State of California AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking, Including Summary of Comments and Agency Response

PUBLIC HEARING TO CONSIDER AMENDMENTS TO REGULATIONS FOR THE AVAILABILITY OF CALIFORNIA MOTOR VEHICLE SERVICE INFORMATION

Public Hearing Dates: January 22, 2004

May 20, 2004

Agenda Item No.: 04-1-4

I. GENERAL

The Staff Report: Initial Statement of Reasons for Rulemaking ("ISOR" or "Staff Report"), entitled "Public Hearing to Consider Adoption of California Regulations for Motor Vehicle Service Information", released December 5, 2003, is incorporated by reference herein.

Following a public hearing on January 22, 2004, the Air Resources Board ("Board" or "ARB") by Resolution 04-5 approved, with modifications, amendments to the service information regulations for 1996 model-year and later passenger cars, lightduty trucks, medium-duty, and heavy-duty vehicles equipped with on-board diagnostic ("OBD") systems. (Resolution 04-5 is included in this rulemaking record and incorporated herein.) The service information regulations were initially adopted and became operative in 2003 and are set forth at section 1969, title 13, California Code of Regulations (13 CCR section 1969), and title 17 CCR sections 60060.1 through 60060.34. The present Board action amends only 13 CCR section 1969. At the January 22, 2004 hearing, the board approved for adoption the amendments proposed by staff and directed staff to make certain modifications in response to comments received during the hearing and the 45-day comment period. The Board closed the record on that date and directed staff to reopen the record to consider only heavy-duty issues at the time ARB staff formally noticed for hearing regulations to adopt Engine Manufacture Diagnostics for heavy-duty vehicles. That hearing was held on May 20, 2004. At that time, the Board directed the staff to finalize the recommendations through the 15-Day Notice of Proposed Modification ("15-Day Notice") process.

On August 3, 2004, staff issued the first 15-Day Notice (ARB Mail-Out MSO #2004-03) outlining the changes made to the regulation in response to the Board's directives at the January 22 Board hearing and comments received during the initial 45-day comment period and the 45-day comment period preceding the May 20, 2004 hearing. A second 15-Day Notice (ARB Mail-Out MSO #2004-04) was issued on September 30, 2004, in response to additional comments received during the first 15-Day Notice. The first and second 15-Day Notices are incorporated by reference herein.

13 CCR section 1969 incorporates by reference recommended practices and documents. In addition to those documents incorporated into the regulations as first adopted in 2001, the amendments have incorporated a recently published Society of Automotive Engineers ("SAE") Recommended Practice J2534, "Recommended Practice for Pass-Thru Vehicle Programming," September 2004.

Existing administrative practice of the ARB has been to have technical recommended practices, such as the SAE document, incorporated by reference rather than printed in the CCR. These procedures are highly complex and technical documents. They include "nuts and bolts" engineering protocols and have a limited audience. Because the ARB has never printed SAE documents in the CCR, the affected public is accustomed to the incorporation format utilized in 13 CCR section 1969. Moreover, printing portions of the documents in the CCR when the bulk of the procedures are incorporated by reference would be unnecessarily confusing to the affected public. The full documents are instead available for public inspection from the Clerk of the Board at 1001 "I" Street, 23rd floor, Sacramento, California 95814.

<u>Background</u>. The service information regulation was developed pursuant to the requirements of Senate Bill 1146 ("SB 1146"), codified in Health and Safety Code ("H&SC") section 43105.5. Enacted on September 30, 2000, the statute required the ARB to adopt a service information regulation by January 1, 2002.

The regulation was approved by the Board on December 13, 2001, and implemented on March 30, 2003. It provides for increased competition in the service, repair, and aftermarket industries by making dealership quality emissionrelated service information and tools available for purchase by independent service facilities and aftermarket companies over the Internet. The service information and tools available under the regulation include, but are not limited to, service manuals, technical service bulletins, OBD information, wiring diagrams, training materials, and reprogramming and diagnostic tools. All light- and medium-duty vehicle manufacturers currently have functional service information websites on the Internet. In the past, some service information has only been available to motor vehicle manufacturers' franchised dealerships. Increased availability ensures that the emission benefits of the ARB's low emission standards and OBD regulations are maintained through the increased ability of independent service shops to more efficiently diagnose and repair vehicle problems. The United States Environmental Protection Agency ("U.S. EPA") also issued a similar amended regulation in May 2003. ARB and U.S. EPA staff worked together during the rule development process to harmonize the requirements wherever possible. Apart from the applicability of California's requirement to heavy-duty vehicles (as expanded by this rulemaking), differences in the federal and California regulations are minor and do not require manufacturers to develop separate Internet websites to comply with both simultaneously.

At the 2001 hearing, the Board directed staff to see if it could facilitate a means that would allow on-board computer remanufacturers to access initialization information so that they could efficiently and effectively test remanufactured products. Initialization information entails the use of access codes necessary to reset a vehicle's passive anti-theft system (commonly known as an immobilizer) after the replacement of an on-board computer or possibly other emission-related repairs. At the hearing, the Board determined that SB 1146 denied the availability of this information to computer remanufacturers. However, the Board was interested in seeing if a reasonable and feasible method could be worked out between the remanufacturers and automobile manufacturers that would permit access to the information without interfering with vehicle security.

Regarding heavy-duty vehicles, the ARB began developing a separate regulatory proposal in 2003 that would require the use of OBD systems on this class of vehicles (i.e., vehicles weighing more than 14,000 pounds) no later than the 2007 model year. Under the language of H&SC 43105.5(a), such vehicles would then need to be covered under the same information and tools provisions required of light-and medium-duty vehicle manufacturers.

As set forth above, the ARB staff proposed amendments to the service information regulation to address both of the above issues and brought it to the Board for approval at the January 22, 2004 hearing. At that hearing, the Board approved the amendments, but directed the staff to continue working with heavy-duty manufacturers regarding possible liability issues resulting from the availability of heavy-duty tools and related information. Staff was also directed to consider the impact of the then yet-to-be proposed, heavy-duty engine manufacturer diagnostic ("EMD") system regulation (i.e., the ARB's first-generation, on-board diagnostic requirements for 2007 and later heavy-duty vehicles) on the service information requirements for heavy-duty manufacturers. Lastly, staff was asked to work further with light- and medium-duty vehicle manufacturers and the aftermarket industry towards finding better options for the availability of immobilizer information for onboard computer remanufacturers beyond the use of existing service-based procedures. In response, staff proposed further amendments to the regulation and on May 22, 2004, presented its proposal to the Board.

Economic and Fiscal Impacts. The staff estimated that the primary costs of compliance with this regulatory action would be associated with the formatting and transfer of text-based service information to heavy-duty manufacturers' Internet websites and the ongoing maintenance of those websites. Using information provided by heavy-duty manufacturers, staff estimated that start-up costs for the development of a compliant website for an individual manufacturer would range from \$250,000 to \$750,000, with annual maintenance costs in the vicinity of \$125,000 to \$325,000. To offset some or all of the compliance costs, manufacturers are permitted to set fair, reasonable, and non-discriminatory prices for the tools and information that must be made available under the regulation.

The regulation should have a continued positive impact on independent service repair facilities and aftermarket manufacturers through the wider availability of emission-related service information and tools. Covered persons such as independent service facilities and aftermarket part manufacturers should only incur additional expenses as a result of this regulation if they choose to purchase additional information and tools. However, in doing so, it is assumed that the purchases will be based on business decisions in expectation of making a profit. The loss of some business for both franchised dealerships and authorized service networks is expected as independent service facilities conduct more repairs using the service information and tools made available by the regulation. However, this competitive effect was clearly recognized by the California Legislature when SB 1146 was originally drafted.

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district the costs of which are reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

Alternatives. For the reasons stated in the Initial Statement of Reasons and this Final Statement of Reasons, the Board has determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board.

II. SUMMARY OF COMMENTS AND AGENCY RESPONSE

At the January 22, 2004, hearing, oral testimony was received in the following order from:

Mr. Aaron Lowe, Automotive Aftermarket Industry Association / Automotive Warehouse Distributors Association (AAIA)* (2 letters)

Mr. John Cabral. Blue Streak Electronics

Ms. Lisa Stegink, Engine Manufacturers Association (EMA)*

Mr. John Cabaniss, Association of International Automobile Manufacturers (AIAM)*

Mr. John Trajnowski, Ford Motor Company (Ford)*

Mr. Frank Krich, DaimlerChrysler Corporation (DaimlerChrysler)*

Mr. David Raney, American Honda Motor Company (Honda)*

Mr. David Ferris, General Motors Corporation (GM)

Other written comments were received by the January 22, 2004, hearing date from:

Mr. John Duerr, Detroit Diesel Corporation (DDC)

Mr. Bill Gaines, MGA research Corporation (MGA)

At the May 20, 2004, hearing, oral testimony was received in the following order from:

Mr. Steven P. Douglas, Alliance of Automobile Manufacturers (Alliance)

Mr. Kerby Suhre, Embedded Electronic Products Or Design, LLC

Mr. Aaron Lowe, AAIA*

Mr. John Cabral, Blue Streak Electronics

Mr. Russ Schinizing, Cardone Industries USA

Mr. David Darge, Powertrain Electronics, LLC

Mr. Frank Krich, DaimlerChrysler

Mr. Pete Meier, Honda

Ms. Lisa Stegink, EMA*

Mr. Steve Hoke, NorthState Truck Equipment

Mr. David Ferris, GM

Mr. Mark Saxonberg, Toyota Motor Corporation (Toyota)

Those names above noted with an asterisk also submitted written comments. All of these written comments were received during the 45-day comment period prior to the hearing.

No other written comments were received by the May 20, 2004, hearing date.

Written comments regarding the ARB's first 15-Day Notice for the rulemaking were received from the following parties by the August 23, 2004, deadline:

Mr. George Adelsperger, Bureau of Automotive Repair (BAR)

Mr. W. C. Passie, Caterpillar Inc. (Caterpillar)

Mr. Aaron Lowe, AAIA

Mr. John Cabaniss, Association of International Automobile Manufacturers (AIAM), and Mr. Steven P. Douglas, Alliance

Written comments regarding the ARB's second 15-Day Notice for the rulemaking were received from the following parties by the October 18, 2004, deadline:

Mr. Michael Conlon, Heavy Vehicle Maintenance Group

Ms. Lisa Stegink, EMA

No comments were submitted by the Office of Small Business Advocate or the Trade and Commerce Agency.

Below is a summary of each objection or recommendation made regarding the specific regulatory actions proposed, together with an explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. The comments have been grouped by topic wherever possible. Comments not involving objections or recommendations specifically towards the rulemaking or to the procedures followed by the ARB in this rulemaking are also summarized below, but an agency response is not required.

HEAVY-DUTY AMENDMENTS

1. Comment: The ARB does not have the authority to establish service information requirements for heavy-duty vehicles. SB 1146 was written to be applicable to light-duty vehicles, and was never discussed as an option for heavy-duty engines and vehicles because there were no OBD requirements on heavy-duty vehicles when the legislation was passed. In addition, the ARB has not provided evidence that such service information is truly needed. The ARB should withdraw its proposal and instead utilize a 50-state rulemaking under development by the U.S. EPA. (EMA)

Agency Response: Health and Safety Code §43105.5 states that the ARB's service information requirements apply to 1994 and later model-year vehicles equipped with OBD systems. At the time when heavy-duty vehicles become subject to OBD requirements (currently model year 2007), they will fall into the parameters of the applicability language. ARB staff agrees that at the time the legislature created the section, OBD requirements applied only to light- and medium-duty vehicles; however, nothing in the statute limits the applicability to just these classes of vehicles.

The ARB explained the need for heavy-duty vehicle service information availability in the Staff Report. Specifically, United States Census Bureau statistics¹ indicate that more than 75 percent of heavy-duty trucks are maintained and/or overhauled by independent vehicle service providers. Comments from independent heavy-duty service industry representatives and a survey by the American Trucking Association indicate that technicians do not always have timely access to the service information and parts necessary to effectively repair emissions-related malfunctions. Further, proper operation of emission control equipment will be critical to minimize in-use emissions from 2007 and later model year heavy-duty applications. Therefore, there is a clear need for heavy-duty service information and tools access in the same manner as there is for light- and medium-duty vehicles.

2. Comment: The nature of the heavy-duty service industry makes application of the amended regulation inappropriate. The heavy-duty industry operates on a much smaller and individualized scale compared to the light-duty industry. Much more individualized communication already occurs with respect to the servicing of heavy-duty vehicles. Indeed, aftermarket service providers testified at the ARB's August 2003 public workshop that there was no need to extend service information availability requirements to the heavy-duty industry. The current service information infrastructure is already established and adequate to meet the needs of the heavy-duty industry. (EMA)

<u>Agency Response</u>: Some participants at the ARB's workshop did indicate that heavy-duty service information was generally available to independent service technicians. However, comments during the workshop made clear that access to

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¹ United States Census Bureau: "1997 Economic Census Vehicle Inventory and Use Survey."

some manufacturers' service information was harder to obtain than others. Additionally, comments at the workshop indicated that absent regulation there was an increased likelihood for discriminatory pricing and availability.

To the extent that service information is already available at reasonable prices, the only impact of the regulation on heavy-duty manufacturers is the requirement for the information to be formatted and made available via the Internet. Manufacturers have two years of lead time to design websites that would facilitate posting of service information for 2007 and later model year heavy-duty vehicles. The costs for creating and maintaining service information websites were identified and addressed in the ARB's Staff Report and summarized above in the "Economic and Fiscal Impacts" portion of this document.

In adopting the regulation, the Board considered the unique, non-integrated nature of the heavy-duty industry and modified or deleted regulatory provisions that distinguished the heavy-duty vehicle industry from the light- and medium-duty industry as necessary. These modifications include the inclusion of transmission manufacturers within the applicability of the regulation and the deletion of requirements for heavy-duty reprogramming tools and associated information. The ARB will revisit the deleted requirements for heavy-duty tools and information at the time that it considers on-board diagnostic system requirements (beyond the EMD requirements that were approved for adoption at the May 20, 2004 hearing) for heavy-duty vehicles.

- 3. Comment: The existing service information regulation template is for the lightand medium-duty vehicle industries. It does not reflect the realities of the heavyduty industry and as such, is not the best place to start for implementation of heavy-duty service information requirements. We urge the Board to direct staff to work with us and other interested stakeholders to assure that all appropriate and necessary heavy-duty engine industry amendments are made to the service information rulemaking. (EMA)
- 4. Comment: One concern in getting a working regulation is the unique nature of the heavy-duty service industry. The light-duty service industry operates on a much wider scale in California with hundreds of service facilities to meet the needs of millions of vehicles. The heavy-duty industry in contrast operates on a much smaller scale with far fewer service facilities. Heavy-duty manufacturers also make a limited number of products albeit with an enormous number of variations on how they are configured and calibrated. The other challenge is the infrastructure that will need to be developed in the heavy-duty service industry. Such an infrastructure needs to ensure that proprietary code is secure and cannot be obtained by unauthorized parties or somehow misused. Heavy-duty manufacturers will need to completely re-engineer major portions of the system and do appropriate testing to assure that information can be safely provided to third parties. (EMA)

Agency Response to Comments #3-4: Although there are differences between the light-duty and heavy-duty vehicle service industries, the "template" for the regulation is simply that manufacturers must make the service information that they provide to dealers and authorized service networks available over the Internet to heavy-duty service providers not affiliated with the manufacturer. The need for service information necessary to effectively repair emission-related problems is common to the light-, medium-, and heavy-duty service industries and, thus, referencing both industries within the same regulatory text is both practical and effective.

Notwithstanding, the staff has worked with heavy-duty stakeholders to address concerns specific to the heavy-duty industry. For example, the ARB deleted tools availability requirements for heavy-duty vehicles in this rulemaking so that it could further consider lead time and security issues raised by heavy-duty manufacturer stakeholders. (See agency response to comment #2.) The staff has requested and considered input from heavy-duty manufacturers and the industry's trade association at every step of the rulemaking process.

- 5. Comment: In order to assure that heavy-duty manufacturers' proprietary and trade secret information is not divulged to third-party service providers and scan tool makers, they would have to undertake substantial reordering and reprogramming of current software. They would need time to develop and test whether the new controls and infrastructure are viable with their own service providers. Once that has been accomplished, manufacturers would then need additional time to determine how the information could be extended to the aftermarket industry. (EMA)
- 6. Comment: The ARB should provide additional lead time for heavy-duty manufacturers to adapt to and comply with certain aspects of the regulation. It is particularly needed to comply with the requirements for data stream and bi-directional control information to develop a new approach to how manufacturers provide software updates, programming modules for service parts, and related information. Second, the lead time is also applicable to the requirement to provide information to equipment and tool companies. This should be delayed until all heavy-duty OBD requirements are defined and implemented and data infrastructure systems are built to them. (EMA)

Agency Response to Comments #5-6: The ARB originally addressed EMA's concerns over releasing "proprietary code" by giving heavy-duty manufacturers the option to require training for all entities that wanted to purchase their reprogramming and enhanced diagnostic tools and related information. However, at the May 2004 hearing, manufacturers were still concerned over safety and liability concerns that could arise despite the inclusion of training requirements. They did not want to be held responsible for misuse of the tools or any reprogramming mistakes made by the aftermarket. Thus, the ARB deleted the requirements for the availability of diagnostic tools and related information, and reprogramming equipment. The ARB, per EMA's suggestion, will rework its

availability requirements in these areas at the time it proposes enhanced onboard diagnostic system requirements for heavy-duty vehicles. To the extent that the commentor is concerned with the release of proprietary trade secret information, 13 CCR section 1969(i) sets forth a process in which the holder of the proprietary information may protect such information from disclosure.

- 7. Comment: Heavy-duty manufacturers need additional lead time to account for and to meaningfully comment of the OBD-specific requirements of the regulation. Without a heavy-duty OBD regulation in place, manufacturers cannot make appropriate comments about the heavy-duty service information. At a minimum, the comment period on the heavy-duty aspects of the service information regulation should be kept open at least until the time of the Board hearing on the heavy-duty OBD proposal and also as the 2007 and post-2007 OBD requirements are implemented and more fully understood. Lead time is also needed to adapt existing light-duty service information requirements to the heavy-duty industry. (EMA)
- 8. Comment: We are asking the Board to keep open the opportunity for us to provide further input on the service information rulemaking as it applies to heavy-duty vehicles. We have worked with staff and believe we have a solution to assure that our concerns are met. We recommend that you direct the staff to work with engine manufacturers on the underlying issues that we have submitted in separate comments and to do that through the 15-Day Notice process. In addition we think that the Board should support the staff's commitment to allow heavy-duty engine manufacturers to address service information issues at the OBD hearing (on May 20, 2004) and at a minimum to provide an additional 15-Day Notice on the service information rulemaking after that hearing. (EMA)

Agency Response to Comments #7-8: In response to EMA's concerns and direction from the Board at the January 2004 hearing, the ARB reopened the regulatory record for the service information requirements during the 45-day notice period prior to the May 2004 hearing at which EMD requirements for heavy-duty vehicles were considered and adopted. Between the January and May hearings, staff continued working with EMA in discerning the remaining concerns of the heavy-duty industry. The staff presented an update to the Board at that hearing on those efforts.

9. <u>Comment:</u> EMA seriously questions the census data on which ARB relies. The Staff Report states that only 11 percent of heavy-duty maintenance and 24 percentage of major overhauls are conducted by heavy-duty dealerships. Engine manufacturers are highly skeptical of the former percentage. Unless the data is further analyzed and evaluated, it is not appropriate to draw such a conclusion. (EMA)

Agency Response: The data were taken from the United States Census Bureau's ("Census Bureau") "1997 Economic Census Vehicle Inventory and Use Survey." The data was made publicly available as a reference to the rulemaking record

and is also available from the Census Bureau in hardcopy on its website. The ARB has not received any evidence that the information or the ARB's usage of it was inaccurate.

10. Comment: The Staff Report states that because heavy-duty manufacturers have a smaller number of product offerings than the light-duty market, "hardware costs for development computers and Internet servers are also expected to be less." What the ARB failed to account for, however, is the far greater diversity in engine configurations and calibrations that exist in the heavy-duty market. Greater diversity means more unique products and less ability to use a "one-size-fits-all" approach to providing service information. (EMA)

<u>Agency Response</u>: The ARB does not believe that the regulation requires a "one-size-fits-all" approach. The regulation simply requires that manufacturers make available to independent service providers the service information that they provide to dealerships and authorized service networks. The ARB has not received any information to suggest that service information cannot be formatted for posting on the Internet.

The ARB understands that some manufacturers may have great diversity in the number of engine configurations and calibrations it produces; however, in order for the products to be serviced, adequate information must be provided to technicians. Manufacturers are currently able to manage this diversity with respect to their dealers and authorized service providers. The staff believes there is no reason why independent service providers cannot be included in the dissemination of the information in the same manner.

The ARB staff stated in its Staff Report that hardware costs are expected to be lower for heavy-duty manufacturers than for light- and medium-duty manufacturers because the heavy-duty manufacturers have fewer engine offerings and a lower volume of service information overall. The staff understands that heavy-duty manufacturers may offer a particular engine with many configuration or calibration options. However, because the base engine and most, if not all, engine components are the same, the service and repair procedures should be very similar, if not identical, for the different variations. Accordingly, each variation should not need separate and unique service information. Heavy-duty manufacturers have provided no specific information to suggest that the ARB's compliance costs estimates are too low.

11. Comment: The ARB staff believes that "some or all" of the costs of complying with the service information rule will be recoverable by heavy-duty manufacturers through the sale of information and tools. However, even if only the costs of implementing, maintaining, and staffing a website were considered, manufacturers anticipate recovering little, if any, of such costs. The implication that manufacturers could recover up to "all" of the costs is preposterous. At a minimum, the ARB must recognize the substantial costs associated with all aspects of the rulemaking, including not only development and maintenance

costs, but also those for development of a new infrastructure for providing information and tools. (EMA)

Agency Response: The ARB has estimated in its Staff Report all aspects of the cost of complying with the regulation by considering the cost to both develop and maintain service information websites in compliance with the regulation. The estimates were not reduced based on any anticipated revenue from website subscriptions. Therefore, they can be considered to be worst-case cost estimates. Nonetheless, it is obvious that unless website information is offered for free, at least some costs will be recovered through the sale of information and tools. Whether or not a manufacturer will be able to recover all costs is dependent on a number of factors including the number of customers it attracts and the cost of creating and formatting the information.

- 12. Comment: The rulemaking must specifically include language limiting heavy-duty manufacturers' liability for service provided by aftermarket technicians. Although the regulation proposed tool training before they are provided to the aftermarket, the fact that they may work on several brands of engine means they are more likely to make mistakes. Therefore, it should be made clear that engine manufacturers will not have any emissions warranty, in-use compliance, defect reporting, or recall liability for service on a heavy-duty engine that is not undertaken by the manufacturer. (EMA)
- 13. Comment: Our most significant concern is with sections 1969(f)(1)(B) and (f)(2)(B) of the regulation. These sections allow heavy duty manufacturers to require covered persons to participate in training programs before they can purchase enhanced diagnostic or generic tools using the manufacturer's data stream and bi-directional control information. We believe that this requirement is totally unnecessary, but will not oppose the requirement provided that the training is economical, is required for franchised dealers, and not an excuse to limit aftermarket access to reprogramming tools. (AAIA)

Agency Response to Comments #12-13: See agency response to Comment #2. Based on the liability comments from EMA, the ARB has deleted the availability requirements for tools and reprogramming information for heavy-duty vehicles. The staff will readdress these requirements at the time that new OBD requirements for heavy-duty vehicles are proposed for Board adoption. Staff believes that some lead time may be necessary to make heavy-duty tools and reprogramming equipment safe from misuse or tampering.

14. <u>Comment</u>: It is too early for the ARB to propose heavy-duty amendments to the existing service information regulation because the proposed OBD regulation has not yet been finalized. This "cart before the horse" approach denies manufacturers and other stakeholders the opportunity to comment meaningfully on the proposed amendments. (DDC)(EMA)

Agency Response: This comment was received prior to the January 2004 hearing at which the Board directed staff to keep the record open on heavy-duty service information until the actual EMD proposal was made at the May 2004 hearing. Stakeholders had the opportunity to comment on these service information requirements in light of the adoption of the EMD requirements for heavy-duty vehicles at that hearing. The ARB staff carefully considered all stakeholder comments before issuing both of its 15-Day Notices of proposed regulatory modifications regarding heavy-duty issues.

15. Comment: The term "emission-related" needs to be explicitly and separately defined as it applies to heavy-duty engines and vehicles. The existing definition was developed with light-duty vehicles in mind and is overly broad when applied to the heavy-duty industry. DDC believes that the definition should relate only to components that affect engine emissions measured in grams per brake horsepower-hour and should be restricted to engine hardware and software features whose primary functions is to control emissions. (DDC)

Agency Response: The ARB does not agree that the definition of "emission-related" as used in the terms "emission-related motor vehicle information" or "emission-related motor vehicle part" should be limited only to cover hardware and software primarily used to control emissions. Many powertrain related components and systems that are not primarily emission-control systems can have a very significant effect on emissions. Fuel injectors are a good example. Vehicle emissions can often times exceed emission standards even without a malfunction within any of the components or systems used specifically to control emissions. As such, technicians need to have information on all components and systems that can affect emissions in order to maximize their chances of properly diagnosing and repairing a vehicle with excess emissions.

16. Comment: Heavy-duty engine manufacturers cannot be made responsible for providing service information for transmissions or other non-engine vehicle systems. The proposed definition of "motor vehicle manufacturer" does not indicate the party responsible for making non-engine related service information. Since heavy-duty engine manufacturers do not certify or have design control over non-engine vehicle systems, they should not be responsible for providing such related information on their websites. DDC recommends that the proposed regulation explicitly indicate the party or parties responsible for providing non-engine related service information. (DDC)

Agency Response: Since the time this comment was received, 13 CCR section 1969 (d)(1) has been modified to make clear that manufacturers are only responsible for providing information and tools relative to the portion of the vehicle that they have certified in California (e.g., the whole vehicle, the engine, or the transmission, as applicable).

17. <u>Comment</u>: The ARB's proposed regulation requires that annual reports be submitted to demonstrate compliance with the Internet website provisions.

However, no guidelines are provided on how to prepare these reports in order to make them more meaningful and substantive. DDC recommends that the ARB delete this requirement if it is not necessary or cost-effective. (DDC)

Agency Response: Guidelines have been provided. The regulatory text states that the reports are to demonstrate how the specific requirements in subsection (e)(2) are being met, and must also demonstrate that the websites have good performance as indicated by commonly used Internet statistics. The Executive Officer has not yet provided an official format for the reports; however, this is not roadblock to compliance with the requirement because the ARB is accepting formats developed by the manufacturer. Manufacturers may also submit reports formatted in the manner required by the U.S. EPA in which many Internet parameters are specifically delineated.

- 18. Comment: 13 CCR section 1969(f)(3) of the regulation requires motor vehicle manufacturers to make available for purchase tools and information needed for vehicle reprogramming. DDC is concerned with this provision because there are many different software calibrations used in the heavy-duty industry as compared to the light-duty industry. If the aftermarket were given the opportunity to reprogram engines with new calibrations, the possibility of mismatched configuration would increase because they are not as proficient in matching hardware and software as dealers that work exclusively on DDC engines. If this provision is retained, DDC wants the regulation to absolve heavy-duty manufacturers of any liability resulting from mismatched configurations done by the aftermarket. This would include liabilities that otherwise exist under emission warranties, defect reporting requirements, recall, and in-use emission testing programs. (DDC)
- 19. Comment: 13 CCR section 1969(f)(2)(A) of the regulation requires manufacturers to make available to all equipment and tool companies all data stream and bidirectional control information used in enhanced diagnostic tools available to dealers and authorized service networks. However, since manufacturers typically work individually with equipment and tool companies, it is important that this provision does not require an engine manufacturer to provide the information to all of them at once. Further, after initial tools are developed, additional time is needed to develop a "second generation" tool that is free of proprietary information and features that can be made available for general use. Therefore, we recommend that an engine manufacturer's responsibilities under this provision not begin until some period of time after the initial tool has been placed in the market by the engine manufacturer or a equipment or tool manufacturer. The engine manufacturer should also be free of liability for the performance of tools provided by a non-affiliated equipment or tool manufacturer. (DDC)
- 20. Comment: 13 CCR section 1969(d)(2)(G) of the regulation requires heavy-duty manufacturers to provide information necessary to interpret "mode 6" OBD data, which is needed by aftermarket add-on and replacement part manufacturers to develop components compatible with OBD systems. However, doing so does

not guarantee that such parts will function properly. Therefore, DDC believes the regulation should absolve engine manufacturers of any liability resulting from the use of aftermarket replacement or add-on parts. This would include liabilities that otherwise exist under emission warranties, defect reporting requirements, recall, and in-use emission testing programs. (DDC)

- 21. Comment: We have some liability concerns. As aftermarket providers are given the tools to service and reconfigure heavy-duty engines, there is a possibility that inadvertent or deliberate reprogramming may occur. Training may address this issue in part, and we support that aspect of the rule, but we don't think it goes far enough. We think the proposed rule needs to include language that removes engine manufacturers from liability for third-party actions. (EMA)
- 22. <u>Comment</u>: Our objection to the training (before the purchase of motor vehicle manufacturers' tools and related information) was only to the fact that at this point it would be abused by the manufacturers. We just want it watched closely by the Board and ourselves. (AAIA)

Agency Response to Comments #18-22: See agency responses to comments #2, #3-4, and #12-13. The issue of manufacturers' liability in providing information and tools was discussed before the Board on May 20, 2004. The staff made clear in its presentation that nothing in the proposed service information rules would prevent a manufacturer from using indemnity clauses and hold harmless agreements to minimize potential liability issues. The ARB also agreed to drop the tools availability requirements for heavy-duty vehicles until the second-generation OBD requirements are developed for these vehicles. This will provide heavy-duty manufacturers with additional lead time to incorporate any further safeguards necessary to minimize the chances for inadvertent or intentional misuse of the tools.

23. Comment: Section 1969(e)(2)(D) of the regulation requires that manufacturer websites use certain search terms including, but not limited to, vehicle model, model year, bulletin number, diagnostic procedure, and trouble code. The term "vehicle model" is not useful for accessing a transmission or engine manufacturer's service information. DDC suggests that the term be replaced with "vehicle, engine, or transmission model." (DDC)

<u>Agency Response</u>: The staff agreed with the above comments. The term was modified as suggested in the first 15-Day Notice.

24. Comment: The stringent heavy-duty emission standards established by the ARB and the U.S. EPA will reduce emissions by more than 90% between 2007 and 2010. Heavy-duty manufacturers are dedicating substantial resources into meeting these standards. The proposed service information and OBD regulations are set to be implemented within the same timeframe thereby stretching manufacturer's already limited resources. The ARB must be sensitive to this situation and must structure the service information regulation in such a

way to minimize additional burden on manufacturers through 2010. Failure to do so could jeopardize the availability of customer accepted engines that meet the stringent standards. (DDC)

Agency Response: The ARB does not believe that its service information requirements will overextend heavy-duty manufacturers' resources. The regulation only requires manufacturers to make the service information and tools they already provide to dealerships and authorized service networks available to independent service providers. The only significant additional requirement is for the information to be formatted for access via the Internet. This effort requires information technology resources that should have little or no overlap with the engine and emission control system development resources that manufacturers will need to expend to meet 2007 and 2010 emission standards.

- 25. Comment: EMA acknowledges and supports the application of service information requirements to the heavy-duty industry as a corollary to heavy-duty EMD. However, we think it is essential that the service information requirements for heavy-duty engines be implemented in a way that assures that compliance with and acceptance of the 2007 and later model year emission standards are not jeopardized. (EMA)
- 26. Comment: The service information amendments for heavy-duty engines are being adopted in conjunction with the EMD rulemaking. EMD will not be the final word on on-board diagnostic requirements, but these future requirements have been deferred. We believe that it is critical that for the rollout of both the service information and EMD requirements to be successful, the Board should consider them in the context of one another. Therefore, EMA urges the Board to defer adoption of any heavy-duty service information requirements until after 2009 model year until EMA has had a chance to work with the staff on the next round of on-board diagnostic requirements. (EMA)
- 27. Comment: Until we know the scope of the OBD requirements and how they will be implemented, we can't fully address key aspects of the service information proposal for heavy-duty vehicles. We have discussed this with staff and they have agreed to a process that would allow us to continue to work with them to craft a service information rule that works for the heavy-duty industry. (EMA)

Agency Response to Comments #25-27: The manufacturers are concerned about committing to make diagnostic tools and related information available to the aftermarket before knowing how the design of such tools might change as a result of new EMD and future OBD requirements. Overall, the ARB does not anticipate that fundamental tool design changes will be needed to accomplish these objectives. However, after considerable discussion with heavy-duty manufacturers, the ARB agreed to delete the requirements for heavy-duty reprogramming and enhanced tools availability from the regulation at this time. The staff instead intends to re-propose these requirements at the same time that the future OBD requirements are considered. This should alleviate

manufacturers' concerns because the extent of the proposed OBD requirements will be known to them. There is a need now for heavy-duty information to allow the aftermarket industry to properly repair engines, vehicles, and transmissions, and therefore, staff sees no justifiable reason to delay implementation of the entire regulation for heavy-duty manufacturers until 2009.

28. <u>Comment</u>: I speak for many diesel engine rebuilders, and I can say that it is very important for us as rebuilders, repair facilities, and heavy-duty truck owners to have on-board diagnostic capability on all heavy-duty diesel engines from the Internet. (NorthState Truck Equipment)

<u>Agency Response</u>: The ARB believes the comment addresses the importance of having repair information available over the Internet for EMD/OBD-equipped vehicles. As such, this comment is in support of the regulation.

29. Comment: We have concerns about the costs involved with the proposed amendments for heavy-duty vehicles. Staff has cost estimates for developing websites and maintaining them, but what has not been considered are the costs that will be required to completely re-engineer major portions of the system. We think that the cost almost surely won't be recoverable, at least not to any large extent. (EMA)

<u>Agency Response</u>: The ARB disagrees that major portions of any heavy-duty vehicle system will need to be re-engineered in response to the service information requirements. With the removal of the tools availability requirements for heavy-duty vehicles, the primary remaining requirement is for heavy-duty manufacturers to format the service information they create for posting on the Internet, and to make it available to covered persons.

30. Comment: The heavy-duty industry really does need to change the software on the computer service tool and infrastructure due to the tremendous capability for customization in the reprogramming process. These changes will safeguard, limit errors, and limit the opportunities for tampering, as well as protect the proprietary information that's currently built into these tools. (GM)

Agency Response: As stated previously, the requirement for diagnostic tools and reprogramming equipment availability has been deleted pending the development of new OBD requirements for heavy duty vehicles. When the equipment availability requirements are again proposed, manufacturers will have every opportunity to present concerns over system security and workload.

31. Comment: The change made to the rulemaking that eliminates the availability of heavy-duty enhanced diagnostic tools, enhanced data stream information, bi-directional control information, and reprogramming equipment directly conflicts with the language of SB 1146 which requires that such diagnostic tools and information be made available to covered persons and tool and equipment companies, respectively. SB 1146 does not allow the Board to make a decision

to withhold these tools and information from such parties. Failure to obtain them will severely impact the ability of independent aftermarket heavy-duty service providers to quickly and accurately diagnose emission-related problems. Without reprogramming capabilities, an independent technician will be unable to complete many emission-related repairs even if the problem can be properly diagnosed. Further, the unavailability of bi-directional information will not allow tool manufacturers to produce generic reprogramming tools for independent technicians. (AAIA)

32. Comment: We are still very concerned about the deletion of the requirement to provide enhanced diagnostic and reprogramming tools and information. However, we have been assured that these issues will be addressed again at the time more definitive OBD rules are considered for heavy-duty vehicles. While we continue to believe that this is the appropriate time for these issues to be addressed so that heavy-duty manufacturers will understand their full disclosure obligations and can design their OBD systems to facilitate compliance, we will reserve further comment until we see how these issues are addressed in the future. (Heavy Vehicle Maintenance Group)

Agency Response to Comments #31-32: The regulation, as originally proposed by the staff, extended the availability requirements for diagnostic tools and reprogramming equipment to heavy-duty applications. However, heavy-duty manufacturers commented extensively that their existing diagnostic tools and reprogramming equipment were not designed for the purpose of being utilized by all independent service providers. They expressed concerns about having inadequate security and safeguards within the tools to ensure proper use in the field and to protect proprietary information. Further, the manufacturers argued that any effort to modify their tools and equipment so that they can be made available without restriction should be delayed until the impact of future on-board diagnostic requirements on the design of these devices is better known. The current EMD requirements for heavy-duty vehicles do not contain any requirements for data stream information or bi-directional controls: however, the future OBD requirements currently under consideration likely will. Accordingly, they urged that the ARB defer the issue regarding availability of diagnostic and reprogramming tools and equipment until such future time.

Based on these comments, the ARB agreed to remove the tools availability requirements for heavy-duty vehicles until the next round of OBD requirements are developed and proposed. This will give heavy-duty manufacturers additional lead time to consider appropriate equipment security features, and will permit the manufacturers to incorporate these features at the same time they implement the data access requirements anticipated under future OBD requirements.

The ARB disagrees that the effect of its decision is to "withhold tools and information" from independent service providers. Instead, the agency is simply providing the heavy-duty industry with adequate lead time to adjust to the tools availability requirements in the statute as the industry becomes subjected to

California OBD requirements. The ARB's action in no way prohibits or discourages heavy-duty manufacturers from continuing their current business practices of making diagnostic tools and reprogramming equipment available to qualified service providers.

The ARB decision does not conflict with the dictates of SB 1146. In granting to the ARB authority to adopt the service information regulation, the H&SC provides express authority to the ARB "to do such acts as may be necessary for the proper execution of the powers and duties granted to, and imposed upon, [it by the provisions of division 26 of the H&SC] and any other provisions of law." With this discretion, the ARB has determined that it would be beneficial to the health and welfare of the state to properly balance the immediate needs of the service industry for tools and equipment against the needs for vehicle manufacturers to have time to develop safe and secure tools and equipment. In determining that additional time is necessary for the release of safe and secure tools and equipment, the ARB has properly balanced these competing needs.

33. Comment: Nothing in the regulation proposed prior to the May 20, 2004, hearing gave any indication that either enhanced diagnostic tools or enhanced data stream information would be denied to the aftermarket. In fact, all discussions between the aftermarket and the staff prior to the hearing indicated that such tools and information would be provided as required by law. (AAIA)

Agency Response: See agency response to comments #31-32. The requirements for the availability of heavy-duty diagnostic tools and related information were initially proposed as part of the rulemaking. As such, interested parties should be of the understanding that the requirements may be adopted by the Board as proposed, rejected by the Board in their entirety, or adopted in some modified form.

Heavy-duty manufacturer stakeholders testified at the January 2004 hearing about their concerns over the tools availability requirements, with concerns regarding security and liability being the primary focus. The Board asked to staff to further consider the manufacturers' concerns and to report back to the Board later in the year.

The ARB staff satisfied this request with its May 20, 2004, update to the Board. The ARB agreed to postpone tools availability requirements for heavy-duty vehicles based on manufacturer stakeholder requests made at that hearing. Aftermarket stakeholders had every opportunity to attend the hearing and comment on this potential decision. Contrary to the assertions stated in the comment, the ARB staff was in contact with the commentor prior to the May 20 hearing, and forewarned the commentor that heavy-duty manufacturer stakeholders were expected to ask the Board for the delay in the requirement for tools availability.

34. Comment: The definition of "covered person" in 13 CCR section 1969(c)(4) primarily includes entities licensed or registered with BAR. However, this registration requirement is limited to entities repairing passenger cars (and some parts of recreational vehicles). Repair of most heavy-duty vehicles fall outside of BAR registration requirements. Therefore, the definition of a covered person must be amended to include business not required to be registered with BAR, that repair heavy-duty vehicles, engines, or transmissions. (BAR)

<u>Agency Response</u>: To ensure that persons or entities that repair heavy-duty vehicles, engines, and transmissions are not excluded from being able to purchase emission-related service information and tools, the ARB agreed that it is necessary to modify the regulation to remove the condition that independent heavy-duty service providers must be registered with BAR. This modification was proposed in the second 15-Day Notice.

35. Comment: The ARB proposed in its second 15-Day Notice to revise the definition of "covered person" to clarify that persons and entities involved in the repair of heavy-duty engines, vehicles, or transmissions are considered covered persons without having to be licensed by BAR. Although it is reasonable to make such a clarification, the definition is too broad. The availability of heavy-duty information to entities without regard to their qualifications could lead to improper repairs. Since BAR registration is not the proper credential for heavy-duty facilities, the ARB should include some threshold qualification for becoming a "heavy-duty covered person" that will ensure some measure of competence in repairing heavy-duty vehicles, engines, and transmissions. Moreover, due to the numerous calibration variations in each heavy-duty engine rating configuration, an entity's ability to access information should be limited to its area(s) of competence to ensure that appropriate repairs are completed. (EMA)

Agency Response: The requirement for a covered person that services light- or medium-duty vehicles to be licensed with the Bureau of Automotive Repair simply reflects state law that such service providers be licensed before conducting commercial business in the state. To not include the condition in the definition of a covered person could imply that unlicensed California shops have a right to purchase service information even though they do not have a right to conduct business in the state. In using the BAR qualification for light- and medium-duty OBD II, the ARB did not intend to establish any technician qualification threshold beyond that which already exists in state law. No similar licensing requirements exist for heavy-duty service providers in this state. The ARB neither has the resources nor the expertise to establish such a licensing program at this moment.

The ARB further does not believe that making the information initially accessible to all persons who work on heavy-duty vehicles is necessarily improper. The more information available to those who work on such vehicles, the better the chance that vehicles will be adequately maintained and quickly and properly

repaired when problems arise. The comment implies that poorly qualified entities in the business of servicing heavy-duty vehicles will do a worse job in repairing vehicles if they are able to access dealership quality service information. The ARB believes that such entities willing to make an investment in purchasing manufacturers' service information will become better equipped to properly fix vehicles and more motivated to be competent in their use of the information.

IMMOBILIZERS

- 36. Comment: The ARB's proposed solution for the availability of immobilizer information to emission control unit (ECU) remanufacturers is not acceptable. There is no reason why our proposed solution of the motor vehicle manufacturers developing a special calibration would make it easier to steal a vehicle or be too expensive to implement. We ask the Board to adopt our solution as part of the proposed amendments to the service information regulation. (AAIA)
- 37. Comment: It is our understanding that aftermarket remanufacturers find it desirable to temporarily inhibit the time-delay security features in some immobilizer systems during bench testing only. To do so, we recommend that a motor vehicle manufacturer implement a bench testing security inhibit feature in the onboard computer. The test bench computer is the only method capable of temporarily inhibiting the security function. We recommend using a similar technique used by several motor vehicle manufacturers to gain access for the calibration program downloading called "Seed and Key." Simply, we're trying to implement a one-second test that is active only the first second after the key is turned on. This test is only run once. And then once the engine is turned on, the test does not run again. This does not affect the existing fuel, spark, starter control, or security system. The onboard computer's existing engine control software and security system will remain as it is today. The test is clearly doable by the vehicle manufacturers. (Powertrain Electronics, LLC)
- 38. Comment: We think a one-second immobilizer test that we developed resolves the issue of vehicle theft. We don't see how this solution has any conflict with SB 1146. We believe that the rebuilders are included within the scope of SB 1146. The bill also requires that initialization be included as far as a requirement to complete the repair of a vehicle. So we do not see where this would be prohibited from being required. They are not actually changing anything about the ECU as part of this solution. (AAIA)
- 39. <u>Comment</u>: We have a truly practical solution that is low-cost and unobtrusive to vehicle operation or the anti-theft operation. Most of the vehicle manufacturer costs are centered on the development of a mode 8 test. We are not asking for a mode 8 test. (Cardone Industries USA)
- 40. <u>Comment</u>: The solution we have is low cost. Mode 8 is not required. It is unobtrusive to the security system or the ECU. It is just a piece of software that

is added to the computer to check it in the first second before the engine is on. It in no way makes the car any easier to steal, and we think it will help reduce the cost significantly for the engine rebuilders at a very low cost for the vehicle manufactures to put together. (AAIA)

- 41. Comment: The automobile industry did a cost estimate for what is referred to as mode 8 test mode software change. Aaron Lowe of AAIA indicated that he thought that such a change was a more expensive change. We believe a mode 8 test would be easier to implement, less expensive, and more secure. If we had to make some kind of software change, we would prefer to make that one. (Ford)
- 42. Comment: SB 1146 did not direct the ARB to redesign a vehicle to accommodate remanufacturers. In fact, the provision for rebuilding was specifically deleted by the author during the legislative development. Even as it was originally proposed, the bill never discusses redesigning vehicles for the benefit of remanufacturing. It was only for information, which I think we are providing. (Alliance)

Agency Response to Comments #36-42: As discussed in detail in the Staff Report, on-board computer remanufacturers have been concerned about their ability to properly test remanufactured computers that employ passive anti-theft systems called immobilizers. Unless the immobilizer system is re-initialized after the remanufacturing process, the remanufacturer cannot get the computer to exercise all of its functions when tested on a workbench.

The above comments were made with respect to a requirement proposed by the remanufacturers. The proposal would require vehicle manufacturers to modify the on-board computer software in new vehicles to incorporate special testing software that would cause the computer to briefly exercise all of its functions without having to re-initialize the immobilizer logic.

On-board computer remanufacturers have argued that H&SC sections 43105.5 (5) and (6) compel the ARB to require vehicle manufacturers to provide information or tools necessary to fully test remanufactured computers. As determined at the initial 2001 Board hearing to consider adoption of the service information regulation, the ARB does not believe the H&SC contains language that entitles on-board computer remanufacturers to special tools or information to better facilitate bench testing of remanufactured computers. The basis for the ARB's position was explained in detail in the Final Statement of Reasons submitted for the rulemaking adopted by the Board in December 2001.

The ARB staff, in response to the Board's directive, attempted to work with the vehicle manufacturers and on-board computer remanufacturers to identify potential informal solutions that would permit remanufacturers to more efficiently and effectively test their products without undermining the effectiveness of the immobilizer systems in deterring vehicle theft. The staff found that there were at

least two technically feasible solutions to the problem. The first solution would incorporate testing software into the on-board computer as identified above. The second solution would adapt the service procedures manufacturers have employed when a vehicle's immobilizer-equipped on-board computer is replaced. The latter solution is discussed in detail in the ARB's Staff Report.

In its May 2002 update to the Board, the staff reported to the Board that the solution based on manufacturers service procedures was technically and economically feasible, supported by vehicle manufacturers, and can be implemented right away. Although easier to implement for the computer remanufacturers, the aftermarket's software proposal was opposed by vehicle manufacturers, and had the limitation of only being applicable to future model-year vehicles. At the conclusion of the hearing, the Board agreed with the staff that the aftermarket's proposal should not be incorporated into the regulation. The Board's determination was principally based on the availability of a reasonable solution to the remanufacturers' problem and statutory restrictions against forcing manufacturers to implement software algorithms strictly to lower remanufacturers' production costs.

- 43. Comment: The regulation as it stands today benefits everyone. It benefits independent repair shops, tool companies, and I think the computer remanufacturers would say they are better off because of this regulation. We believe that we've provided an adequate solution to computer remanufacturers in the form of a low-cost test bench that they can use at a reasonable cost to test these systems. (Alliance)
- 44. <u>Comment</u>: Honda supports the Alliance and AIAM position on the immobilizer/remanufacturer issue. (Honda)
- 45. <u>Comment</u>: Ford supports the Alliance comments relating to the immobilizer/remanufacturer issue. (Ford)
- 46. <u>Comment</u>: Chrysler agrees with the staff's conclusion that the existing service procedure solution is the best regulatory approach to remanufacturer's requests for immobilizer information. (DaimlerChrysler)

Agency Response to Comments #43-46: None required.

47. Comment: The cost of an onboard computer where there's competition is usually \$200 or less. Also, the vehicle manufacturer price and the aftermarket price are getting closer and closer together. That serves to indicate that competition is much more intense in the aftermarket and that vehicle manufacturers are really pushing in the price to try to compete against our industry. If you looked at a Toyota Camry where there's no competition for repairs, the price for an ECU is well over a \$1000. If rebuilders cannot compete in the marketplace, the cost to consumers in maintaining their vehicles when their onboard computers fail is going to be fairly expensive. (AAIA)

- 48. Comment: The bench test idea set forth by vehicle manufacturers proposes that we simulate on-vehicle conditions in a factory environment. Based on the number of keys, modules, and transceivers required, just for Ford alone, we have upwards of 40 different combinations. Seeing that we need three setups per tester to satisfy the ten-minute security feature delay, we are talking about a substantial number just for one manufacturer alone. Furthermore, once vehicle manufacturers change their systems on an ongoing basis, we are also going to have to develop these testing systems on an ongoing basis at substantial cost, depending on the vehicle manufacturer. (Blue Streak Electronics)
- 49. Comment: The costs related to the service-based immobilizer solution would be a little over \$1 million for a remanufacturer. These are initial manpower, system development, and hardware costs. This does not include future costs for training, upgrades, and ongoing maintenance with the multiple different systems we will need to have. These costs will significantly eliminate the value proposition. Once this happens, there will be no more competition for remanufactured onboard computers because only new onboard computers will be available from one source, and prices will go up. (Cardone Industries USA)

Agency Response to Comments #47-49: Based on total cost estimates provided by remanufacturer stakeholders, the ARB staff estimated that the price per remanufactured computer should not increase by more than one to two percent using service-based procedures for initialization. The current price differentials between new computers and those remanufactured by the aftermarket are significantly higher. Therefore, the staff does not believe that aftermarket remanufacturers will lose their ability to compete effectively with original equipment manufacturers despite having to invest in new test equipment necessary to initialize immobilizer equipped computers for testing.

- 50. Comment: Remanufacturers contend that they need regulatory assistance to keep vehicle manufacturers' parts prices in check. While Toyota does have some high prices for onboard computers, it is because the pricing is a function of the cost of quality. It has nothing to do with our competition for market share. It costs more to maintain the quality control so that their failure rate is extremely low. (Toyota)
- 51. <u>Comment</u>: The benefits of allowing computer remanufacturers to avoid a few thousand dollars in investment expense and extra test benches is not worth the risk of a backdoor to get around our anti-theft systems. (GM)
- 52. <u>Comment</u>: We are against rebuilder proposals for vehicle manufacturers to implement a special test mode or dummy calibrations because they add cost and workload burden to manufacturers and provide no other benefit other than for rebuilders. (Ford)

Agency Response to Comments #50-52: The comments are in support of ARB's proposal, which does not require vehicle manufacturers to implement new onboard computer software for purposes of testing remanufactured on-board computers.

53. Comment: It is important to understand the true impact that ECU replacement has on clean air efforts. Statistically speaking, very few emission failures are caused by a failed ECU. While the aftermarket's one-second proposal may reduce testing costs for ECU remanufacturers, statistics from smog check programs indicate that it will have virtually no effect in making the California fleet any cleaner and it will not reduce vehicle owner's repair costs. (Toyota)

Agency Response: While this comment was made in support of ARB's proposals regarding immobilizer information, ARB staff does not necessarily agree with the commentor that on-board computer (a.k.a. "ECU") replacements are rarely emission-related. As discussed above and in the ARB's Staff Report, computer bench test solutions have been identified that will help remanufacturers to competitively continue their business activities without jeopardizing vehicle security. A requirement for manufacturers to implement special test software is not necessary and, in staff's opinion, conflicts with the language of H&SC section 43105.5.

- 54. Comment: AIAM and the Alliance generally support the amendments which further harmonize the ARB service information regulation with the U.S. EPA service information regulation promulgated last year. We also fully support the proposed amendments regarding testing remanufactured on-board computers equipped with immobilizers via the use of generic or manufacturer scan tools that can be used by a remanufacturer to bench test its products using service-based procedures. (AIAM)
- 55. Comment: Problems with immobilizers that remanufacturers have brought up can be easily overcome using existing reinitialization service procedures and tools available to repair facilities today. These procedures can be followed without the need to purchase Ford's specific tools. This is staff's recommendation, which we fully support. (Ford)
- 56. <u>Comment</u>: SB1146 was not intended to facilitate onboard computer remanufacturing. In fact, specific language that addressed the remanufacturing of vehicle computers was actually contained in an earlier draft of SB 1146 but was subsequently removed from the bill when it was adopted. (Ford)
- 57. Comment: Remanufacturers have proposed alternatives that they believe will lessen the burden to remanufacture computers, but they add workload complexity and additional cost to vehicle manufacturers to develop, validate, and implement, and could jeopardize the effectiveness of the immobilizer. These resources simply are not available in light of the already challenging and complex service information regulation we are required to implement. (DaimlerChrysler)

58. Comment: DaimlerChrysler strongly supports the ARB's position regarding remanufacturers, and we firmly believe the information and tools are available today to provide remanufacturers with the ability to remanufacture onboard computers. (DaimlerChrysler)

Agency Response to Comments #54-58: The comments are in support of ARB's proposal, which does not require vehicle manufacturers to implement new onboard computer software for purposes of testing remanufactured on-board computers.

59. Comment: Honda supports the proposed amendments for light-duty vehicles and trucks but continues to be concerned with the anti-theft initialization requirements. We need more lead time to completely change over our electrical architecture on the cars for some of the smaller models we produce. We believe that extending this lead time allowance seems reasonable considering that the 2007 lead time was proposed only two years ago. We do ask that the Board amend the latest proposal to grant us this additional lead time. (Honda)

Agency Response: The ARB agrees that some additional lead time beyond the already allowed 2007 timeframe may be necessary to fully comply with provisions for initialization information availability. Previously, the regulatory language only considered the vehicle security risk associated with the unprotected availability of this information, and not the commentor's stated implications involving changes in certain software/hardware applications or a manufacturer's rollout plan for its vehicle line. Therefore, in the first 15-Day Notice, staff extended the lead time from 2007 to 2009 and additional language was added that now requires motor vehicle manufacturers to also demonstrate that a technical and economic need exists for the additional time.

OTHER COMMENTS

- 60. <u>Comment</u>: Toyota is a strong supporter of the ARB's service information rulemaking and has been since the very beginning. (Toyota)
- 61. Comment: In general, the aftermarket groups represented on the testimony are in support of the regulatory amendments proposed by the ARB in the service information rulemaking. We believe that the Board staff has done a commendable job in implementing SB 1146, and these changes will help make it a more effective regulation. (AAIA)

Agency Response to Comments #60-61: None required.

62. <u>Comment</u>: As a fuel system manufacturer, we need to know the tolerances of motor vehicle manufacturers' emission leak detection systems and their leak test

strategies. This information is necessary to confirm that our fuel systems will meet all applicable emission regulations specified by the ARB. (MGA)

Agency Response: 13 CCR section 1969(d)(2) governs the type of on-board diagnostic system design information that must be made available to covered persons, and includes the types of information identified in the comment. Specifically, for leak detection systems (and all other monitoring strategies), manufacturers must provide a description of the monitoring strategy, the trouble codes associated with the monitor, a description of the conditions under which the monitor is enabled, information on how the monitor is sequenced and how often it runs, the thresholds against which the monitor judges whether a malfunction is present, and information necessary for the covered person to use associated "mode 6" data stored in the on-board computer.

- 63. Comment: We note one error in two places in the regulatory language. In 13 CCR section 1969(c)(11), the definition of "Fair, reasonable, and nondiscriminatory price," and in 13 CCR section 1969(c)(15), the definition of "nondiscriminatory," the phrase "emission-related service information" is used. However, this term is not defined in the regulation. The correct term in each case should be "emission-related motor vehicle information," which is defined in 13 CCR section 1969(c)(7). (AAIA)
- 64. Comment: In 13 CCR section 1969(c)(7), the term "emissions-related motor vehicle information" defines what information must be made available to covered persons. However, 13 CCR sections 1969(c)(11) and (c)(15) use the undefined term "emissions-related motor vehicle service information." The word "service "has to be eliminated from both for the former definition to apply. (AAIA)

Agency Response to Comments #63-64: In response to the comments, both references were modified as suggested in the staff's draft of proposed amendments presented to the Board at the January 22, 2004 hearing. However, staff inadvertently forgot to remove the term "service" from 13 CCR sections 1969(c)(11) and (c)(15). This was subsequently corrected in the ARB's second 15-Day Notice.

65. <u>Comment</u>: It appears that the costs of website access for car companies vary widely, especially for long term access. We urge staff to closely monitor website subscription prices, as not to make it cost prohibitive to the aftermarket. (AAIA)

Agency Response: Because there are many factors that can go into subscription pricing strategies for access to motor vehicle manufacturers' websites, it is not unexpected that pricing may vary among manufacturers. Variation in pricing does not necessarily indicate that any particular price is not "fair, reasonable, or nondiscriminatory." The regulation lists the factors that are to be considered in evaluating the appropriateness of pricing strategies in 13 CCR section 1969(a)(11). The ARB will continue to audit manufacturers' compliance with pricing and content requirements pursuant to 13 CCR section 1969(i)(2). Should

- a covered person believe that a manufacturer has violated on or more of the requirements of the regulation, he or she may request the ARB to investigate the matter under enforcement provision provided in 13 CCR section 1969(j)(3).
- 66. Comment: Manufacturers should not be required to identify and describe the training materials that are not appropriate for self-study, and therefore, not posted on Internet websites. The usage and material content can vary from session to session. It is unreasonable to expect manufacturers to post these dynamically changing materials on their websites and to subject the manufacturer's determination of the appropriateness of training materials for self-study to Executive Officer review and approval each time they are withheld. There should instead be a presumption that any training materials that are solely distributed to attendees of manufacturer training are for use within the context of the training session and are not appropriate for self-study. The regulation already includes compliance procedures for ensuring that covered persons have access to necessary information. The proposed changes to 13 CCR sections 1969(d)(1) and (e)(2)(G) add an unnecessary and burdensome step and should be eliminated. (EMA)

Agency Response: The ARB included language in the regulation that would permit manufacturers to withhold from their websites training information that would not be useful to covered persons outside of manufacturers' training classrooms. This provision was added to prevent a manufacturer from having to format, post, and manage information that covered persons won't want to buy or won't be happy with if they do buy it. However, in order to ensure that materials are not improperly withheld under this provision, it is important for manufacturers to list on their websites the materials that are being withheld. Without such a listing, neither the ARB nor covered persons can easily question a manufacturer's determination on the usefulness of the materials, and thus covered persons' rights under the Health and Safety Code and the regulations cannot be adequately protected. Although some resources will be necessary for the list to be created and maintained by the manufacturers, the burden should be less than that necessary for the manufacturer to make available subject training materials. Ultimately, manufacturers have the choice of posting a list of withheld materials or posting the materials themselves.

67. Comment: The final regulation would impose a new and unreasonable restriction on the training materials that SB 1146 specifically states must be made available for purchase. In 13 CCR sections 1969(d)(1) and (e)(2)(G), the language states that only training materials "useful for self-study outside a motor vehicle manufacturer's training classroom" must be made available. This adds a subjective element to the requirement. Allowing motor vehicle manufacturers, whose dealers compete with independents, to make the decision as to what is useful is an invitation to abuse. There is also no need to restrict access because the regulation requires independents to pay a fair and reasonable price for training materials. (AAIA)

68. Comment: We question the restriction on training materials that limited the materials that had to be made available to those "useful for self-study outside a motor vehicle manufacturer's training classroom." This language does not comply with the requirements of SB 1146 and appears to create a loophole that will allow significant amounts of training materials to be withheld from the independent aftermarket. The final regulation does not eliminate this restriction nor our concerns, but attempts to soften its potential adverse impact by requiring manufacturers to list on their websites any training materials they are withholding for this reason so that the ARB could compel disclosure if it found the manufacturer's decision to be erroneous. We will wait to see how this system actually works before deciding whether it is sufficient or not. (Heavy Vehicle Maintenance Group)

Agency Response to Comments #67-68: The ARB added the provision for manufacturers to withhold training materials that have no self-study value in response to industry concerns. The manufacturers stated that some of the materials they provide to students taking training classes would be of no value to covered persons outside of the training room because most or all of the pages only contain outlines or blanks lines that are filled in with information obtained during the class. Unlike the U.S. EPA, the ARB's regulation does not require manufacturers to make training classes available to covered persons, be it by tape, satellite transmission, or other means. Therefore, the manufacturers are concerned about the burden of having to reproduce, stock, and make available materials that few if any will purchase. They further believe that those who do purchase the materials will be unhappy when they receive them, realizing how little value they provide. This will result in a further burden on manufacturers in having to handle customer dissatisfaction issues.

Nonetheless, in response to concerns about motor vehicle manufacturers possibly using the provision to inappropriately restrict access to training materials that are of value to the aftermarket, the ARB staff has amended the regulatory language in its second 15-Day Notice. A manufacturer would be required, under the new language, to list and briefly describe on their websites those training materials that are not available due to a determination that they would not be useful as stand-alone documents. This would provide an opportunity for covered persons to express concerns about any manufacturers' determinations, which would also be subject to Executive Officer approval. Staff believes that this change will satisfactorily balance the concerns of both the manufacturers and the aftermarket.

69. Comment: The following statement appears in the ARB's second 15-Day Notice: "Manufacturers would not have to list text-based training materials that are sold only in a bundle with associated media (e.g., videocassettes or compact discs)." We are uncertain what this language means and request that the ARB further clarify it. We strongly object if it means that manufacturers neither have to provide any training materials that are bundled with associated media nor disclose those materials on their websites. (Heavy Vehicle Maintenance Group)

Agency Response: The intent of the aforementioned statement in the notice was not meant to give motor vehicle manufacturers the option to deny access to training materials bundled with related media or disclosure on service information websites. On the contrary, the statement was added to emphasize the importance of such materials. In other words, it is simply conveying that bundled training materials would not have be listed on a manufacturer's website as not useful for self-study because they should already be available for purchase elsewhere in the website.

70. Comment: SB 1146 restricts the right of covered persons to specific algorithms, software code and calibration data unless it is available to franchised dealerships through a generic scan tool. However, 13 CCR section 1969(d)(2)(H) now states that this information will be made available to covered persons only "upon request." This language has the effect of denying the information to covered persons because they will seldom know what to ask for. This information is uniquely within the knowledge of the manufacturers and to ask independents to figure out what they need and then learn it is available to dealers is counterproductive and conflicts with the intent of SB 1146. (AAIA)

Agency Response: The staff agreed with this comment and revised the language in its second 15-Day Notice to delete the phrase "upon request." It was originally included to indicate that covered persons are indeed permitted to request and purchase such information. It was not intended to allow motor vehicle manufacturers the option of not listing the information on their websites. Thus, to minimize confusion, the phrase was removed.

- 71. Comment: The term "franchised dealerships and authorized service networks" was changed in 13 CCR sections 1969(c)(15), (d)(1), (d)(2)(H), (d)(4), (f)(2), and (f)(4). These changes allow the manufacturer to deny providing some information or other benefit to covered persons if it does not provide it to both dealerships and service networks. The regulation should say "franchised dealerships or authorized service networks" except in 13 CCR section 1969(c)(15) and the second time it is used on 13 CCR section 1969(f)(2), the phrase "whichever occurs first" should be included afterward. (AAIA)
- 72. Comment: In section 1969(e)(2)(F) of the regulation, updated information must be made available to covered persons at the same time such information is made available to franchised dealerships or authorized service networks. It is unclear from this language whether a manufacturer who has both dealers and an authorized service network has to make the information available when he makes it available to one of these groups or only when he makes it available to both. The language needs to be modified to make the information available at the time it is available to franchised dealerships or authorized service networks "whichever comes first." (AAIA)

Agency Response to Comments #71-72: The intent of staff's original modification to use the term "and" rather than "or" was to ensure that motor vehicle manufacturers provide the aftermarket industry with access to all emission-related service information that is available to both dealers and service networks. However, after the first 15-Day Notice was issued, the aftermarket believed that the term only allowed the aftermarket to access information and tools when both dealers and service networks also had similar access. Under this interpretation, if only one of these parties had access to the information and tools, then the aftermarket would not be permitted to purchase it until the other party also gained access. The staff subsequently concurred with this argument and reinstated the use of the term "or" for all affected portions of the regulatory language as suggested by the commentor.

73. Comment: In section 1969(e)(4) of the regulation (as modified in the first 15-Day Notice), the addition of the phrase "relative to a range of time periods" leaves question whether the range of time periods could be considered a requirement, irrespective of whether Caterpillar wishes to only sell yearly subscriptions at a price that is well below competitors' prices for a one-month subscription. (Caterpillar)

Agency Response: Staff believes the use of the phrase "relative to a range of time periods" permits manufacturers to establish a single price for a website subscription if that price is fair, reasonable and non-discriminatory when considered over a range of time periods. Therefore, considering the commentor's example, if the price for a one year subscription is so low that it is also clearly fair, reasonable and nondiscriminatory for a covered person that only wants one month of access, the manufacturer would not be required to separately offer a one-month subscription.

74. Comment: Automakers believe that additional lead time is necessary to comply with the standardized reprogramming requirements contained in the new version of SAE J2534, "Recommended Practice for Pass-thru Vehicle Programming," September 2004. The additional changed in SAE J2534 will require all automakers, as well as all SAE J2534 device manufacturers, to make significant software changes to their Application Programming Interface. These changes cannot be made within 90 days after the Secretary of State approves the amendment as required in 13 CCR section 1969(a)(2). To allow orderly implementation of the new software, it is essential that the ARB provide 180 days to comply with SAE J2534. (Alliance/AIAM)

Agency Response: In response to the comment, staff, in the second 15-Day Notice, has revised 13 CCR section 1969(a)(2) to allow 180 days after the effective date of the amended regulation for compliance with the provisions of SAE J2534. All other amendments are still subject to the proposed 90-day timeframe.

75. Comment: Language added to 13 CCR section 1969(e)(2)(B) to define direct online access is ambiguous. The phrase "for online viewing and/or file downloading" seems to make downloading a requirement rather than an option. Staff had earlier indicated that it is indeed an option, and thus we subsequently request that the ARB include clarifying language in the regulatory text or otherwise in the regulatory support documents making this point clear. (Alliance/AIAM)

<u>Agency Response</u>: Staff believes the use of the term "and/or" indicates clearly that motor vehicle manufacturers have the choice to provide service information by either online viewing, file downloading, or both. The choice to use file downloading is done at the manufacturer's option and is not a requirement as long as online viewing is provided to covered persons.