perception -- somehow concluding that the air is dirty because some emissions-related components, however redundant or trivial, fail.

Nor is there any threat to the integrity of the emissions program the Board administers if it regulates by way of emissions performance standards, rather than by way of prescriptive standards, such as the greater-than-96% reliability regulations currently being proposed. The program's integrity is defined by its track record in securing emissions reductions, not by forcing

manufacturers to abandon or lose the benefits of planned redundancy in emissions system design – a method of vehicle design of which the Board and its staff have long been aware of without ever taking steps to prohibit. Moreover, arguing that prescriptive standards must be set here and that manufacturers must be denied the flexibility of meeting performance standards or programmatic integrity will be threatened is to quarrel with the Legislature's clear policy preference for performance standards. See California Government Code § 11340(d) ("The imposition of prescriptive standards upon private persons and entities through regulations where the establishment of performance standards could reasonably be expected to produce the same result has placed an unnecessary burden on California citizens and discouraged innovation, research, and development of improved means of achieving desirable social goals."); *id.* at § 11340.1 ("It is the intent of the Legislature that agencies shall actively seek to reduce the unnecessary regulatory burden on private individuals and entities by substituting performance standards for prescriptive standards wherever performance standards can be reasonably expected to be as effective and less burdensome, and that this substitution shall be considered during the course of the agency rulemaking process.").

III.

The flaws described above cannot be remedied by answering the objections identified in this letter at the stage of issuing a final statement of reasons ("FSOR") for the Proposed EWIR Regulations. The California Legislature did not idly specify procedural requirements that the Board must meet for its regulations at the ISOR stage. See *Franzosi v. Santa Monica Community College Dist.*, 118 Cal. App. 4th 442, 451 (2d Dist. 2004) (the Legislature does not enact statutes that are "pointless acts"). Instead, the Legislature *deliberately* specified requirements *both* at the ISOR and FSOR stages. Accordingly, the agency must comply with both sets of requirements, and cannot ignore its duties at the ISOR stage, by arguing those defects can be remedied in the FSOR stage.

The logic behind requiring compliance with both sets of requirements is obvious: It prevents the agency from sandbagging regulatory parties, especially in terms of the consideration of alternatives. If agencies were free to ignore submitted alternatives, and especially if they were free to ignore the mandated need to consider whether their objectives can better be achieved in regulations that adopt performance standards over prescriptive standards, then regulatory parties are deprived of all of their legislatively provided procedural opportunities to explain and place the best and most responsive evidence in the record as to why any initial rationales offered by the agency at the ISOR stage are faulty. In other words, if an agency can illegitimately postpone its ISOR-based obligations to consider alternatives until the FSOR stage, then the first time regulated parties see an explanation of why all or many of their submitted alternatives have been rejected is in that FSOR document. And that is statutorily unacceptable.

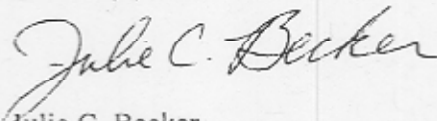
Postponing the consideration of alternatives submitted by regulated parties under the FSOR stage foments sandbagging and forces regulated parties to decide whether to challenge a rulemaking in court without ever have seen the agency's responses to the regulated parties' objections to the agency's preferred course of action when compared against other alternatives. The most highly developed area of jurisprudence concerning agency obligations to consider alternatives is in the National Environmental Policy Act ("NEPA") and the California Environmental Quality Act ("CEQA") contexts. In that area, it is clear that alternatives must be considered and agencies must explain early on why any reasonable alternatives brought to their attention were rejected. Otherwise, agencies build up what has been called "bureaucratic inertia" or

develop a "bureaucratic steamroller" behind their preferred approach, even though doing so violates the fundamental tenet of statutes designed to reorder the way agencies do business by requiring the consideration of alternatives -- i.e., that the process of considering alternatives can convince an agency that a better approach might be available, that the proposed cure is worse than the disease, or that sufficiently serious weaknesses in the agency's reasoning have been exposed such that the proposed agency action must be withdrawn entirely. See, e.g., *Sierra Club v. Marsh*, 872 F.2d 497, 500 (1st Cir. 1989) (Breyer, J.) ("Once large bureaucracies are committed to a course of action, it is difficult to change that course -- even if new, or more thorough, NEPA statements are prepared and the agency is told to 'redecide.' It is this type of harm that plaintiffs seek to avoid, and it is the presence of this type of harm that courts have said can merit an injunction in an appropriate case.").

* * * *

Please do not hesitate to contact me with any questions (Ph: 202-326-5511; jbecker@autoalliance.org). Thank you for your consideration of this letter and its requests.

Sincerely yours,



Julie C. Becker
Assistant General Counsel

cc: Kirk C. Oliver
Tom Jennings
Allen Lyons
William McDuffee

ATTACHMENT C



November 28, 2006

Via E-mail and FedEx

Ms. Catherine Witherspoon
Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Failure to Respond to the Alliance's October 30, 2006 Letter Concerning
Deficiencies in the Initial Statement of Reasons for the Warranty and Defect
Reporting Rulemaking

Dear Ms. Witherspoon:

I write to follow up on my letter to you of October 30, 2006. In that letter I described various procedural and other deficiencies in the Initial Statement of Reasons ("ISOR") for proposed amendments to the emissions warranty information and reporting and recall regulations. On behalf of the Alliance of Automobile Manufacturers, I accordingly requested that the December 7, 2006 hearing set for Bakersfield be rescheduled to allow the ISOR to be rewritten and reissued without the deficiencies that were identified. Finally, I requested a response to my letter on or before November 7, 2006.

Despite one face-to-face meeting with a contingent of ARB staff and representatives of the Alliance and its member companies held on November 3, 2006, and a follow-up conference call my colleague Steve Douglas participated in with ARB staff on November 21, 2006, no substantive response to the October 30 letter has been sent or provided orally. While we appreciated the opportunity to have those two discussions, led by Tom Cackette of your Office, it is regrettable that the October 30 letter will not be responded to before the December 7 hearing date. Indeed, on the November 21 conference call, it was made clear to Steve Douglas by ARB staff both that: (1) the hearing date would not be postponed; and (2) no response in any form to the letter would be forthcoming before the December 7 hearing.

The point of the letter was to avoid the waste of resources that would occur if the rulemaking were, in the future, sent back to fix the deficiencies the letter identified, when those deficiencies could be corrected by staff revising and reissuing the ISOR now and postponing the

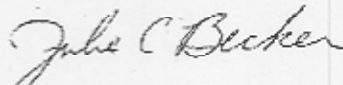
BMW Group • DaimlerChrysler • Ford Motor Company • General Motors
Mazda • Mitsubishi Motors • Porsche • Toyota • Volkswagen

Board hearing. It is not too late for staff to take the proposed rulemaking back, rework the ISOR in accordance with California law, and reschedule a Board hearing to address the revised ISOR.

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.

Please do not hesitate to contact me any questions about this letter or about the Alliance's position on this proposed rulemaking.

Sincerely,



Julie C. Becker
Assistant General Counsel

cc: Kirk C. Oliver
Tom Jennings
Allen Lyons
Annette Hebert

ATTACHMENT D

May 31, 2006

By Electronic Mail

Mr. Allen Lyons
Chief, Mobile Source Operations Division
9480 Telstar Avenue, Suite 4
El Monte, California 91731

Re: Initial Comments on Amendments to Defect Warranty Reporting and Recall Regulations

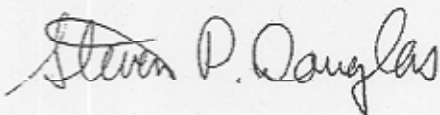
Dear Allen:

The Alliance of Automobile Manufacturers¹ and the Association of International Automobile Manufacturers² appreciated the opportunity to meet with you and your colleagues at the public workshop on May 2, 2006, to discuss amendments to the Air Resources Board's (ARB) regulations concerning defect warranty reporting and recalls. At the workshop, the staff explained the reasons why they believe changes in the current regulations are necessary. In brief, the main concerns the staff identified were (1) the time required to initiate warranty-based remedial programs, including voluntary recalls, and (2) the drain on staff resources arising from the need to monitor large numbers of warranty reports, and to assure that there is appropriate and timely manufacturer follow-up.

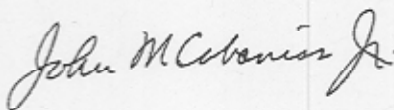
Certain aspects of ARB's proposal are not authorized by California law, particularly those that require manufacturers to take remedial action on vehicles that meet applicable emissions standards or to provide warranty coverage beyond the scope of sections 43204-43205.5 of the Health and Safety Code. We are, however, enclosing an alternative proposal in a spirit of cooperation that will meet ARB's concerns and objectives in a more cost-effective and less-burdensome manner. Our proposal is presented in flow chart format, based on the flow chart attached to the April 4 Mail-Out that announced the May 2 workshop.

We would like to discuss this alternative approach, our legal concerns, and any other issues related to the current regulations, at your convenience. Please contact Steve Douglas at (916) 447-7315 or John Cabaniss at (703) 237-2107 to arrange a follow-up meeting.

Sincerely,



Steve Douglas
Director, Environmental Affairs
Alliance of Automobile Manufacturers

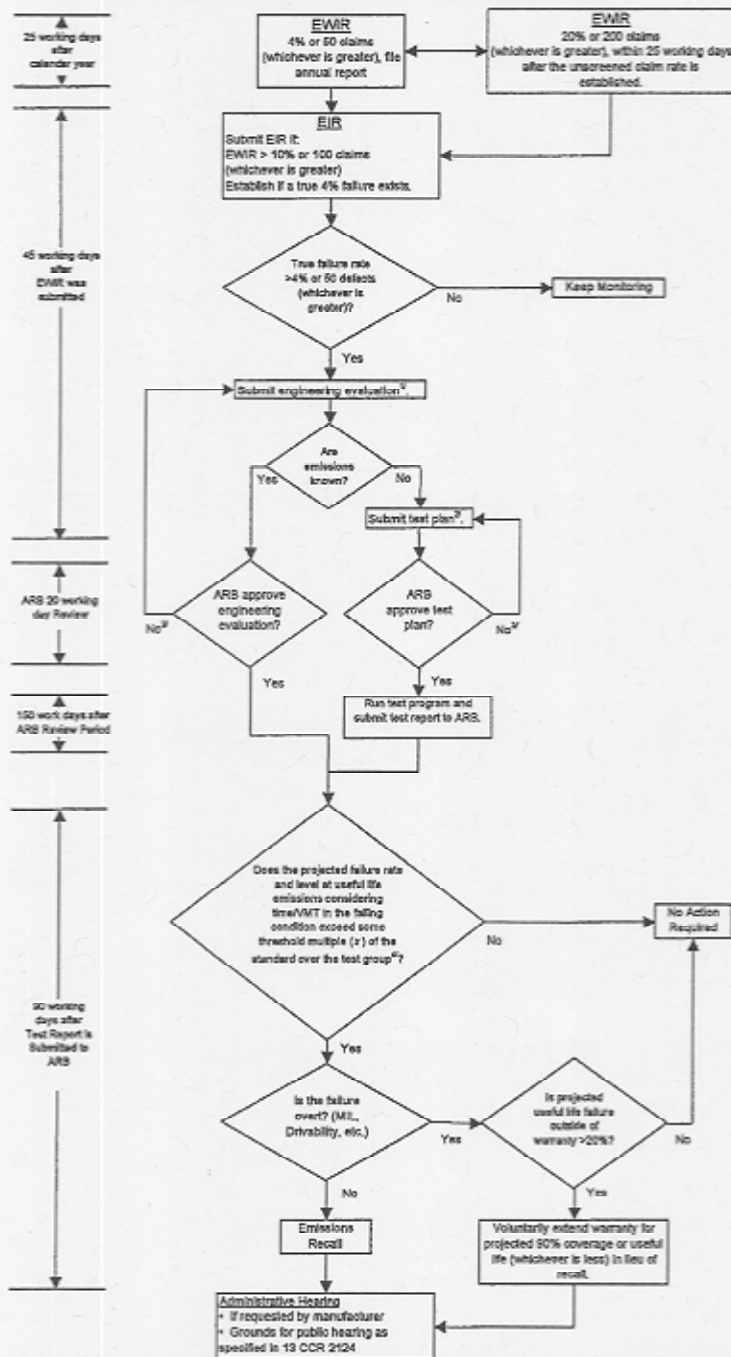


John Cabaniss
Director, Environment & Energy
Association of International Automobile
Manufacturers

¹ The Alliance members are BMW Group of North America, Inc., DaimlerChrysler Corporation, Ford Motor Company, General Motors Corporation, Mazda North American Operations, Mitsubishi Motor Sales of America, Inc., Porsche Cars North America, Inc., Toyota Motor North America, Inc., and Volkswagen of America, Inc.

² AIAM manufacturer members are American Honda Motor Co., Inc., American Suzuki Motor Corporation, Aston Martin Lagonda of North America, Ferrari North America, Hyundai Motor America, Isuzu Motors America, Inc., Kia Motors America, Inc., Maserati North America, Mitsubishi Motors North America, Inc., Nissan North America, Inc., Peugeot Motors of America, Inc., Renault, SA, Subaru of America, Inc., and Toyota Motor Sales, U.S.A., Inc.

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



¹⁾ Engineering Evaluation includes: description of the defect, description of potentially affected vehicles, projected failure rate at useful life (UL), evaluation of the emissions impact of the defect, available data, description of indicators that will notify the driver to the problem (e.g. drivability, MIL, Illumination), projected repair rate due to overt indication.

²⁾ Test plan must be representative of a typical failure mode to determine the emissions impact for a substantial number of vehicles.

³⁾ The manufacturer may request an Adjudicatory Hearing pursuant to Sections 60040 through 60053, Title 17, CCR after good faith efforts to resolve issues about the test plan or engineering evaluation have been exhausted.

⁴⁾ Please see attached examples for clarification.

CALIFORNIA WARRANTY FAILURE REPORTING PROPOSAL

EXAMPLES FOR PASSENGER CAR AND LIGHT DUTY TRUCK PROCESS (see FLOWCHART)

CALCULATION:

Projected failure rate and level = $[(X/Y) * (A*B)] + \{ [(Y-X)/Y] * [A*D] \} + C*D$, where:

A = Portion of vehicles projected to fail by full useful life, i.e. 25% equals a portion of .25)

B = Projected emissions factor at full useful life as a multiple of the standard (e.g. B=1.5 means emissions are projected to be 1.5xStd or 150% of standard at full useful life)

C = Percentage of vehicles that are not projected to fail by full useful life (i.e. C = 1 - A)

D = 1.0, manufacturers are liable for a vehicle's emissions to be at or below the standard (i.e. 1.0xStd).

X = Projected miles driven before failure is corrected.

Y = The applicable regulatory useful life in miles, e.g. 120K for light duty truck (<6000 # GVWR).

EXAMPLES

1) An intake sensor (low cost part) that has one failure mode exceeds both the 4% claim and failure rates and is reported on an EWIR and an EIR. The EIR contains an engineering evaluation that shows that the faulty sensor signal, in its most typical failure mode, will cause feedgas (engine out) levels to increase by 2 times over all engine operating condition. Based on the conversion efficiency of a catalyst aged to useful life it is estimated that a vehicle with a failed intake sensor will exceed the emission standard by fifty percent (or 1.5 times the standard). It is projected that customers will bring vehicles in for corrective service by at least 500 miles due to an overt indication of the failed condition and the regulatory useful life in miles is 120,000.

- a) If 25% of the test group is projected to fail within the useful life, the calculation is:
 $[(500/120,000) * (0.25*1.5)] + [(119,500/120,000) * (0.25*1.0)] + 0.75(1.0) =$
 $0.00156 + 0.24896 + 0.75 = 1.00052$
Is $1.00052 \leq x$?
- b) If 75% of the test group is projected to fail within the useful life, the calculation is:
 $[(500/120,000) * (0.75*1.5)] + [(119,500/120,000) * (0.75*1.0)] + 0.25(1.0) =$
 $0.00469 + 0.74688 + 0.25 = 1.0057$
Is $1.0057 \leq x$?

It is projected that customer will bring vehicles in for service by at least 10,000 mile due to an overt indication of the failed condition and the regulatory useful life in miles is 100,000, then:

- c) If 75% of the test group is projected to fail within the useful life, the calculation is:
 $[(10,000/100,000) * (0.75*1.5)] + [(90,000/100,000) * (0.75*1.0)] + .025(1.0) =$
 $0.1125 + 0.675 + 0.25 = 1.0375$
Is $1.0375 \leq x$?

2) An exhaust actuator (high cost part) that has one failure mode exceeds both the 4% claim and failure rates and is reported on an EWIR and an EIR. An engineering evaluation alone can not adequately determine a quantitative emission affect. Therefore, the EIR contains a test plan (2 vehicles, A-B-A testing on each). After the test plan is approved and completed the test data shows that a vehicle with a failed exhaust actuator will exceed the emission standard by three-hundred percent (or 3.0 times the standard). It is projected that customers will bring vehicles in for corrective service by at least 500 miles due to an overt indication of the failed condition and the regulatory useful life in miles is 120,000.

- a) If 10% of the test group is projected to fail within the useful life the calculation is:

$$[(500/120,000) * (0.10*3.0)] + [(119,500/120,000) * (0.10*1.0)] + 0.90(1.0) =$$

$$0.00125 + 0.0995 + 0.90 = 1.0008$$

Is $1.0008 \leq x$?
- b) If 25% of the test group is projected to fail within the useful life the calculation is:

$$[(500/120,000) * (0.25*3.0)] + [(119,500/120,000) * (0.25*1.0)] + 0.75(1.0) =$$

$$0.00312 + 0.2490 + 0.75 = 1.0021$$

Is $1.0021 \leq x$?

It is projected that customer will bring vehicles in for service by at least 10,000 mile due to an overt indication of the failed condition and the regulatory useful life in miles is 100,000, then:

- c) If 75% of the test group is projected to fail within the useful life the calculation is:

$$[(10,000/100,000) * (0.75*3.0)] + [(90,000/100,000) * (0.75*1.0)] + 0.25(1.0) =$$

$$0.25 + 0.675 + 0.25 = 1.175$$

Is $1.175 \leq x$?
- d) If the testing demonstrates that emissions exceed the standard by 600% (a factor of 6.0) and the same scenario as c) then the calculation is:

$$[(10,000/100,000) * (0.75*6.0)] + [(90,000/100,000) * (.75*1.0)] + 0.25(1.0) =$$

$$0.50 + 0.675 + 0.25 = 1.42$$

Is $1.42 \leq x$?

3) A fuel tank sensor (low cost part) that has three failure modes exceeds both the 4% claim and failure rates and is reported on an EWIR and an EIR. The EIR contains a test plan (2 vehicles, A-B-A testing on each¹). The failure modes have the following failure rates; mode 1 – 48% of failed parts fail because of broken diaphragms, mode 2 – 37% of failed parts fail because of contaminated orifices, and mode 3 – 15% of the failed parts fail because of corrosion of the wiring connector. The test plan is 2 vehicles, A-B-A testing on each for the first two failure modes which account for more than 50% of the failed parts. After the test plan is approved and completed the test data shows that a vehicle with a failed fuel tank sensor will exceed the emission standard by two-hundred percent (or 2.0 times the standard) for the first failure mode and by three-hundred percent (or 3.0 times the standard) for the second failure mode. It is projected that customers will bring vehicles in for corrective service by at least 500 miles due to an overt indication of the failed condition and the regulatory useful life in miles is 120,000.

- a) If 10% of the test group is projected to fail within the useful life the calculation is:

$$\begin{aligned} & [(500/120,000) * \{(0.10 * ((2.0*(48/(48+37)) + (3.0*(37/(48+37))))\}] + \\ & [(119,500/120,000) * (0.10*1.0)] + 0.90(1.0) = 0.0010 + 0.0996 + 0.90 = 1.0006 \\ & \text{Is } 1.0006 \leq x? \end{aligned}$$

- b) If 75% of the test group is projected to fail within the useful life the calculation is:

$$\begin{aligned} & [(500/120,000) * \{(0.75 * ((2.0*(48/(48+37)) + (3.0*(37/(48+37))))\}] + \\ & [(119,500/120,000) * (0.75*1.0)] + 0.25(1.0) = 0.0076 + 0.743 + 0.25 = 1.27 \\ & \text{Is } 1.27 \leq x? \end{aligned}$$

It is projected that customer will bring vehicles in for service by at least 10,000 mile due to an overt indication of the failed condition and the regulatory useful life in miles is 100,000, then:

- c) If 75% of the test group is projected to fail within the useful life the calculation is:

$$\begin{aligned} & [(10,000/100,000) * \{(0.75 * ((2.0*(48/(48+37)) + (3.0*(37/(48+37))))\}] + \\ & [(90,000/100,000) * (0.75*1.0)] + 0.25(1.0) = 0.183 + 0.675 + 0.25 = 1.108 \\ & \text{Is } 1.108 \leq x? \end{aligned}$$

- d) If the testing demonstrates that emissions exceed the standard by 600% for failure mode 1 and 400% for failure mode 2 and the same scenario as c) then the calculation is:

$$\begin{aligned} & [(10,000/100,000) * \{(0.75 * ((6.0*(48/(48+37)) + (4.0*(37/(48+37))))\}] + \\ & [(90,000/100,000) * (0.75*1.0)] + 0.25(1.0) = 0.38 + 0.675 + 0.25 = 1.305 \\ & \text{Is } 1.305 \leq x? \end{aligned}$$

¹ B level testing will be conducted on the failure mode that has the highest failure rate, i.e. most typical. If the highest failure rate mode of failure accounts for 50% or more of the failed parts no other failure modes will be tested. If the highest failure rate mode of failure is less than 50% the next highest failure rate failure mode will also be tested. Additional failure modes may be tested until the failure mode(s) of at least 50% of the failure are evaluated.