

PUBLIC MEETING AGENDA

November 17, 2011

LOCATION:

Air Resources Board

Byron Sher Auditorium, Second Floor

1001 I Street

Sacramento, California 95814

http://www.calepa.ca.gov/EPAbldg/location.htm

This facility is accessible by public transit. For transit

information, call (916) 321-BUSS, website:

http://www.sacrt.com

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TO SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING

GO TO:

http://www.arb.ca.gov/lispub/comm/bclist.php

November 17, 2011

9:00 a.m.

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item

11-9-2: Public Hearing to Consider California Certification Procedures for Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years

Staff will present to the Air Resources Board (ARB or Board) proposed regulations and certification procedures for engine packages intended for use in specially constructed vehicles, including kit cars. Certifying engine packages using the new regulations and procedures would be optional for engine manufacturers. The proposed regulations would allow hobbyists to choose a certified low emitting new engine package instead of the current practice of utilizing new uncontrolled crate engines or uncontrolled rebuilt used engines.

11-9-3: Public Meeting to Hear a Report to the Board on ARB's Policies and Actions for Environmental Justice

Staff will present to the Board an update on the implementation of ARB's environmental justice policies and actions over the last ten years.

11-9-4: Public Meeting to Hear an Update on 2011 Legislation

Staff will present to the Board a review of air quality and climate change legislation from the 2011-2012 Legislative Session.

11-9-5: Public Meeting to Hear a Report to the Board on ARB's Enforcement Penalty Policy

Staff will present to the Board the final Enforcement Penalty Policy that describes ARB's process for assigning a penalty to a violation of an ARB enforced regulation.

CLOSED SESSION – LITIGATION

The Board will hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation:

Pacific Merchant Shipping Association v. Goldstene, U.S. District Court (E.D. Cal. Sacramento), Case No. 2:09-CV-01151-MCE-EFB.

POET, LLC, et al. v. Goldstene, et al., Superior Court of California (Fresno County), Case No. 09CECG04850.

Rocky Mountain Farmers Union, et al. v. Goldstene, U.S. District Court (E.D. Cal. Fresno), Case No. 1:09-CV-02234-LJO-DLB.

National Petrochemical & Refiners Association, et al. v. Goldstene, et al., U.S. District Court (E.D. Cal. Fresno) Case No. 1:10-CV-00163-AWI-GSA.

Association of Irritated Residents, et al. v. California Air Resources Board, Superior Court of California (San Francisco County), Case No. CPF-09-509562.

Association of Irritated Residents, et al. v. U.S. E.P.A., 2011 WL 310357 (C.A.9), (Feb. 2, 2011).

California Dump Truck Owners Association v. California Air Resources Board, U.S. District Court (E.D. Cal. Sacramento) Case No. 2:11-CV-00384-MCE-GGH.

Engine Manufacturers Association v. California Air Resources Board, Sacramento Superior Court, Case No. 34-2010-00082774.

OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST

Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.

OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD

Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak.

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ONLINE SIGN-UP:

You can sign up online in advance to speak at the Board meeting when you submit an electronic Board item comment. For more information go to:

http://www.arb.ca.gov/board/online-signup.htm

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERK OF THE BOARD:

OFFICE: (916) 322-5594
1001 I Street, Floor 23, Sacramento, California 95814
ARB Homepage: www.arb.ca.gov

SPECIAL ACCOMMODATION REQUEST

Special accommodation or language needs can be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 10 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Comodidad especial o necesidad de otro idioma puede ser proveído para alguna de las siguientes:

- Un intérprete que esté disponible en la audiencia.
- Documentos disponibles en un formato alterno u otro idioma;
- Una acomodación razonable relacionados con una incapacidad.

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envíe un fax a (916) 322-3928 lo más pronto posible, pero no menos de 10 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

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PUBLIC MEETING AGENDA

LOCATION:

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TITLE 13. CALIFORNIA AIR RESOURCES BOARD

NOTICE OF PUBLIC HEARING TO CONSIDER CALIFORNIA CERTIFICATION PROCEDURES FOR LIGHT-DUTY ENGINE PACKAGES FOR USE IN LIGHT-DUTY SPECIALLY CONSTRUCTED VEHICLES FOR 2012 AND SUBSEQUENT MODEL YEARS

The Air Resources Board (ARB or Board) will conduct a public hearing at the time and place noted below to consider the adoption of a regulation and related certification procedures for new engines for use in light-duty specially constructed vehicles.

DATE:

November 17, 2011

TIME:

9:00 a.m.

PLACE:

California Environmental Protection Agency

Air Resources Board Byron Sher Auditorium

1001 | Street

Sacramento, California 95814

This item may be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., Thursday, November 17, 2011, and may continue at 8:30 a.m., on Friday, November 18, 2011. This item may not be considered until Friday, November 18, 2011. Please consult the agenda for the hearing, which will be available at least 10 days before Thursday, November 17, 2011, to determine the day on which this item will be considered.

INFORMATIVE DIGEST OF PROPOSED ACTION AND POLICY STATEMENT OVERVIEW

<u>Sections Affected</u>: Proposed adoption of California Code of Regulations, title 13, sections 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, and 2218, which incorporate by reference "California Certification Procedures for Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years."

The following documents are also incorporated by reference:

- "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" (last amended September 27, 2010)
- "California Evaporative Emissions Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles" (last amended December 2, 2009)
- "Procedures for Reporting Failure of Emission-Related Components," (last amended December 3, 2009)

Background:

The California Air Resources Board (ARB or the Board) staff is proposing an optional regulation and associated certification procedures for new light-duty engines for use in specially constructed vehicles (SPCNS, such as kit cars). The proposed regulation and procedures would ensure that certified engine packages, when placed into any SPCNS, would meet new vehicle emission standards, and be able to meet Smog Check requirements.

The proposed regulation and procedures would not impose any requirements on engine manufacturers or hobbyists. Certifying engine packages via the new regulation and procedures would be optional for engine manufacturers, and hobbyists would not be required to choose purchase or utilize certified engine packages.

SPCNSs are an integral part of California's car culture. Kit car hobbyists often use uncontrolled crate engines, and register their vehicles by utilizing a provision in the California Health and Safety Code, section 44017.4 (enacted by Senate Bill 100 (SB 100) 2001, Johannessen), which allows a hobbyist to choose the model year for their vehicle and thereby exempt their vehicle from Smog Check requirements. Staff believes the proposed regulation and procedures would provide hobbyists a low emitting option when choosing an engine for their SPCNS. Staff's proposal will not affect the current registration process for SPCNSs, nor change the 500 vehicle limit or model year assignment process allowed under SB 100.

The proposed regulation and certification procedures would require certified engine packages to meet current Low Emission Vehicle (LEV II) exhaust and evaporative standards. To receive certification, manufacturers would be required to demonstrate emissions compliance on a worst-case vehicle. The engine package would be required to come with an engine and controller, including software and calibration to ensure the certified engine package remains as low-emitting as possible. Additionally, the package would be required to come with exhaust and evaporative emission components such as intake and exhaust manifolds, engine controller, catalytic converter, an evaporative canister and detailed instructions for the proper installation of the package.

Staff is also proposing to create a system of checks and balances for shops that aid hobbyists in installing these certified engine packages into their vehicles. Hobbyists would not be required to have an installer install their engines. However, if a hobbyist were to choose that route, the installer would be required to warrant the engine's proper installation, and maintain a paper trail on each vehicle.

COMPARABLE FEDERAL REGULATIONS

The Federal Environmental Protection Agency's (U.S. EPA) does not have regulations applicable to motor vehicle engines used in SPCNSs. However, the U.S. EPA's current kit car policy, (available at http://www.epa.gov/oms/imports/kitcar.htm) issued on

July 8, 1994, clarifies U.S. EPA's policy concerning the regulation of imported and domestically produced kit cars and kit car packages.

U.S. EPA's policy only applies to kits or assembled kit cars. It provides that the engine of a kit car must be used or used and rebuilt, in order for U.S. EPA to consider an assembled kit car or complete kit car package to be a rebuilt vehicle of a previously certified configuration that is covered by the certificate of conformity that U.S. EPA issued for that certified configuration.

However, U.S. EPA does not have a mechanism for preventing kit cars not in compliance with their policy from being registered and driven. Hence, kit cars not complying with U.S. EPA's policy are regularly registered in California and other states.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSONS

ARB staff has prepared a staff report: Initial Statement of Reasons (ISOR) for the proposed regulatory action, which includes a summary of the economic and environmental impacts of the proposal. The report is entitled: "Proposed Regulation and Certification Procedures For Light-Duty Engine Packages For Use In Light-Duty Specially Constructed Vehicles For 2012 and Subsequent Model Years."

Copies of the ISOR and the full text of the proposed regulatory language may be accessed on ARB's website listed below, or may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, (916) 322-2990, on Wednesday, September 28, 2011. Upon its completion, the Final Statement of Reasons (FSOR) will be available and copies may be requested from the agency contact persons in this notice, or may be accessed on ARB's website listed below.

Inquiries concerning the substance of the proposed regulation may be directed to the designated agency contact persons, Ms. Anna Wong, Air Pollution Specialist, (916) 323-2410, or Ms. Kimberly Heroy-Rogalski, Manager, (916) 327-2200.

Further, the agency representative and designated back-up contact persons, to whom non-substantive inquiries concerning the proposed administrative action may be directed are Ms. Lori Andreoni, Manager, Board Administration and Regulatory Coordination Unit, (916) 322-4011, or Ms. Amy Whiting, Regulations Coordinator, (916) 322-6533. The Board staff has compiled a record for this rulemaking action, which includes all the information upon which the proposal is based. This material is available for inspection upon request to the contact persons.

This notice, the ISOR and all subsequent regulatory documents, including the FSOR, when completed, are available on ARB's website for this rulemaking at www.arb.ca.gov/regact/2011/spcn11/spcn11.htm

COSTS TO PUBLIC AGENCIES AND TO BUSINESSES AND PERSONS AFFECTED

The determinations of the Board's Executive Officer concerning the costs or savings necessarily incurred by public agencies and private persons and businesses in reasonable compliance with the proposed regulations are presented below.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action would not create substantial costs or savings to any State agency or in federal funding to the State, costs or mandate to any local agency or school district, whether or not reimbursable by the State pursuant to Government Code, title 2, division 4, part 7 (commencing with section 17500), or other nondiscretionary cost or savings to State or local agencies.

In developing this regulatory proposal, ARB staff evaluated the potential economic impacts on representative private persons or businesses. It is unlikely a representative private person or business would necessarily incur costs in reasonable compliance with the proposed action. Staff's proposal is an optional certification procedure for engine manufacturers. Staff expects most manufacturers choosing to certify engine packages via the new regulation and procedures to create engine packages based on previously certified vehicles, which would minimize the need for additional certification testing and minimize such certification costs. To the extent any certification costs are passed onto the consumer, end users would not be required to purchase these engines.

The Executive Officer has made an initial determination that the proposed regulatory action would not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states, or on representative private persons.

In accordance with Government Code section 11346.3, the Executive Officer has determined that the proposed regulatory action would not affect the creation or elimination of jobs within the State of California, the creation of new businesses or elimination of existing businesses within the State of California, or the expansion of businesses currently doing business within the State of California. A detailed assessment of the economic impacts of the proposed regulatory action can be found in the ISOR.

The Executive Officer has also determined, pursuant to California Code of Regulations, title 1, section 4, that the proposed regulatory action could potentially affect small businesses, especially installers of certified engine packages into SPCNSs. Installers who choose to install these certified engine packages would incur costs due to increased reporting requirements and providing a one year/12,000 mile warranty.

In accordance with Government Code sections 11346.3(c) and 11346.5(a)(11), the Executive Officer has found that the reporting requirements of the regulation which apply to businesses are necessary for the health, safety, and welfare of the people of the State of California. Engine manufacturers certifying engine packages for SPCNSs

through staff's proposed procedure would need to report the number of engines sold each year in California. Additionally, shops that install these certified engine packages into SPCNSs would be required to report to ARB the number of certified engine packages installed in SPCNSs each year.

Before taking final action on the proposed regulatory action, the Board must determine that no reasonable alternative considered by the Board, or that has otherwise been identified and brought to the attention of the Board, would be more effective in carrying out the purpose for which the action is proposed, or would be as effective and less burdensome to affected private persons than the proposed action.

SUBMITTAL OF COMMENTS

Interested members of the public may also present comments orally or in writing at the meeting, and comments may be submitted by postal mail or by electronic submittal before the meeting. The public comment period for this regulatory action will begin on Monday, October 3, 2011. To be considered by the Board, written comments, not physically submitted at the meeting, must be submitted on or after Monday, October 3, 2011 and received no later than 12:00 noon on Wednesday, November 16, 2011, and must be addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board 1001 I Street, Sacramento, California 95814

Electronic submittal: http://www.arb.ca.gov/lispub/comm/bclist.php

New Feature

You can now sign up online in advance to speak at the Board meeting when you submit an electronic board item comment. For more information go to: http://www.arb.ca.gov/board/online-signup.htm.

Please note that under the California Public Records Act (Gov. Code, § 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request. Additionally, this information may become available via Google, Yahoo, and any other search engines.

ARB requests that written and email statements on this item be filed at least 10 days prior to the hearing so that ARB staff and Board members have additional time to consider each comment. The Board encourages members of the public to bring to the attention of staff in advance of the hearing any suggestions for modification of the proposed regulatory action.

Additionally, the Board requests but does not require that persons who submit written comments to the Board reference the title of the proposal in their comments to facilitate review.

STATUTORY AUTHORITY AND REFERENCES

This regulatory action is proposed under the authority granted in Health and Safety Code, sections 39600, 43000, 43100, 43101, 43102, 43104, 43105. This action is proposed to implement, interpret, and make specific Health and Safety Code sections 39002, 39003, 43000, 43013, 43100, 43101, 43102, 43104, 43105, 43106, 43205, and Vehicle Code section 580.

HEARING PROCEDURES

The public hearing will be conducted in accordance with the California Administrative Procedure Act, Government Code, title 2, division 3, part 1, chapter 3.5 (commencing with section 11340).

Following the public hearing, the Board may adopt the regulatory language as originally proposed, or with non-substantial or grammatical modifications. The Board may also adopt the proposed regulatory language with other modifications if the text as modified is sufficiently related to the originally proposed text that the public was adequately placed on notice and that the regulatory language as modified could result from the proposed regulatory action; in such event, the full regulatory text, with the modifications clearly indicated, will be made available to the public, for written comment, at least 15-days before it is adopted.

The public may request a copy of the modified regulatory text from ARB's Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, First Floor, Sacramento, California, 95814, (916) 322-2990.

SPECIAL ACCOMMODATION REQUEST

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- Documentos disponibles en un formato alterno (por decir, sistema Braille, o en impresión grande) u otro idioma.
- Una acomodación razonable relacionados con una incapacidad.

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CALIFORNIA AIR RESOURCES BOARD

James N. Goldstene Executive Officer

Date: September 20, 2011

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.arb.ca.gov

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD

STAFF REPORT: INITIAL STATEMENT OF REASONS

PROPOSED REGULATIONS AND CERTIFICATION PROCEDURES FOR LIGHT-DUTY ENGINE PACKAGES FOR USE IN LIGHT-DUTY SPECIALLY CONSTRUCTED VEHICLES FOR 2012 AND SUBSEQUENT MODEL YEARS



This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources. Board, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.

Date of Release:

October 4, 2011

Scheduled for Consideration: November 17-18, 2011

EXECUTIVE SUMMARY

The California Air Resources Board (ARB or the Board) staff is proposing optional certification regulations and procedures for new light-duty engines for use in specially constructed vehicles (SPCNSs, such as kit cars). The proposed regulations and procedures would create a path for manufacturers to certify engine packages, that when placed into an SPCNS, would meet new vehicle emission standards, and enable the vehicle to meet Smog Check requirements.

The proposed regulations and procedures would not impose any new mandated requirements on engine manufacturers or hobbyists. Certifying engine packages via the new regulations and procedures would be optional for engine manufacturers, and provide hobbyists an alternative to choose certified low emitting engine packages.

SPCNSs are an integral part of California's car culture. Kit car hobbyists often use uncontrolled crate engines, and register their vehicles by utilizing a provision in the California Health and Safety Code, section 44017.4 (enacted by Senate Bill 100 (SB 100), Johannessen), which allows a hobbyist to choose the model year for their vehicle and thereby exempt their vehicle from Smog Check requirements. Staff believes the proposed certification regulations and procedures would help give hobbyists a low emitting option when choosing an engine for their SPCNS. Staff's proposal will not affect the current registration process for SPCNSs, nor change the 500 vehicle limit or model year assignment process allowed under SB 100. Staff's proposal will, however, allow SPCNS registered after the 500 vehicle limit is exceeded to be legally registered and biennially Smog certified.

The proposed certification regulations and procedures would require certified engine packages to meet current Low Emission Vehicle (LEV II) exhaust and evaporative standards. To receive certification, manufacturers would be required to demonstrate emissions compliance on a worst-case vehicle. The engine package would be required to come with an engine and controller, including software and calibration to ensure the certified engine package remains as low-emitting as possible. Additionally, the package would be required to come with exhaust and evaporative emission components such as intake and exhaust manifolds, engine controller, catalytic converter, an evaporative canister and detailed instructions for the proper installation of the package.

Staff is also proposing to create a system of checks and balances for shops that aid hobbyists in installing these certified engine packages into their vehicles. Hobbyists would not be required to have an installer install their engines. However, if a hobbyist were to choose that route, the installer would be required to warrant the engine's proper installation, and maintain a paper trail on each vehicle.

The proposed optional certification regulations and procedures will likely result in criteria pollutant benefits in California. According to Bureau of Auto Repair (BAR) Smog Check data, on a per mile basis, SPCNSs today can pollute on average 30 times more (oxides of nitrogen and hydrocarbons) than a vehicle meeting current vehicle emission standards. If more kit car hobbyists begin to choose low-emitting certified engine packages as a result of this rulemaking, this could significantly lower SPCNS emissions, on a per mile basis, in the future.

In developing the proposed certification regulations and procedures, staff held two public workshops (May and July, 2011) and worked closely with stakeholders, including General Motors, Specialty Equipment Manufacturers Association (SEMA), Ford, BAR, Department of Motor Vehicles (DMV), the California Highway Patrol (CHP), and various car clubs and their members.

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Appendix A: Proposed Regulation Order

Appendix B: Proposed Certification Procedures

Appendix C: Cost Spreadsheet

Acronyms ARB Air Resources Board ASM Acceleration Simulation Model BAR____Bureau of Automotive Repair CCR____California Code of Regulations CEQA California Environmental Quality Act CHP California Highway Patrol CO____Carbon Monoxide DMV_____Department of Motor Vehicles E-ROD Emissions-compliant hot rod ECM Engine Control Module EGR____Exhaust Gas Recirculation EMFAC Emissions Factor – ARB's emissions model EO____Executive Order GVWR____Gross Vehicle Weight Ratio HC Hydrocarbons LEV II Low Emission Vehicle program (as adopted in 1998) MIL____Malfunction Indicator Light N/V Engine Speed to Vehicle Speed Ratio NOx____Oxides of Nitrogen OBD II On-Board Diagnostics (as adopted in 1996) ORVR On-Board Vapor Recovery PCV____Purge Control Valve REG 256: Statement of Facts Application (provided by DMV at the following link: http://dmv.ca.gov/forms/reg/reg256.pdf) REG 343 Title of Registration Application (provided by DMV at the following link: http://dmv.ca.gov/forms/reg/reg343.pdf) REG 5036 Statement of Construction Application (provided by DMV at the following link: http://dmv.ca.gov/forms/reg/reg5036.pdf) SAE Society of Automotive Engineers SB____Senate Bill SEMA Specialty Equipment Market Association SPCNS____Specially Constructed Vehicle U.S. EPA United States Environmental Protection Agency VECI_____Vehicle Emission Control Identification VIN Vehicle Identification Number

I. INTRODUCTION

This Staff Report: Initial Statement of Reasons for Proposed Rulemaking (Staff Report) provides the basis for the California Air Resources Board (ARB or the Board) staff's proposal to adopt certification requirements for new light-duty vehicle engines for use in specially constructed vehicles (SPCNSs).

ARB currently certifies engines for medium-duty, heavy-duty, motorcycle, and off-road applications. Other than through aftermarket parts exemptions for replacement engines, there is current no certification process for new light-duty engines. Instead, ARB evaluates entire light-duty vehicles for certification. A popular application for light-duty engines (often called crate engines) is in SPCNSs, which include kit cars.

Creating an optional certification path for low-emitting engine packages for use in SPCNSs could result in emission benefits compared to existing SPCNS practices. Creating such a certification path would enable vehicle manufacturers to use an engine from a currently certified vehicle to create a low-emitting engine package for use in SPCNSs, as well as open the possibility for manufacturers to develop engines specifically for SPCNSs.

II. BACKGROUND

According to the California Vehicle Code 580 definition, an SPCNS is a vehicle built for private use, not for resale, and not constructed by a licensed manufacturer or remanufacturer. An SPCNS may be built from (1) a kit; (2) new or used, or a combination of new and used, parts; or (3) a vehicle reported for dismantling, as required by Vehicle Code Section 5500 or 11520, which when reconstructed does not resemble the original make of the vehicle dismantled. An SPCNS is not a vehicle that has been repaired or restored to its original design by replacing parts. An example of an SPCNS is a Factory Five manufactured Ford Shelby Cobra Replica. SPCNSs do not include restorations of actual vintage vehicles, such as an old vehicle rebuilt to its former specifications.

Traditionally, SPCNSs have been a hobby-driven market. Hobbyists who build SPCNSs have passion for their vehicles, and consider the cars they build an art form. There are thousands of SPCNSs registered in California, with many more being built in garages and shops, and they are an integral part of California's car culture.

Because many hobbyists building SPCNSs desire to replicate older vehicles, they may use actual uncontrolled engines removed from old vehicles or new uncontrolled crate

engines intended to be similar to those from older vehicles. In addition, hobbyists also use new uncontrolled crate engines as the powerplant in their SPCNSs for improved performance and reliability over older, used engines. Therefore, SPCNSs are often considered uncontrolled emissions vehicles, or uncontrolled vehicles. An uncontrolled vehicle is a vehicle manufactured before emission control regulations took effect. An uncontrolled vehicle can emit up to 200 times more emissions than a vehicle meeting current emission standards.

Health and Safety Code, section 43102, states all new vehicles must meet emission standards. Vehicle Code, section 4000, requires all vehicles to be registered in California. New SPCNSs present numerous unique issues regarding both of the aforementioned requirements. The following sections describe the unique nature of SPCNSs related to these two requirements.

A. Emission Certification for Light-Duty Vehicles

In order for any new vehicle to be sold in California, the vehicle must first be certified to ARB's current emission standards. Certification for light-duty vehicles is granted annually to individual engine families and is good for one model year. Light-duty vehicle emission certification is based on the entire vehicle's emissions, including evaporative emissions, not just the vehicle's engine emissions. Engines for medium- and heavy-duty vehicles, as well as engines for off-road vehicle applications, can be certified separately from the vehicle chassis. For light-duty certification, certification is completed through durability and emissions testing of a certification vehicle (a vehicle that represents the planned production vehicle). That is, manufacturers must test certification vehicles that are equipped with specific engines, transmissions, and emission control systems to demonstrate that their vehicles meet applicable certification requirements, including not emitting above specified levels of exhaust and evaporative emissions for the vehicle's useful life, and comply with on-board diagnostic systems and anti-tampering requirements, etc.

Light-duty manufacturers may apply for aftermarket exemptions for engines intended for engine changes and engine replacements if they differ from the originally certified engine configuration. However, the engines obtaining aftermarket exemptions are typically limited to older vehicles. Aftermarket exemption means the part exempted does not make emissions worse, as explained further below.

A vehicle's engine and transmission configuration can have a dramatic effect on a vehicle's emissions. New SPCNSs present unique challenges regarding emissions compliance. Unlike production vehicles, that are equipped with known configurations of engine, transmission, and emission control system, SPCNSs may be equipped with

¹ Health and Safety Code, section 43102

components from various manufacturers in a multitude of configurations. For example, a hobbyist is allowed, under existing law, to produce an SPCNS that incorporates an engine from a California-certified Ford light-duty truck mated with a Chevrolet transmission in a Chrysler truck chassis. Because this configuration has never been test by any one manufacturer, nor ARB, nor the United Stated Environmental Protection Agency (U.S. EPA), it is impossible to authoritatively determine the SPCNS's emission levels.

Aftermarket Parts Exemption for New Light-Duty Engines

In 2009, General Motors approached ARB with a new engine package created from their certified 2010 Camaro, called the emissions compliant hot rod (E-ROD). General Motors requested ARB approve the new engine package for sale in new kit cars. However, there were no provisions in the current new vehicle emission control regulations that would allow ARB to certify the engine package. General Motors moved forward and introduced the E-ROD at the Specialty Equipment Manufacturers Association (SEMA) show in November 2009 with the marketing campaign focusing on emissions compliance and performance. In 2010, General Motors again approached ARB to consider alternatives for E-ROD engine package as an engine change. ARB was able to certify the engine package through an aftermarket parts exemption; however the engine package was limited to installation in 1995 and older model year vehicles, and requires complete removal of the stock engine, including its exhaust and evaporative canister and replacement with the E-ROD engine package.²

ARB treats SPCNSs equipped with such engine packages as engine changes. ARB and BAR's engine change policy, consistent with California Vehicle Code section 27156, allows engine changes to occur, as long as the change does not increase pollution from the vehicle. The engine must be from the same or newer model year than the vehicle and from the same type of vehicle based on weight (i.e. passenger car, heavy-duty truck, etc.). All emissions control equipment must remain on the installed engine. After an engine change, vehicles must first be inspected by a state referee station. The vehicle will be inspected to ensure that all the equipment required is in place, and the vehicle will be emissions tested subject to the specifications of the installed engine.

ARB has issued General Motors aftermarket parts exemptions for two of its engine kits:

- 1. LC9-5.3L V8 E-ROD Kit (derived from a 2012 federally certified truck engine)³
- 2. LS3-6.2L V8 E-ROD Kit (derived from a 2011 CA certified Camaro LS 3 engine)⁴

² 1996 and new model year vehicles are required to have a full OBD II system. The E-ROD engine package comes with an incomplete OBD II system, and therefore cannot be installed in OBD II compliant vehicles, which would be any 1996 and newer model year vehicles.

³ ARB, 2011. Executive Order D-126-31. http://arb.ca.gov/msprog/aftermkt/devices/eo/D-126-31.pdf Signed July 2011.

Both are complete engine and emission control packages designed to be engine changes for all 1995 and older passenger cars and trucks with up to 6500 lbs. test weight (7200 lbs. gross vehicle weight rating, or GVWR). The kits include modifications to the original engine control module (ECM) calibration, exhaust system, evaporative system, and air intake system. The kit is also equipped with a fully functioning on-board diagnostic (OBD II) system except for the diagnostics related to the evaporative system and transmission. The stock vehicle check engine light is retained or needs to be added for older vehicles that were not originally equipped with a check engine light in the dashboard. The exhaust system, catalytic converters and oxygen sensors must be installed in the location/orientation as prescribed in the installation instructions provided with the kit.

B. New Vehicle Registration

An owner of a new certified light-duty vehicle must register its vehicle with the Department of Motor Vehicles (DMV) in order to drive it legally on the road in California.

SPCNS Registration Process

SPCNSs are typically homemade, therefore making them difficult to register through California's typical new vehicle registration process. These difficulties include the vehicle lacking a model year and vehicle identification number (VIN), both of which are essential for tracking the vehicle throughout its life and emissions compliance. Due to the unique nature of SPCNS, the DMV, the Bureau of Automotive Repair (BAR), and the California Highway Patrol (CHP) created an SPCNS registration process to address these issues, which greatly differs from typical new vehicle registration. A diagram of the current registration process (simplified) is shown in Figure 1.

⁴ ARB, 2010. Executive Order D-126-30. http://arb.ca.gov/msprog/aftermkt/devices/eo/D-126-30.pdf Signed October 2011.

Figure 1: SPCNS Registration Process^{5,6}

Department of Motor Vehicles (DMV)

 Application for Title or Registration (REG 343) and Statement of Construction (REG 5036) with vehicle costs & proof of ownership for major component parts

Pay registration fees

For SB 100, can request a Certificate of Sequence (only 500 allowed each calendar year).



California Highway Patrol (CHP)

- Present DMV forms and proof of ownership
- Inspection
- Issue Vehicle Identification Number (VIN) or CA #.



Bureau of Automotive Repair (BAR)

Visit Smog Referee Station for inspection

- SB 100: owner chooses model year (MY) determination to be based on engine or vehicle or body.
 - MY based on engine: Referee compares to other previously manufactured engines
 - MY based on body. Referee compares to other previously manufactured vehicles.
 - If either doesn't sufficiently resemble one previously manufactured, assign MY 1960.

Non-SB 100 vehicles: MY assigned is the year of application to register.

- Referee places tamper-resistant BAR Label on vehicle, indicating the required emission controls
- Smog check required if MY >1975 (>1997 for diesel).



Official Brake & Light Inspection Station

Two individual certifications issued by official inspection station

 If no official inspection station within reasonable distance, a repair shop can conduct the inspection and complete Statement of Facts (REG 256).



DMV #2

- All completed certificates returned to DMV to finalize registration
- DMV will issue plates and tags
- Title issued by mail

⁵ DMV, 2011a. California Department of Motor Vehicles. *Registration Requirements for Home Made Specially Constructed or Kit Vehicles*. http://www.dmv.ca.gov/vr/spcnsreg.htm. Accessed August 9, 2011.

⁶ BAR, 2009. California Bureau of Automotive Repair. *Questions and Answers: Registration of Specially Constructed Vehicles*. http://www.smog

check.ca.gov/01 ConsumerActivities/Specially Constructed Vehicles/SPCN Fact Sheet.pdf July 8, 2009. Accessed August 9, 2011

California's Smog Check Program

California's Smog Check program requires most 1976 and newer model year vehicles to pass an emissions control inspection prior to original registration, transfer of ownership, and every second annual renewal. BAR administers the Smog Check program, which can test for oxides of nitrogen (NOx), carbon monoxide (CO), and hydrocarbon (HC) emissions, the precursor emissions for smog formation. Dependent on region, there are two different types of Smog Check tests: enhanced and basic. For areas requiring basic tests, a two-speed idle test with ignition timing is performed. For areas requiring enhanced tests, acceleration simulation model (ASM) tests are performed, where NOx emissions are also measured. A vehicle must pass all the following elements of a Smog Check inspection:

- 1. <u>A visual inspection</u>, in which required emissions control components and systems are identified, and must appear connected and functional.
- 2. A functional inspection which includes, checking the functionality and integrity of the malfunction indicator light (MIL) if so equipped, the ignition timing, the gas cap, and the exhaust gas recirculation (EGR) system. A low-pressure fuel evaporative test is performed on all 1995 and older vehicles. A functional check of a vehicle's OBD II system is also performed on 1996 and newer vehicles.
- 3. A tailpipe emissions test, which measures exhaust emissions using a probe inserted into the vehicle's tailpipe during testing. Vehicles pass or fail this part of the Smog Check inspection based on established emission cut-points.⁸

New SPCNSs are required to pass Smog Check inspection on initial registration. New SPCNSs are held to the same Smog Check cut-points as current production vehicles. However, as described further below, Senate Bill (SB) 100 allows up to 500 hobbyists each year to register their vehicle regardless of the model year or emissions.

Senate Bill 100

As shown in Figure 1 above, the emission control system requirements for SPCNSs are dependent upon the year the owner applies for registration. Health and Safety Code section 44017.4 (enacted by SB 100 in 2001, Johannessen), provides that the first 500 owners of SPCNSs each year can choose, for purposes of the BAR inspection, whether the inspection will be based on the model year of the engine, or on the vehicle model year (DMV, 2011a). If the inspection is based on the engine model-year, the referee

⁷ DMV, 2011b. California Department of Motor Vehicles. *Specially Constructed Vehicles Emission Control.* http://dmv.ca.gov/vr/spcns.htm. Accessed August 10, 2011

⁸ BAR; 2011a. California Bureau of Automotive Repair. *Frequently Asked Questions, Part 2.*http://www.bar.ca.gov/80 BARResources/02 Smog Check/Frequently asked Questions Part 2.html. Accessed August 25, 2011

August 25, 2011.

9 SB-100, 2001. Johannessen. http://www.leginfo.ca.gov/pub/01-02/bill/sen/sb 0051-0100/sb 100 bill 20011014 chaptered.html

shall require "only those emission control systems that are applicable to the established engine model-year and that the engine reasonably accommodates in its present form."10 If the inspection is based on the vehicle model year, the referee shall require "only those emission control systems that are applicable to the established model-year and that the vehicle reasonably accommodates in its present form."11 The referee must assign a 1960 model-year to an engine in an SPCNS that does not sufficiently resemble a previously manufactured engine or vehicle.

The demand for the SB 100 Certificate of Sequence has exceeded the 500-vehicle limit per calendar year every year since SB 100 was adopted, with Certificates sometimes running out in January. All subsequent SPCNSs beyond the 500 allowed by SB 100, referred to as "501st vehicles", would be assigned the same model year as the calendar year in which the registration application is submitted (DMV, 2011b). For example, the DMV would assign a 2011 model year to the 501st and later SPCNS being initially registered in 2011. The vehicles would then be required to comply with the emission requirements for the year of registration and will be subject to future Smog Check inspections on a biennial basis (BAR, 2009). Hobbyists who find themselves unable to get a number through the Certificate of Sequence process currently must wait until the following year to apply for registration when the 500-vehicle limit count restarts. 12 or meet current year Smog Check requirements, which is in most cases impractical. Hence, the 500-vehicle limit has practically constrained the number of SPCNSs able to be registered each year.

Whether or not a specific SPCNS qualifies for registration under SB 100, a BAR referee must conduct a visual inspection to ascertain whether the SPCNS is equipped with the required emission control system.

Comparable Federal Policy

The U.S. EPA does not have regulations applicable to motor vehicle engines used in SPCNSs. However, the U.S. EPA's current kit car policy, issued on July 8, 1994. clarified policy concerning the regulation of imported and domestically produced kit cars and kit car packages.

U.S. EPA's policy only applies to kits or assembled kit cars. It provides that the engine of a kit car must be used or used and rebuilt, in order for U.S. EPA to consider an assembled kit car or complete kit car package to be a rebuilt vehicle of a previously

Health and Safety Code § 44017.4(a)(1)
 Health and Safety Code § 44017.4(a)(2)

¹² Car and Driver, 2004. Harold Pace, Car and Driver. Registration Roundup - Varying Rules by State. http://www.caranddriver.com/features/04q1/registration_roundup-feature/varying_rules_by_state_page_2. February 2004.

certified configuration that is covered by the certificate of conformity that U.S. EPA issued for that certified configuration.

However, U.S. EPA does not have a mechanism for preventing kit cars not in compliance with their policy from being registered and driven. Hence, kits cars not complying with U.S. EPA's policy are regularly registered in California and other states.

III. SUMMARY OF RECOMMENDED ACTIONS

ARB staff is proposing to establish a certification process for new light-duty motor vehicle engines for use in SPCNSs. The engines that are certified pursuant to the proposed requirements can be purchased by hobbyists and installed and used in SPCNSs.

The proposed certification requirements differ from ARB's well-established new vehicle certification regulations and procedures for passenger cars and light-duty trucks because they would be applicable to engine packages in light-duty vehicles, whereas ARB has traditionally only certified passenger cars and light-duty trucks on a complete vehicle basis. Staff believes an engine certification approach is warranted due to the unique nature of the SPCNSs.

Additionally, hobbyists are building new SPCNSs each year. Such new SPCNSs cannot use engine packages certified via ARB's aftermarket parts exemption process because the only such exemptions have been for 1995 and older vehicles. In order to give hobbyists building new SPCNSs a new way, outside SB100, to register their vehicles and to identify low-emitting engine packages, staff is proposing a certification procedure for engines intended for use in new light-duty SPCNSs.

Section A describes emissions certification for these engine packages, including exhaust and evaporative standards. Section B describes elements that must be included in an engine package when offered for sale. Section C describes requirements for installers who aid hobbyists with engine installation. Section D describes other proposed general regulatory requirements and certification procedures, including applicability and definitions. The applicable proposed regulatory language reference in the California Code of Regulations (CCR) or certification procedure reference is noted next to each requirement. The regulatory language is appended as Appendix A, and the proposed certification procedures are attached as Appendix B.

A. Emission Certification

Worst Case Vehicle Testing [13 CCR §2212(f)]

Certification Procedure Reference: Section 3 "Worst Case Vehicle" and Section 4 "Vehicle Testing", subsection (d) and (e)

Staff proposes compliance with emissions standards be done on an engine installed in a worst case (in terms of emissions) configuration on a slave vehicle. When selecting the worst case vehicle, the manufacturer is to consider the following criteria: engine displacement, vehicle test weight, vehicle road load, vehicle frontal area, calibration, emission control system configuration and calibration, transmission, and engine speed to vehicle speed (N/V) ratio. Typically, the worst case vehicle is the vehicle with the highest vehicle road load within the highest test weight class as a "worst case" vehicle. Worst case vehicle testing is important for certification of these engine packages for SPCNSs, because, as stated previously, of the unique and specialized nature of the vehicles. Worst case vehicle testing ensures that when the certified engine is installed per the manufacturer's instructions, within the weight limits provided by the manufacturer, that the SPCNS will, in effect, also be in compliance with the standards.

Although the new certification path will open the possibility for manufacturers to develop engines specifically for SPCNS, staff expects many manufacturers to create engine packages from a previously certified vehicle, much like General Motors has done with their E-ROD engine package derived from a 2010 certified Camaro. Manufacturers pursuing this approach may use carry-over data, as long as the engine maintains the same configuration as the previously certified vehicle.

2. Exhaust Emission Standards [13 CCR §2212(c)(1) – (5)] Certification Procedure Reference: Section 4 "Vehicle Testing", subsection (a) "Exhaust emissions" (part (1) – (4)), subsection (c)

The Board's Low Emission Vehicle (LEV) regulation, first adopted in 1990, later amended in 1998 with the standards called LEV II, requires new vehicles to meet stringent exhaust and evaporative emission requirements. Staff proposes that 2012 and subsequent model year engine packages meet the LEV II LEV standards, as described in Title 13, section 1961 with the exception of 1961(a)(5) and as shown in Table 3.1, Table 3.2, Table 3.3 and Table 3.4 below:

Table 3.1: Exhaust Emission Standards: 2012 and Subsequent Model Year

Model Years	Standard	NMOG (g/mi)	CO (g/mi)	NOx (g/mi)	HC (mg/mi)	PM (g/mi)
2012 and subsequent	LEV II LEV (120,000 mi Durability)	0.090	4.2	0.07	18	0.01

NMOG: Non-Methane Organic Gases / CO: Carbon Monoxide / NOx: Oxides of Nitrogen / HC: hydrocarbons / PM: Particulate Matter

Table 3.2: Exhaust Emission Standards: 50° F Exhaust Emission Standards

Model Years	NMOG (g/mi)	CO (g/mi)	NOx (g/mi)	HC(mg/mi)
2012 and subsequent	0.150	3.4	0.05	30

Table 3.3: Exhaust Emission Standards: Highway NOx Test

Model	NOx
years	(g/mi)
2012 and	0.07
Subsequent	

Table 3.4: Exhaust Emission Standards: Supplemental Highway Test

Model Years	Vehicle Classes	Weight (lbs.)	NOx	NMHC +CO	NMHC +NOx	CO
2012 and	PC	All	0.14	8.0	0.20	2.7
subsequent	LDT	0-3750	0.14	8.0	0.20	2.7
	LDT	3751-5750	0.25	10.5	0.27	3.5
	MDV	3751-5750	0.40	10.5	0.31	3.5
-	MDV	5751-8500	0.60	11.8	0.44	4.0

Later this year, the Board will consider further modifications to the LEV criteria pollutant regulations for model year 2015 and subsequent vehicles, known as LEV III. Depending on the outcome of the Board's ruling, staff will propose in a 15-day post-board hearing modification to include requirements for model year 2015 and subsequent engines.

3. Evaporative Emissions Standards [13 CCR §2212(d)]

Certification Procedure Reference: Section 2 "Emissions Standards", and Section 4 "Vehicle Testing", subsections (b) and (c)

The majority of a vehicle's evaporative emissions results from fuel vapors escaping from the fuel system and permeation of the fuel through components such as the fuel tank and fuel lines. Modern vehicles control these emissions by use of a carbon canister, and fuel tanks and lines made from advanced, non-permeable materials.

Typically, compliance with evaporative standards is demonstrated by measuring the vehicle's evaporative emissions over simulated real-world conditions. For example, evaporative emissions are measured in an enclosed chamber in which the vehicle is subjected to temperature swings that are intended to simulate exposure to hot days. Evaporative emissions are also measured during simulated driving conditions, and immediately after the engines are shut down. Specifically, compliance is demonstrated using a series of two specific test procedure sequences: 1) Three-Day Diurnal plus High-Temperature Hot Soak and Running Loss and, 2) Supplemental Two-Day Diurnal plus Hot Soak. Both of these procedures involve prescribed methods to suitably condition and stabilize the evaporative emission control system components prior to the actual emission tests. Moreover, certification compliance is also demonstrated by properly aging evaporative emission control system components to the required useful life in advance of any certification tests.

Staff proposes that manufacturers of certified engine packages for SPCNSs must demonstrate emissions compliance with LEV II evaporative standards through testing of a worst case vehicle with the engine package installed per the instructions. Because the engine packages will only be required to include certain evaporative controls like the evaporative canister, but will not include the fuel tank or fuel lines, it is difficult for manufacturers to guarantee in-use evaporative emission compliance. However, manufacturers will be required to provide detailed instructions on the fuel tank size and allowed fuel system materials, Society of Automotive Engineers (SAE) compliant fuel lines, and compliant on-board vapor recovery (ORVR) system. Staff believes requiring engine certification in a worst case configuration will ensure evaporative emissions compliance for any vehicle in which (within the weight and size limits provided by the certifying manufacturer) the engine is installed.

B. Engine Package Requirements

In addition to meeting the emission test requirements described above, staff proposes that the emissions compliant engine package would be required to include critical emissions components, including an ECM; an OBD II system; be covered by a warranty; be accompanied by a thorough installation guidance manual, which would include an affidavit for the engine installer; and have a vehicle emission control identification (VECI) label.

1. Crankcase Emissions [13 CCR §2212(e)]

On an engine, no piston ring, new or old, can have a perfect seal. Leakage occurs when an engine runs, and emission vapors flow into the engine's crankcase. Staff proposes that each engine sold must be equipped with a closed crankcase system that does not discharge crankcase emissions.

2. Critical Emission Control Components [13 CCR §2211(a)(2)]
Certification Procedure Section Reference: Section 5 "Delivery of Engines", subsection
(a)

Emission control components are those that are installed for the primary purpose of controlling emissions. Staff proposes that in addition to an emission compliant engine, manufacturers need to include critical emission components with each engine package. This will include an ECM, catalytic converter(s), exhaust gas recirculation (EGR) valve, intake and exhaust manifolds, oxygen sensors, mass airflow sensors and housing, evaporative emissions canister, purge control valve (PCV), purge logic, and flow diagnostics. The components required are consistent with exhaust emission controls required for new vehicles. Requiring manufacturers to provide the emission control components in the package will help ensure the SPCNS stay low-emitting throughout the life of the vehicle and can pass future Smog Checks.

3. On Board Diagnostic System [13 CCR §2212(g)]

New LEV II compliant vehicles are equipped with OBD II systems consisting of software designed into motor vehicle on-board computers that detects emission control system malfunctions as they occur. The OBD II system monitors virtually every component and system that can cause increases in emissions. When an emission-related malfunction is detected, the system alerts the driver by illuminating the MIL on the instrument panel. By alerting the driver of malfunctions as they occur, repairs can be made promptly, which results in fewer emissions from the vehicle. The OBD II system also stores important information that identifies the faulty component or system and the nature of the fault, which allows technicians to quickly diagnose and properly repair the problem. It also results in less expensive repairs and promotes repairs done correctly the first time, resulting in less costs to the vehicle owners. For 1996 (the year OBD II systems were first required) and newer model year vehicles, the OBD II system is the dominant mechanism used in the Smog Check program to identify vehicles in need of emission repair and thus, properly functioning OBD II systems are critical to maximize emission reductions from in-use vehicles.

OBD II systems consist of a complex set of software routines in the engine control computer that run in the background while the vehicle is being operated and verify that each and every component related to emission control is performing correctly. While some diagnostic routines are fairly straightforward (e.g., detecting a sensor that has a broken or disconnected wire), others are extremely complex and must take into account many parameters about how the vehicle is configured and how it is being driven while the diagnostic is attempting to complete. An example of a complex diagnostic is the evaporative system leak check. This diagnostic, on current production vehicles, is

¹³ OBD requirements were first adopted in 1986. The second generation of OBD (OBD II) was adopted in 1996.

capable of detecting a leak as small as a hole with a diameter of 0.020 of an inch anywhere in the evaporative system from the gas cap, filler neck, gas tank, vapor lines, canister, or purge valve. To be able to robustly detect such a small leak in such a large vapor space, the system must make corrections for everything from the level of fuel in the tank, the amount of slosh currently happening in the tank, the cumulative volume of vapor space, the volatility of the fuel in terms of how much vapor it is currently generating, ambient temperature, fuel temperature, and even barometric pressure (to sense elevation changes that would affect pressure measurements).

In a new vehicle certification, a vehicle manufacturer has control over many of these elements as they are fixed by design, and can modify an appropriate amount of calibration and development work to account for these factors. For SPCNSs, however, the variances from vehicle to vehicle in things as simple as shape, size, and location of the gas tank are quite vast and cannot be accounted for ahead of time by a manufacturer of a certified engine package.

In several instances, such interactions between vehicle configuration and the OBD II system have necessitated less stringent requirements to make it feasible to design and certify an engine package that can accommodate a reasonable range of SPCNS configurations. Accordingly, staff proposes to modify the existing OBD II requirements specifically for engines certified through these regulations and procedures. However, the proposed modifications are limited to those which staff and engine manufacturers have identified as technically necessary to accommodate an SPCNS, while the majority of the OBD II requirements for new production vehicles remain unchanged. Below, in Table 3.3, are staff's proposed OBD II modifications for engine packages certified for use in SPCNSs:

Table 3.5: Proposed OBD II Modifications

Proposed OBD II Relief	Rationale
Allow flexible location of the malfunction indicator light (MIL) (§2212(g)(1))	While in production vehicles, location of the MIL is tightly constrained, the uniqueness of SPCNSs warrants extra flexibility in location of MIL, as long as the MIL can be reasonably identified and located by inspectors
Reduce in-use monitoring frequency (1/3 reduction) (§2212(g)(2))	In production vehicles, a minimum in-use frequency is defined and required to be met to ensure that malfunctions that occur are detected within a reasonable amount of time. SPCNSs are expected to be used in a significantly different manner than most production vehicles and are expected to be used substantially less per year.

Proposed OBD II Relief	Rationale
•	According to BAR data, SPCNSs travel on average less than 1000 miles per year. 14
Raise the emission threshold for the misfire monitor, the cylinder air-fuel imbalance monitor, and the cold start emission reduction strategy monitor. Allow manufacturers to disable monitoring at light loads to ensure more robust detection of actual misfires. (§2212(g)(3), (5) & (6)) Exempt systems from all evaporative system monitoring, and require vehicles to be capable of off-board low pressure evaporative test during Smog Check (§2212(g)(4))	Several OBD II system diagnostics are calibrated to detect a fault before tailpipe emissions exceed specific values and this requires iterative development and emission testing by vehicle manufacturers prior to production. However, SPCNSs vary in the weight, size, and function of the vehicles that such a precise calibration is unrealistic for some monitors. Evaporative system monitoring is an extremely complex OBD II that is very dependent on vehicle configuration. However, SPCNSs vary greatly in size and design and do not include a fuel system, and it is infeasible to replace such design restrictions on these vehicles.
Exempt systems from transmission related malfunctions. To the extent that the engine diagnostics require and rely on any transmission signals (e.g., the use of a vehicle speed sensor) for other diagnostics, the OBD II system would still be responsible for diagnosing that signal. (§2212(g)(7))	SPCNSs vary in transmission configurations, and staff does not require the manufacturer to include or specify a transmission with the engine package. Requiring monitoring of several different transmissions is unrealistic.
Allow flexibility in location of the diagnostic connector (§2212(g)(8))	SPCNSs vary greatly in size and design, and the driver interior foot-well may not always be a feasible location for the diagnostic connector.
Require a manufacturer descriptor (to identify the certified engine package manufacturer) and the engine serial number in lieu of the VIN. (§2212(g)(9))	To guarantee the correct vehicle required to pass Smog Check inspection is present, manufacturers are required to program the VIN into the OBD II system. Because SPCNS VINs are assigned through CHP, the certified engine package cannot come pre-programmed with the correct VIN

¹⁴BAR, 2011c. California Bureau of Automotive Repair. SPCNS Smog Check Data-All Vehicles With VMT Data. Excel Worksheet. September 6, 2011.

a) Miscellaneous OBD II Certification Requirements [§2212(g)(10) – (14)]

Various elements of the OBD II regulation require the manufacturer to submit data prior to and after certification. These demonstration data and production vehicle evaluation data allow staff to verify that the OBD II system performs as represented by the manufacturer in the certification application. As such, these data will still be required. However, in cases where the certified engine package is identical or similar to that used in an actual production vehicle, provisions have been made to allow the manufacturer to request the use of carry over existing data from the production vehicle to meet these requirements.

Lastly, there is a dedicated regulation for OBD II enforcement that was structured to be used for actual production vehicles, not certified engine packages. Accordingly, staff is proposing a few modifications to account for the fact that an engine package is being certified, in lieu of a complete vehicle, and to provide revised enforcement consistent with the revisions provided above for various monitors.

4. Manufacturer Warranty

The proposed regulations include warranty and recall provisions for the engine and emission control systems included in the package that are similar to those for new cars. These provisions are meant to protect the ultimate purchaser in cases of defects or performance failures, and to ensure the SPCNS, equipped with the new certified engine package, will pass Smog Check inspection. Staff proposes to require an emissions warranty from both manufacturers selling engine packages, and installers who install the certified engine packages into an SPCNS. The warranty provisions are included in proposed Sections 2214 through 2217 and are discussed below.

a) General Manufacturer Warranty Coverage and Requirements [13 CCR §2214(a)-(i) and §2215(a)-(m)]

All manufacturers are required to provide warranties with new vehicles sold in California. Warranties required by ARB pertain to emissions. When a defective part reduces the emissions performance of a vehicle, a manufacturer is liable for 3 years or 50,000 miles, or 7 years or 70,000 miles for high priced emission-related parts. Because staff proposes these engines meet the same emission standards as new vehicles, staff believes it is also appropriate to require the engine manufacturer to provide warranty coverage for all the parts included in the engine package that affect emissions.

Staff proposes the defects and performance warranties for manufacturers would begin on either the date of vehicle registration or 2 years after the engine purchase date, whichever occurs first, and would be valid for 3 years or 50,000 miles (7 years or 70,000 miles for high-priced emission-related parts). This would allow SPCNS owners additional time to install an engine after purchase, which is particularly important for

these home-built vehicles that often take several years to complete. As an alternative to this approach, manufacturers will be allowed to begin the warranty period when the certified engine package is purchased if the manufacturer extends the warranty period from 3 years or 50,000 miles to 5 years or 50,000 miles. The warranties would be issued by the engine manufacturer and would ensure that the engine and emission control systems provided in the package are free from defects, and that the vehicle would be able to pass Smog Check inspection.

The defects and performance warranty requirements applicable to certified engine packages for SPCNSs have been established to essentially mirror the requirements applicable to 1990 and newer passenger cars, light-duty trucks, and medium-duty vehicles. If warranted repairs are necessary due to failure of a warranted part or other emissions-related failures, staff proposes that the repairs (parts, labor and applicable taxes) must be made free of charge to the engine owner, at a facility authorized by the engine manufacturer to perform the repairs, otherwise known as a warranty station. Failures determined to be caused by abuse, neglect, or improper maintenance would not be covered under warranty. Diagnostic labor that leads to the determination of a warrantable condition would be required to be provided free of charge to the engine owner, and the manufacturer would be responsible for any damages that occur to other vehicle components as a result of warranted failures.

b) Certified Engine Package Owner Obligations [13 CCR §2214(j) and §2215 (n)]

Staff proposes to include a requirement that the owner of the certified engine be responsible for performance of all required scheduled maintenance specified in the manufacturer's written instructions. As with the other provisions in this section, this requirement is consistent with those for new passenger cars.

c) Warranty Card [13 CCR §2214(k)]

Certification Procedure Reference: Section 11 "Warranty Card"

Warranty cards are an important tool in tracking warranty claims and providing the ultimate purchaser (owner) details regarding the warranty coverage.

Staff proposes to require the engine manufacturer to include a warranty card with each engine package. The warranty card would be completed by the owner in triplicate: one to be returned to the engine manufacturer, one to be provided to the engine installer (if applicable), and one for the owner to keep. The manufacturer would include general terms of warranty on the card, a place for the owner to sign in acknowledgement of those terms, and mailing address. The owner would then supply pertinent information: VIN, odometer reading, engine serial number, date of engine purchase and installation, date of vehicle registration, and information on the person or facility that installed the

engine. Additional instructions regarding the warranty card are included in the proposed certification procedures for the proposed regulations.

d) Emissions Control Warranty Statement [13 CCR §2214(I)]

Certification Procedure Reference: Section 10 "Emissions Control System Warranty Statement"

ARB requires manufacturers to provide an emissions control warranty statement which clarifies the owner's rights and responsibilities, as well as a description of the warranty coverage and terms. In addition to supplying a warranty card to the owners, staff proposes that the manufacturer would also be required to include the ARB emissions control warranty statement. The ARB warranty statement explains the owner's rights and responsibilities, as well as a layman's description of the emissions warranty coverage and terms. The specific statement required is included in the proposed certification procedures for the proposed regulations. The manufacturer shall also provide its warranty language to the owner. Copies of the manufacturer's warranty language shall be provided to staff for review and approval.

e) Mediation; Finding of Warrantable Condition [13 CCR §2214(m) and §2215(o)]

This provision provides a mechanism for engine owners to request that the Executive Officer mediate a warranty claim when there is an unresolved emissions warranty dispute between the owner and the manufacturer. The Executive Officer would examine the facts submitted by the parties concerned and determine if a warrantable condition exists. A finding of a warrantable condition would result in eligibility for warranty coverage as required by this section.

f) Manufacturer Warranty Reporting Requirements [13 CCR §2216]

Staff proposes requiring engine manufacturers to retain and review warranty claims for each engine family on a production year basis for three years and to submit warranty information reports to ARB quarterly when the warranty claim rate for a specific part exceeds one percent or 25 parts, whichever is larger. This is important for recall purposes, and establishes a system of checks and balances between ARB and the certifying manufacturer. The report would contain the following: engine manufacturer's name; an identification of the engine family; model year and description of the class or category of certified engine package; information on the number of warranty claims and percentage of total engines they represent; and the number of each type of certified engine package produced by the manufacturer for sale in California. A manufacturer may elect to use an alternative procedure to that described above, as long as the

Executive Officer determines the alternative procedure will produce substantially equivalent results. Staff proposes that corrective action may be taken when the warranty claims for exhaust and/or evaporative emission control components used in the manufacturer's regular production California-certified vehicles as well as engines certified through this proposed test procedure exceed four percent or 50 parts, as required in section 2143, title 13, CCR. Such corrective action may include an ordered recall, discussed below.

g) Recall Procedures [13 CCR §2217]

Staff proposes to include the same recall procedures as for new light-duty vehicles. ¹⁵ A recall may be required if the Executive Officer has determined that the warranty claim thresholds described above have been reached. The thresholds are based on the engines certified through this proposed test procedure covered under a single Executive Order as well as the manufacturer's regular production California-certified engine systems with the same components. Since the engines certified through this proposed test procedure are expected to be smaller in number than those for regular production vehicles, and since typically the same or very similar engines are also certified for a much larger number of regular vehicles, it is appropriate for any recall that affects regular production vehicles to also apply to the same or similar SPCNS engines.

5. Engine Installation Guidance and Engine Owner's Manual [13 CCR §2212(h)(1), (2), (5) & (6)]

Certification Procedure Reference: Section 5 "Delivery of Engines", subsection (b)(1)

Staff proposes that the engine manufacturer provide written instructions to the ultimate purchaser and/or installer with the engine package. The written instructions must adhere to Federal requirement for engine installation manuals. In addition to Federal requirements, manufacturers must provide a statement to the purchaser that the engine may only be installed in an SPCNS, and also provide in the written instructions parameters for the SPCNSs on which the certified engine is to be installed. This is important because emissions testing will have been proven on a worst case vehicle, and a vehicle outside of the manufacturer's parameters could result in greater emissions than expected and allowed by the certification. Below in Table 3.4 are the vehicle parameters required to be specified:

¹⁶ Section 1051.130, Title 40, Code of Federal Regulations (CFR)

¹⁵ "Procedures for Reporting Failure of Emission-Related Components," Article 2.4, title 13, CCR

Table 3.6: Vehicle Parameters

Required Parameter	Reason
Highest allowed vehicle weight	The weight of a vehicle has a significant effect on the vehicle's emissions. Typically passenger cars are not produced with truck engines, and trucks are not produced with passenger car engines. Engines produce an amount of power which highly correlates with the vehicle's weight.
Highest allowed engine speed to vehicle speed (N/V) ratio	Engines are designed with a vehicle and drive load in mind. Placing an engine into a vehicle with a higher N/V ratio than recommended by the manufacturer will cause an increase in emissions.

To limit in-use evaporative emissions, staff proposes manufacturers must provide fuel tank specifications, e.g., tank material, maximum capacity, minimum distance from the engine, gas cap seals, filler neck, pressure/vacuum relief settings, as well as any other pertinent installation instructions affecting the vehicle's evaporative emissions. Manufacturers also must include language in the installation manual that specifies that the certified engine package should be installed so that the final vehicle is able to be tested via a Smog Check test. This will help ensure a future Smog Check test may be performed.

When a manufacturer applies for certification, staff proposes that the installation manual must also be submitted to the Executive Officer for approval. Staff believes most engines purchasers will also be the engine installer, so it is important that the installation instructions are clear, detailed, and concise.

In addition to the installation guidance, staff proposes that the manufacturer would also include an owner's manual for proper use and maintenance over the life of the engine. The owner's manual must comply with Federal owner's manual requirements.¹⁷

6. Affidavit [13 CCR §2212(h)(7)]

Certification Procedure Reference: Section 5 "Delivery of Engines", subsection (8)

With each engine package, staff proposes that the manufacturer must provide an affidavit, a sworn statement of fact, (in triplicate form) to the ultimate purchaser that states under penalty of perjury that the engine has been installed according to the

¹⁷ The owner's manual must adhere to Section 86.411-78 and 86.412-78, title 40, CFR.

manufacturer's instructions. This will help to ensure the engine manufacturer that the engine has been installed correctly, and provide a paper trail for any potential warranty disputes.

7. Engine Vehicle Emissions Control Information Label [13 CCR §2213]

Certification Procedure Reference: Section 5 "Delivery of Engines", subsection 5

ARB recognizes that certain emissions-related parts must be properly identified and maintained in order for certified engine packages to comply with the applicable emissions standards. All new production vehicles in California are required to place a label on each vehicle with pertinent information for vehicle owners and service mechanics for the proper maintenance of the vehicle.

Staff proposes that the engine manufacturer must provide a label with each certified engine package to the ultimate purchaser to be affixed to a fully assembled vehicle. The label must meet the emissions labeling requirements as new passenger vehicles. In addition to those requirements, staff proposes that the label clearly state that the engine is intended only for installation in an SPCNS. Manufacturers must also provide instructions to the ultimate purchaser to affix the label in such a manner that it cannot be removed without destroying or defacing the label, can be easily identified, and shall not be affixed to any part that is likely to be replaced during the vehicle's useful life.

8. Other Information to be with the Engine Package [13 CCR §2212(h)]

Certification Procedure Reference: Section 5 "Delivery of Engines", subsection (2), (3), and (7)

Along with the requirements mentioned above, staff proposes that the manufacturer must provide the following statements with the engine package:

 A statement that no changes may be made to the certified engine package and evaporative ECS, including, but not limited to: changes to the fuel metering system; changes to the ignition system, changes to the camshaft; and modifying, recalibrating, removing, or failing to properly install any other specified component. This statement may be included in the engine installation instructions.

¹⁸ The label must adhere to the guidelines in the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", part 1, subpart C, section 3, which incorporates by reference and amends 40 CFR 86.1807-01 "Vehicle Labeling."

- 2. A statement that failure to follow the vehicle parameters, installation guidelines, or changes made to the engine and components provided in the engine package will cause the vehicle to violate ARB's certification requirements for which monetary fines and other penalties can be applied. This statement may be included in the engine installation instructions.
- 3. A notice, printed on a separate sheet of paper explaining the documentation, record keeping, notification, access to records requirements for installers of certified engine packages in the state of California, explained further below.
- 9. Manufacturer Reporting Requirements [13 CCR §2212(i)]
 Certification Procedures Reference: Section 6 "Manufacturer Production Reporting"

Staff also proposes that manufacturers must report to ARB the number of certified engine packages produced each year, along with the engine serial number for each vehicle.

C. Installer Requirements [13 CCR §2218]

In public workshops, hobbyists have indicated that many times an SPCNS is built by the hobbyists themselves. Others use professional installers when building their SPCNS for certain components such as the transmission and engine. Because installers are paid for services, staff proposes shops that help install these certified engine packages be required to maintain records and provide an installation warranty.

1. Automotive Repair Dealer [13 CCR §2211(a)(7)]

Staff proposes that an installer must be registered with BAR as an automotive repair dealer¹⁹. Requiring installers to be registered automotive repair dealers gives BAR authority to pursue legal action against individuals engaged in unlicensed activities and it grants the authority to BAR to ensure that stations provide written invoices specifying parts and labor costs, whether or not used parts are being used, etc.

2. Installation and Affidavit [13 CCR §2218(a), (b)(1)]
Certification Procedures Reference: Section 9 "Installer Requirements", subsection (a),(b), and (h)

Staff proposes that an installer be required to install the engine per the manufacturer's written instructions, and to place the provided label in a readily accessible location. Additionally, to ensure this proper installation to the engine manufacturer, staff proposes that the installers must sign the affidavit provided by the engine manufacturer (explained above) that states under penalty of perjury that the engine has been installed per the engine manufacturer's given instructions. The installer must mail the signed affidavit to the engine manufacturer, and provide a copy of the signed affidavit to the vehicle owner.

¹⁹California Business and Professions Code, Section 9880 through 9884.

3. Reporting and Record Keeping [13 CCR §2218(b)(2)]

Certification Procedure Reference: Section 9 "Installer Requirements", subsection (c), (d), (e), and (f)

Reporting and record keeping are essential for enforcement and in-use compliance purposes. Though there will be no in-use testing required, staff proposes that installers report to ARB the number of engines installed into SPCNSs each year, as well as the vehicles' make, model, and engine serial numbers. In addition to reporting, staff proposes installers must maintain photographic and written records, as well as each signed affidavit for each SPCNS built with a certified engine package for no less than two years.

4. Installation Warranty [13 CCR §2218(c)]

Certification Procedure Reference: Section 9 "Installer Requirements", subsection (g)

Staff proposes to require an installation warranty, to be covered by the engine installer, and to be effective for one year after engine installation or 12,000 miles, whichever occurs first. This would cover installation as it affects the SPCNS's emissions, and help guarantee that the SPCNS will be able to successfully pass Smog Check.

D. Other Regulation and Certification Procedure Sections Regulations

§ 2210. Applicability.

<u>Summary</u>: This section describes the overall scope of the regulations, the entities these regulations apply to, allowed severability of each section of the regulation, and explains what is included in the requirements of the regulations.

§ 2211: Definitions

<u>Summary</u>: This section helps to define words that are used throughout section 2010 through section 2218 and provides clarity regarding which entities are regulated and what requirements apply to each said entity. Definitions in this section are consistent with other ARB mobile source regulations and definitions found in the California Vehicle Code and Health and Safety Code.

§ 2212(a)

Summary: This subsection describes the scope of the section 2212.

§ 2212(b)

<u>Summary</u>: This subsection describes the penalties as a result of non-compliance with § 2212 requirements.

Certification Procedures

Section 1. "Applicability"

This section describes the overall scope of the certification procedures, the entities the certification procedures apply to, and the definition of an SPCNS.

Section 4. "Vehicle Testing", subsection (f) "Confirmatory Testing"
This section allows ARB to conduct testing on vehicles to "confirm" the engine is meeting the standards in staff's proposed certification procedure.

Section 7. "Application"

When an engine manufacturer seeks to certify an engine, it must submit a certification application to ARB which includes all the necessary information needed to demonstrate compliance with the standards. This section explains the "Letter of Intent" which notifies ARB of a manufacturer's intent to apply for certification, and where to mail the Letter of Intent and certification application. This section also explains how to submit correspondence, and certification and reporting documents.

Section 8. "Issuance of Executive Orders (EO)"

When ARB approves a manufacturer's certification application, ARB issues an Executive Order, which contains all the necessary information detailing the emissions standards the vehicle was certified to, and the models that obtained certification within the engine family. This section details the Executive Order that would be issued under staff's proposed certification procedures.

Section 12. "Violations and Penalties"

This section states that ARB retains the authority to seek penalties if violations occur.

IV. ECONOMIC IMPACT

This regulation does not mandate any actions by engine manufacturers or hobbyists, but instead provides a new optional certification path. Engine manufacturers are not obliged to build and certify engine packages per the new regulations and procedures, nor are end-users compelled to purchase or install certified engine packages. Manufacturers would incur additional costs resulting from this regulation only if they choose to utilize the new certification path. Similarly, hobbyists would face costs only if they choose to purchase certified engine packages, and installers would face costs only if they choose to install such certified engine packages.

Below in section B, however, we provide a discussion of how costs would be expected to change for manufacturers that choose to certify engine packages, hobbyists that choose to use certified engine packages, and installers paid to install them.

A. Legal Requirement

Sections 11346.3 and 11346.5 of the Government Code require state agencies to assess the potential for adverse economic impacts on California business enterprises and individuals when proposing to adopt or amend any administrative regulation. The assessment shall include consideration of the impact to the proposed regulation on California jobs, business expansion, elimination, or creation, and the ability of California businesses to compete.

State agencies are also required to estimate the cost or savings to any state or local agency and school districts in accordance with instruction adopted by the Department of Finance. This estimate is to include any nondiscretionary costs or savings to local agencies and the costs or savings in federal funding to the state.

B. Potential Impacts

For each certified engine package, the potential costs can be separated into three portions: 1. Costs for the manufacturer of the certified engine package; 2. Costs for the hobbyists (ultimate purchaser), and; 3. Costs for the installer of the certified engine package (if applicable). See Appendix C "Cost Spreadsheet" for more information related to the potential economic impacts associated with the proposed regulations and certification procedures.

Potential Costs Impacts to the Manufacturer of the Certified Engine Package

Potential cost impacts on manufacturers that choose to certify engine packages per the proposed regulation are discussed further below and include costs to develop the engine package, to conduct the necessary emissions testing for certification, to do necessary record keeping and reporting, and to pay for repairs under warranty.

As described earlier in section III, an engine package that would be certified to meet this regulation could be derived from a production engine used in a new motor vehicle that was certified to meet California's new vehicle standards. It is also possible that a certified engine package could be derived from a vehicle not certified to be sold in California, or developed from a new design. However, staff believes the most common and likely situation will be engine packages derived from already certified vehicle engines, because the other two scenarios would be much more expensive.

As discussed earlier in this Staff Report, California's new motor vehicle emissions certification is very stringent. The exhaust and evaporative standards require very low-emitting engines, and it takes significant research and engineering to develop systems to meet stringent requirements, and maintain the low levels for over 100,000 miles. Even if a certified engine package is significantly similar to an engine used in a certified

new motor vehicle, there are changes required so that engine package can be used as "stand-alone". Throughout the development of the engine package, testing will be needed in order to assist with the engineering process and verify the changes are performing as designed. The technical development time can run into hundreds or thousands of hours, with costs of \$25,000 not unrealistic even for engine packages derived from production engines used in new motor vehicles²⁰.

After the manufacturer has completed the design, the engine package will need to go through certification testing, which is a series of five tests. The laboratory needed to conduct these tests must be quite sophisticated and have advanced instrumentation and highly trained technicians. To have the gamut of testing done and provide to the ARB with sufficient laboratory testing results in order to pursue certification could cost \$50,000 (Witherspoon and Harvey, 2011).

However, in cases where the certified engine package is a similar configuration to an engine used in a production vehicle, it is possible that the manufacturer could carry over existing data from the production vehicle to meet these requirements. This would significantly reduce or eliminate certification testing of the engine package and the associated costs.

The manufacturer of the certified engine package will be required to keep records of every engine sold and report that information annually to the ARB. In addition, consistent with procedures for new production motor vehicles, there are provisions proposed for emissions warranty claims quarterly reporting, warranty repairs, retaining warranty claims, and recall procedures. Since it is probable that the sales volume of these engine packages will be small, and manufacturers will handle this in conjunction with their currently established procedures for motor vehicle reporting, staff assumes it would take a half a day to submit sales information to the ARB annually. If the employee doing this work is paid \$40 per hour²¹, this would cost the manufacturer \$160 annually.

For compiling and reporting warranty claims, if there are any, the procedures for these engine packages will also likely be handled along with manufacturers currently established procedures for motor vehicles, and staff assumes it could take a half a day per quarter for retaining and quarterly reporting emissions warranty claims. If the employee doing this work is paid \$40 per hour²¹, this would cost the manufacturer \$160 per quarter.

²⁰ Witherspoon and Harvey, 2011. Personal communication between Jim Witherspoon and Randy Harvey of General Motors, and Michael Baker, ARB. August 30, 2011.

²¹ Hourly rates include overhead.

Manufacturers would be required to pay for warranty repairs due to engine defects. For engine packages based on production motor vehicles, staff assumes that emissions warranty repairs that would be the responsibility of the manufacturer of the engine package would be minimal. The diagnosis and repair of part failures would be similar to that for production motor vehicles and therefore generally documented. Staff assumes emissions-related failures for the engine package would occur five percent of the time, and diagnostic and repair would take less than two hours (at a rate of \$120 per hour²¹), which would result in a warranty charge for the manufacturer of \$240, or an average \$12 per engine package sold.

The proposed regulation requires the manufacturer of the certified engine package to include written instructions for installing the certified engine package into an SPCNS. Staff assumes this would take 40 hours; half for a technician (\$120 per hour²¹) and half for office personnel for (\$40 per hour²¹), which would be a one-time of \$3,200.

If 100 certified engine packages were sold annually by each of the three crate engine manufacturers that are the most frequently used in kit cars (Chevrolet, Ford, Chrysler), with each producing 1/3 of the total units sold annually, then each manufacturer would incur one-time costs (within major development cycles) of approximately \$30,000, and annual costs of approximately \$50,000.

Potential Costs Impacts to the Ultimate Purchaser of the Certified Engine Package For hobbyists choosing an engine certified according to staff's proposed procedures, purchase and installation costs are expected to increase versus the costs they would face if they chose an average uncertified engine. As described further below, purchase costs could be approximately \$3,000 more, and installation costs could be approximately a few hundred to two thousand dollars more than if they chose an average uncertified engine.

From Statements of Construction ARB obtained from the DMV²², the average cost of an engine used in a kit car is \$4,789, and the median (half of the values above this value, and half below) is \$1,704. However, the values of the engines vary widely; from free (had in possession or given), to over \$40,000. Engines in kit cars generally come from three sources: a wrecked vehicle (junk yard, or owned) and often kept stock or slightly modified; a new crate engine from a major manufacturer (typically General Motors, Ford, and Chrysler); and custom or semi-custom built. Both carbureted and fuel

²² DMV, 2011c. California Department of Motor Vehicles, data from Statements of Construction obtained from DMV transposed into an electronic file. July, 2011

injected (manufacturer, or aftermarket fuel injection systems) engines are used in kit cars. General Motors sells the majority of crate motors in the United States^{23,24}.

As mentioned above, the General Motors E-ROD engine package is currently being sold and installed (approved by ARB for 1995 and older vehicle engine changes), and would likely qualify for certification through staff's proposed process. From cost data staff has collected, the E-ROD engine package, for comparison, is on the higher end of the cost typical engines used in kit cars²⁵ (roughly \$3,000 more than the average). however well within the range of engine costs. To put the cost of an engine in perspective, completed kit cars can be built for \$30,000²⁶, with an average cost closer to \$50,000, but may cost more than \$80,000^{27,28} (as mentioned above, the engine alone can be \$40,000).

²³ Proformance Unlimited, 2011. http://www.proformanceunlimited.com/chevytrucks.html. Accessed August 23, 2011. ²⁴ General Motors, 2011a. Press Release. August 18, 2011.

http://media.gm.com/content/media/us/en/chevrolet/news.detail.print.html/content/Pages/news/us/en/2011/Aug/0818 chevysmallblock. Accessed September 1, 2011

Superior Chevrolet Performance Center, 2011. http://www.superchevyperformance.com/Crate_Engines_s/5.htm (with appropriate pages combined into one document.) Accessed September 1, 2011.

28 Ehow.com, 2011. http://www.ehow.com/about_5554147 cost-build-kit-car.html. Accessed August 23, 2011

²⁷Kitcars.com, 2011. Posted May 23, 2011. http://www.kitcars.com/Classifieds/AdDetails.asp?classified_id=22906. Accessed August 23, 2011.

28 Barrett-Jackson.com, 2011. http://www.barrett-

jackson.com/application/onlinesubmission/lotdetails.aspx?ln=1349&aid=403&pop=0. Accessed August 23, 2011.

Table 4.1: Approximate Cost of Chevrolet Complete "Turn-Key"

Crate Motors/Engine Packages

(Not Including Shipping, Tax, or Installation)**

Name	Carbureted or	Horsepower	Cost	
	Fuel Injected			
350	Carbureted	290	\$4,600	
ZZ4	Carbureted	330	\$5,000	
385	Carbureted	386	\$5,700	
LS376	Fuel Injection	515	\$7,200	
E-ROD LS3	Fuel Injection	430	\$7,600	
ZZ427*	Carbureted	480	\$8,100	
ZZ502*	Carbureted	502	\$8,400	
Ram Jet 502*	Fuel Injection	502	\$10,400	
ZZ572*	Carbureted	620	\$13,300	
427*	Carbureted	430	\$17,500	
LS9 ZR1	Fuel Injection	638	\$21,000	

^{*} Near-complete - does not come with relatively low cost parts such as alternator, power steering pump, drive belts, pulleys, air cleaner, starter, and fuel pump

Although many engines put into kit cars are simple engines (carbureted, no electronics), a number do have electronic fuel injection (with accompanying ECM), and a few also use oxygen sensors. Staff expects many of the extra installation steps required for an engine certified through the proposed regulations and procedures, as opposed to a non-electronic engine, also apply to the installation of an engine with electronic fuel injection.

Some hobbyists completely build the kit car, and some have certain steps taken care of professionally, such as paint, or building or installing the engine. The following would likely be additional steps when installing an engine compliant with staff's proposed requirements²⁹, as opposed to a simpler carbureted engine. If the certified engine package was installed into the vehicle by an installer this would impose additional costs to the ultimate user:

- 1. Install the evaporative canister and the lines,
- 2. Extra effort to install the exhaust system including catalyst placement and oxygen sensors.

^{**}Costs are from Superior Chevrolet Performance Center, 2011.

²⁹General Motors, 2011b. GM Performance Parts Catalog 2011
http://www.gmperformanceparts.com/ res/pdf/GMPP Catalog 2011.pdf (only parts pertaining to E-ROD) Accessed August 26, 2011.

- 3. Purchase correct (specified) fuel lines (if not supplied with the engine package or with the kit car),
- 4. Purchase correct (specified) fuel tank and installation (if not supplied with the engine package or with the kit car,
- 5. Possible minor fabrication of custom supports for air filter and mass air flow sensor, and
- 6. Installation of wiring harness, ECM and other minor additional electrical components.

The above items are generally within the expertise of someone building a kit car. Installing the correct fuel tank may require some fabrication of supports. Or if the correct fuel tank is supplied with the kit car, then the frame and body were designed to fit with that supplied fuel tank and no modifications would be needed. As stated above, staff proposes to require a detailed installation manual to be included in each certified engine package, which would include step by step instructions on the aforementioned steps. Staff estimates that this additional effort would increase the installation costs of a certified engine package by approximately \$2,000, if the certified engine package was installed by an installer.

Potential Costs Impacts to Installer of the Certified Engine Package
If an installer is hired to install the engine package, the shop must fill out some paperwork, take photographs, report annually to the ARB, and maintain records for two years. As part of this, the installer will be required to fill out an affidavit and return it to the engine manufacturer. These steps might take a technician (\$120 per hour²¹) or office personnel (\$40 per hour²¹) approximately 30 minutes per vehicle. Therefore these tasks might add \$20 to \$60 per installation, which are of nearly insignificant cost when compared to the cost of installing an engine into a vehicle, whether that be a certified engine or a standard crate engine. Annual reporting costs are estimated at \$40 per installation.

This proposed regulation contains a provision that would require a professional installer to provide an installation warranty for emissions purposes.

As mentioned above, the emissions warranty would apply to both the engine package as well as the installation. Therefore, emissions warranty issues could be the responsibility of the engine package manufacturer, the engine package installer (hobbyist or professional), or some combination. It is likely that emissions warranty repairs due to installation would be minimal. Staff assumes that repairs for installation would occur in five percent of the installations, and would take two hours including

diagnosis (at a rate of \$120 per hour²¹). This would result in an installation warranty claim of \$240, or an average \$12 per engine package installed.

It is likely that installer problems should be minimal. In fact, once the vehicle has the engine assembly installed, any test drives or engine operation could well result in a MIL illumination if something is disconnected, not installed properly, defective, etc. In this case, the problem could be corrected before the vehicle even leaves the shop (or shortly thereafter). Additionally, since the first Smog Check will be performed by a BAR referee station, any existing problems should be detected.

If twelve automotive repair shops throughout the state performed installations and each installer installed four engine packages per year, then installers would incur installation record keeping costs of \$240 annually, and costs of \$88 for annual reporting and warranty related costs. It is likely that installer businesses would include these costs in the price of the installation; therefore these costs would be borne by the end user.

C. Potential Impact on Business Competitiveness

The proposed certification regulations and procedures would have no adverse impact on business competitiveness. Manufacturers expected to apply for engine package certification are outside of California. Installers impacted by warranty and reporting requirements would likely experience no adverse impact on the ability to compete with business in other states, because their market is only in California.

D. Potential Impact on Employment

It is unlikely to expect any noticeable change in California employment because there is a very small share of motor vehicle and parts manufacturing employment in California. Additionally, staff does not expect an increase of hobbyists building SPCNSs due to the proposed regulations. Therefore, the number of installers hired by hobbyists would not likely increase or decrease due to the proposed regulations.

E. Potential Impact on Business Creation, Elimination, or Expansion
There is a potential for business to be created or expanded in response to the proposed certification regulations and procedures. Staff does not expect the proposed regulations to affect business elimination.

F. Potential Costs to Local and State Agencies

The proposed regulations affect manufacturers, hobbyists, and installers. Staff expects BAR to initiate a rulemaking or expand an existing rulemaking (see section 6 below) to address issues surrounding the initial visual inspection, and biennial Smog Checks for these vehicles. BAR will evaluate fiscal impacts in their rulemaking process. Although

additional SPCNSs will go to referee stations, their number will be small; therefore it is anticipated the existing referee network has capacity to accept them.

V. ENVIRONMENTAL IMPACTS ANALYSIS

A. Legal Requirements

ARB is the lead agency for the proposed regulation and has prepared this environmental analysis pursuant to its Certified Regulatory Program. California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program. ARB's regulatory program was certified by the Secretary of the Resources Agency in 1978 and is codified as CCR, title 17, sections 60005-60008. As required by ARB's certified regulatory program, and the policy and substantive requirements of the California Environmental Quality Act (CEQA), ARB has prepared this environmental analysis to assess the anticipated significant long or short term adverse and beneficial environmental impacts associated with the proposed action and a succinct analysis of those impacts (CCR section 60005 (b)). The resource areas from the CEQA Guidelines environmental checklist (CCR, title 14, section 15000 et seq. Appendix G) were used as a framework for assessing potentially significant impacts. In accordance with ARB's certified regulatory program, for proposed regulations the environmental analysis is included in the Staff Report: Initial Statement of Reasons (ISOR) for the rulemaking (CCR section 60005).

If comments are received during the public review period that raise significant environmental issues, staff will summarize and respond to the comments. The written responses will be included in the Final Statement of Reasons (FSOR) for the regulation. Prior to taking final action on the proposed regulation, the decision maker will approve the written responses (CCR 60007 (a)). If the regulation is adopted, a Notice of Decision will be posted on ARB's website and filed with the Secretary of the Natural Resources Agency for public inspection.

B. Impacts Analysis

Based on ARB's review of the proposed regulation, staff has concluded that the regulation would not have a significant adverse effect on the environment and that it may provide air emissions benefits as compared to current practices. This analysis does not include a discussion of alternatives or mitigation measures that could reduce adverse environmental impacts because there are no significant adverse environmental impacts identified.

The proposed regulation is an optional certification procedure for new light-duty engine packages for use in SPCNSs. There will be no requirement for manufacturers to certify engines per the procedure or for hobbyists to purchase these certified engines. The proposed regulation does not require any action that could, either directly or indirectly, cause any adverse impacts on the environment. The optional certification procedure does not require or result in any new development or require modifications to buildings or other structures, affect operations at existing facilities, or cause any new land use designation. Therefore, the proposed regulation is not expected to result in any adverse impacts that would result from development including aesthetics, air quality, agricultural and forestry resources, biological resources, cultural resources, geology and soils, greenhouse gases, land use planning, mineral resources, population and housing, public services, recreation, or traffic and transportation. Further, the proposed regulation does not involve any activity that would involve or affect hazardous material, hydrology and water quality, noise, or population and housing because it is an optional certification procedure for engines and does not mandate any action that could affect these resources. The potential air quality benefits are discussed in more detail below.

1. Potential Air Quality Benefits

Engines certified through the proposed procedure are expected to provide an air quality benefit in terms of reduced emissions as compared with current practices to the extent that they result in hobbyists building SPCNSs to use certified engines instead of uncontrolled engines.

Overall, staff estimates that a typical SPCNS today emits 1.3 to 3.4 times the amount of NOx and HC emissions per year as an average new model year 2010 passenger car. As described further below, this estimate takes into account that SPCNSs are driven relatively infrequently but that SPCNSs have over 30 times higher emission rates on a per mile basis than new passenger cars.

The proposed regulation will enable manufacturers to certify engine packages to be essentially as low-emitting as new passenger cars. Hence, hobbyists who choose to buy such certified engine packages will have the potential to drastically (by a factor of more than 30 on a per mile basis) reduce their emissions below what they otherwise would have been, had they chosen an uncontrolled engine that emits like the engine found in a typical SPCNS today.

Staff first examined emissions data in the EMFAC model³⁰ and found that an uncontrolled crate engine emitting like a 1967 or older vehicle would be expected to have 60 to 200 times the per mile HC and NOx emissions as a modern, low-emitting engine.

³⁰ ARB, 2007, EMFAC, November 2006. http://www.arb.ca.gov/msei/onroad/latest_version.htm

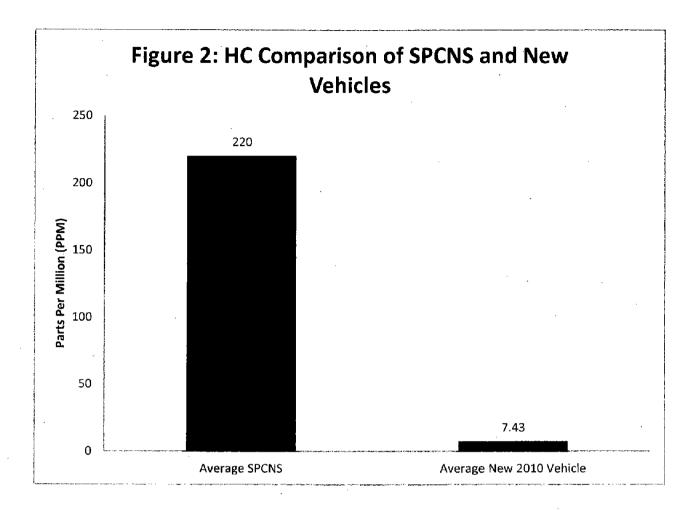
To get a more accurate estimate of how emissions from SPCNSs on the road in California today compare to those from new cars, staff obtained BAR's 2001 through 2010 Smog Check data. Staff examined test results for all SPCNSs tested using the ASM during years 2001 to 2010 and compared it to the ASM test results for model year 2010 vehicles tested during that same period. To remove potentially invalid data, staff removed any SPCNSs from the data set with ASM acceleration violations, any vehicles with erroneous data (zeroed out readings for hydrocarbons or oxides of nitrogen), and duplicate entries. Because the proposed regulation and certification procedures apply only to vehicles under 8,500 pounds GVWR, staff also removed any vehicles with GVWR of 8,500 pounds or higher (heavy duty vehicles, trucks, and buses).

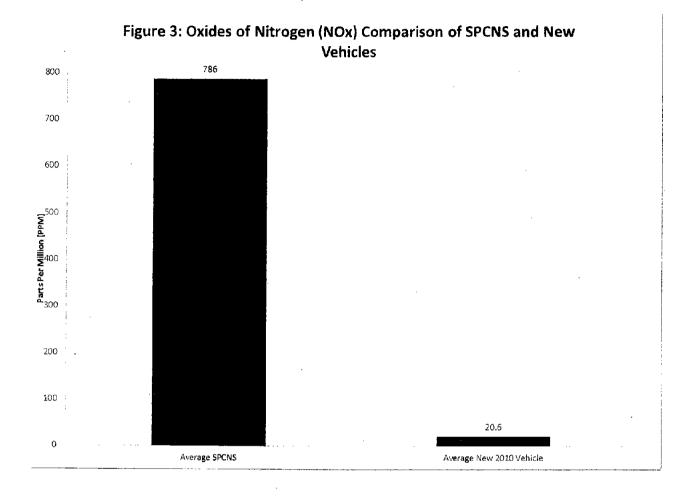
The results are summarized below in Table 5.1 and show concentrations of pollutants in SPCNS emissions are much higher than in model year 2010 vehicle emissions. This is likely due to SPCNSs currently being equipped with uncontrolled engines. As shown in Table 5.1 and illustrated in Figures 2 and 3 below, the Smog Check data indicates pollutant concentrations in SPCNS emissions are on average 30 times higher for HC and 38 times higher for NOx than model year 2010 vehicle emissions. This means that SPCNSs emit approximately 30 times the HC and 38 times the NOx as new vehicles meeting the LEV II standard for each mile they drive.

Table 5.1: HC and NOx Emission Levels from ASM Testing for 2001-2010 SPCNSs vs. 2010 Vehicles

	Number in Sample	HC (parts per million)	NOx (parts per million)
Average SPCNS	1510	220	786
Average New Vehicle	3922	7.43	20.6
Ratio of Average SPCN to Average New Vehicle Emission Concentrations		29.6	38.2

³¹ BAR, 2011b. California Bureau of Automotive Repair. BAR 2010 and SPCNS Smog Check Data. Excel Worksheet. September 6, 2011.





Even though each SPCNS typically drives much less than a new car, because its emission rates are so much higher, the emissions from each SPCNS is significantly greater than for each 2010 model year passenger car. According to BAR data, an SPCNS travels on average only 900 miles per year (BAR, 2011c). This compares to a typical passenger car which drives between 10,000 and 20,000 miles per year, depending on its age and where it operates. Table 5.2 below shows how SPCNS emissions compare to emissions for a model year 2010 vehicle, with a typical SPCNS today emitting 1.3 to 3.4 times the amount of NOx and HC emissions per year as an average new model year 2010 passenger car.

Table 5.2: Emissions Comparison for a Typical SPCNS versus a New Passenger Vehicle

Annual Mileage of New Passenger Vehicle Assumed	Ratio of SPCNS to New Vehicle HC Emissions	Ratio of SPCNS to New Vehicle NOx Emissions
10,000	2.7	3.4
20,000	1.3	1.7

Overall, to the degree that engine manufacturers pursue certification and hobbyists who otherwise would have purchased uncontrolled engines purchase certified engine packages instead, there will be an air quality benefit due to the regulation in that emissions will be reduced.

VI. IMPACTS TO OTHER STATE AGENCIES

ARB staff has worked with the affected agencies to ensure that any potential impacts are appropriately addressed. Staff met multiple times with DMV, CHP, and BAR to ensure the proposed procedure would work with current process to actually benefit consumers. Descriptions of any impacts identified are described below.

Department of Motor Vehicles

The DMV may experience a slight increase in the number of SPCNSs registered outside of the SB 100 program if SPCNS owners elect to install an engine that has been certified under the proposed regulations. However, the proposal does not affect how those vehicle registrations are currently processed by the DMV, and therefore, the DMV is not expected to be adversely affected.

California Highway Patrol

An important part of the SPCNS registration process involves a visible inspection of the vehicle and its parts by the CHP, as indicated in Figure 1.³² SPCNSs equipped with an engine certified under the proposed regulations will be labeled accordingly. While those engines will not be treated differently in CHP's inspection process, the proper identification of the engines will assist CHP in their procedures to trace the engine's origin.

³² CHP, 2011. California Highway Patrol. Meeting with Sergeant Troy Rivers, Vehicle Theft Unit. June 14, 2011.

Bureau of Automotive Repair

Each SPCNS registration application requires an initial inspection at a BAR Referee Station to determine the model year for Smog Check inspection purposes (if the vehicle qualifies for the SB 100 program), to determine Smog Check requirements (if any), to inspect the vehicle to ensure the appropriate emission control systems have been installed as required, and if required, to conduct a Smog Check inspection of the vehicle (BAR, 2011a).

The proposed regulations would affect the BAR Referee Station in that the technician would need to locate and interpret the engine label or engine Executive Order in order to properly identify the engine as one that is certified under the proposed program, and to inspect the engine and emission control systems for compliance with the Smog Check requirements for the engine model year. ARB staff is continuing to work with BAR staff to determine the appropriate methodology for verifying the emission control requirements. For example, the BAR technician may either confirm the required emission controls directly from the engine label or by cross-referencing the Executive Order on ARB's website.

Staff intends engine packages certified through the proposed regulations and procedures would also qualify for an engine change in existing (previously registered) SPCNSs. Staff will continue to work with BAR on their engine change policy to ensure certified engine packages would be allowed for engine changes as well as for new vehicles.

BAR will need to initiate a separate rulemaking process to amend their current practices, and determine if hobbyists will be required to go to a referee station for all future Smog Check inspections. ARB will continue to work with BAR on rulemaking efforts connected with these engine packages.

VII. ENVIRONMENTAL JUSTICE

State law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies³³. The Board has established a framework for incorporating environmental justice into the ARB's programs consistent with the directives of State law. The policies developed apply to all communities in California, but recognize that environmental justice issues have been

³³ SB-115, 1999. Solis. http://www.leginfo.ca.gov/pub/99-00/bill/sen/sb_0101-0150/sb_115_bill_19991010_chaptered.html

raised more in the context of low income and minority communities, which sometimes experience higher exposures to some pollutants as a result of the cumulative impacts of air pollution from multiple mobile, commercial, industrial, area-wide, and other sources.

Over the past twenty years, the ARB, local air districts, and federal air pollution control programs have made substantial progress towards improving the air quality in California. However, some communities continue to experience higher exposures than others as a result of the cumulative impacts of air pollution from multiple mobile and stationary sources and thus may suffer a disproportionate level of adverse health effects.

The emission reductions resulting from adoption of the proposed regulations will affect a small subset of on-road vehicles statewide. To the extent that communities have a disproportionate population of SPCNSs that choose certified engine packages, the benefits of the proposed regulations may provide relatively greater air quality benefit to these communities.

VIII. REGULATORY ALTERNATIVES

The main alternative considered by staff was to take no action, i.e., not to establish a new certification procedure for engine packages. As discussed further below, staff believes the recommended proposal is superior to this alternative because it will encourage more manufacturers to build and more hobbyists to choose low-emitting engine packages.

As discussed in section 5, on a per mile basis, SPCNSs today emit on average over 30 times more emissions than average 2010 vehicles meeting current emission standards. Hence, ARB staff believes it will be beneficial for clean air to encourage more kit car hobbyists to choose lower-emitting engines. Allowing manufacturers to certify light duty engine packages for use in SPCNSs to new vehicle emission standards will guarantee on a per mile basis the SPCNSs built with such engines are nearly as low-emitting as other new vehicles. Additionally, certified engine packages would be required to meet current evaporative emission standards, meaning less evaporative emissions released to the environment and less fumes in hobbyist garages.

Under the no action alternative, ARB would have no way to evaluate the emissions of light-duty engine packages, and manufacturers would have no way of certifying such engine packages as low-emitting. Under the no action alternative, kit car hobbyists would have no way beyond reading manufacturer literature to differentiate low-emitting engines from dirty ones and no guarantee of being able to purchase an engine that had

demonstrated emission compliance to a regulatory agency. In addition, under the no action alternative, those hobbyists that did choose lower emitting engines would receive no registration benefit for doing so; they would have to compete for Certificate of Sequence numbers with all the hobbyists choosing cheaper, higher-emitting engines.

IX. SUMMARY AND CONCLUSION

Staff's proposed certification regulations and procedures will allow manufacturers to certify engines for use in light-duty SPCNSs and provide hobbyists low-emission options when it comes to choosing an engine. The proposed regulations and procedures provide the necessary flexibility needed for the unique characteristics of SPCNSs, while ensuring new SPCNSs are as low-emitting as new production vehicles. Staff recommends the Board adopt the following, which incorporate the proposal:

- 1. Title 13, Division 3, Chapter 1, Article 1.5: Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles, and
- California Certification Procedures for Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years

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APPENDIX A PROPOSED REGULATION ORDER

Adopt new article 1.5, Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles, sections 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, and 2218, title 17, California Code of Regulations, to read as follows:

[Note: All of the text below is new language to be added to the California Code of Regulations (CCR)]

Title 13. Motor Vehicles

Division 3. Air Resources Board

Chapter 1. Motor Vehicle Pollution Control Devices

Article 1.5. Light-Duty Engine Packages for Use in Light-Duty
Specially Constructed Vehicles

§ 2210. Applicability.

- (a) This section applies to 2012 and subsequent model-year light-duty certified engine packages for use in light-duty specially constructed vehicles (SPCNS) and the installers of SPCNS.
- (b) Each part of this article is severable, and in the event that any part of this chapter or article is held to be invalid, the remainder of this article continues in full force and effect.
- (c) This article, and the documents incorporated by reference herein, includes provisions for certification, labeling requirements, emissions standard enforcement, and warranty.

Note: Authority cited: Sections 39600, 39601, 43000, 43100, 43101, 43102, 43104, and 43105, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43100, 43101, 43102, 43104, 43105, 43106, 43205, Health and Safety Code, and 580 Vehicle Code.

§ 2211. Definitions.

- (a) The definitions in Section 1900(b), chapter 1, title 13 of the California Code of Regulations (CCR) apply to this Article with the following additions:
 - (1) "ARB Enforcement Officer" means any employee of the Air Resources Board (ARB) so designated in writing by the Executive Officer of ARB or by the Executive Officer's designee.
 - (2) "Certified engine configuration" means all engine parts on a certified engine package engine that will affect emissions, including, but not limited to pistons, cylinder heads, etc., as described in the application for certification submitted to and approved by ARB.
 - (3) "Certified engine package" means a new engine package, intended for use only in a specially constructed vehicle (SPCNS) with a gross vehicle weight rating (GVWR) at or below 8,500 pounds, which includes a fully assembled and functioning engine, a controller, emission control components, evaporative emissions system control components (e.g. canister, purge control valves, etc.) and purge control logic.
 - (4) "Emission control system or ECS" includes any component, group of components, or engine modification which controls or causes the reduction of substances emitted from an engine or an SPCNS.
 - (5) "Emission warranty information report" means emission warranty information report as defined by section 2144, title 13, CCR.
 - (6) "Exhaust emissions" means substances emitted into the atmosphere from any opening downstream from the exhaust port of an engine.
 - (7) "Installer" means any person who installs a certified engine package in an SPCNS for compensation or consideration of value; but does not include any person that assembles or produces an SPCNS for resale. Installers must be registered as Automotive Repair Dealers under California Business and Professions Code, section 9880 through section 9889.68. Ultimate purchasers are not considered to be installers.
 - (8) "Light-duty motor vehicle" refers to either a passenger car or light-duty truck.

- (9) "Light-duty truck" mean light-duty truck as defined in Section 1900, title 13, California Code of Regulations.
- (10) "Manufacturer" means the manufacturer granted certification for a certified engine package.
- (11) "Passenger car" means a Passenger Car as defined in Section 1900, title 13, California Code of Regulations.
- (12) "Specially constructed vehicle or SPCNS" means a Specially Constructed Vehicle as defined by California Vehicle Code 580.
- (13) "Ultimate purchaser" means ultimate purchaser as defined by California Health and Saftey Code 39033.5.
- (14) "Useful life" means 120,000 miles or 10 years for exhaust and crankcase emissions, and 150,000 miles or 15 years for evaporative emissions.
- (15) "Warrantable condition" means any condition of a certified engine package that triggers the responsibility of the manufacturer to take corrective action pursuant to sections 2214 or 2215.
- (16) "Warranted part" means any part installed on a certified engine package by the manufacturer, or installed in a warranty repair, which affects any regulated emissions from a certified engine package that is subject to any of the standards prescribed in this article and the documents incorporated by reference herein.
- (17) "Warranty period" means the period of time and mileage that the certified engine package or part are covered by the warranty provisions.
- (18) "Warranty station" means a facility authorized by the manufacturer, or a repair facility agreed upon by both the manufacturer and the ultimate purchaser, to service the warranted engine.
- (19) "Worst case vehicle" means a vehicle configuration with a vehicle test weight, vehicle road load, vehicle frontal area, calibration, emission control system configuration and calibration, transmission, engine displacement, and engine speed to vehicle speed (N/V) ratio which (1) with respect to emission deterioration over the vehicle's useful life, produces the greatest stress on

the emission related components or (2) with respect to certification testing, has the greatest probability of exceeding any of the applicable emission standards.

Note: Authority cited: Sections 39600, 39601, 43000, 43100, 43101, 43102, 43104, and 43105, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43100, 43101, 43102, 43104, 43105, 43106, 43205, Health and Safety Code, and 580 Vehicle Code.

§ 2212. Emission Standards, Test Procedures, Package Requirements, and Reporting Requirements for Engine Packages for Specially Constructed Vehicles.

- (a) This section applies to 2012 and subsequent model year certified engine packages.
- (b) Production and sale of certified engine packages which result in noncompliance with the provisions of this section shall subject a manufacturer to civil penalties, as prescribed in Article 1.5 of Chapter 2, Part 5, Division 26 of the Health and Safety Code.
- (c) Exhaust Emissions. Exhaust emissions from engine packages that are manufactured for sale, sold, or offered for sale in California, or that are introduced, delivered or imported into California into commerce and that are subject to any of the standards prescribed in this article and the documents incorporated by reference herein must not exceed:
 - (1) "Low Emission Vehicle (LEV II)" Exhaust Standards. A manufacturer must demonstrate that the certified engine package, when installed in a worst case vehicle, does not exceed the useful life exhaust emissions standards set for new light duty vehicles in Section 1961(a)(1), title 13, California Code of Regulations (CCR):

Model Years	Standard	NMOG (g/mi)	CO (g/mi)	NOx (g/mi)	HCHO (mg/mi)	PM (g/mi)
2012 and Subsequent	LEV II LEV (120,000 mi Durability)	0.090	4.2	0.07	18	0.01

Notes:

The exhaust emission standards at 50,000 miles durability in Section 1961(a)(1), title 13, CCR, are not applicable.

(2) "50°F Exhaust Emission Standards." Manufacturers must also demonstrate that the engine package, when installed on a vehicle in a worst case configuration, does not exceed exhaust emissions standards set for new light duty motor vehicles

Model Year	Standard	NMOG	CO	NOx	НСНО	Notes
		(g/mi)	(g/mi)	(g/mi)	(mg/mi)	
2012 and	LEV II	0.150	3.4	0.05	30	Α
subsequent	LEV					

Notes:

The 50 °F exhaust emission standards applicable at 4,000 miles for NMOG and HCHO are at two times the NMOG and HCHO standards at 50,000 miles durability mileage, respectively, applicable under the FTP test. The 50 °F exhaust emission standards applicable at 4,000 miles for CO and NOX are at one times the CO and NOX standards at 50,000 miles durability mileage, respectively, applicable under the FTP test. There is no 50 °F exhaust emission standard applicable at 4,000 miles for PM.

(3) "Highway NOx Standard." A manufacturer must also demonstrate compliance with Section 1961(a)(6), title 13, CCR.

Model Year	Standard	Durability (miles)	NOX (g/mi)	Notes
2012 - subsequent	LEV II	120,000	0.07	А

Notes:

The exhaust emission standard for NOX applicable at the full durability mileage under the HFET test is at 1.33 times the NOX standard at the full durability mileage under the FTP test.

(4) "Supplemental Federal Test Procedure Off-Cycle Emission Standards." A manufacturer must also demonstrate compliance with 1961(a)(7), title 13 CCR, which references 13 CCR 1960.1(r). The maximum Supplemental Federal Test Procedure (SFTP) exhaust emissions at 4,000 miles or the mileage specified per 13 CCR 1960.1(r) are shown in 13 CCR 1960.1(r) and summarized below. All footnotes in 13 CCR 1960.1(r) apply.

Vehicle	Loaded Vehicle	US06	US06	SC03 + NMHC	SC03
Туре	Weight (lbs.)	NMHC+NOx (g/mi)	CO (g/mi)	NOx (g/mi)	CO (g/mi)
PC	All	0.14	8.0	0.20	2.7
LDT	0-3750	0.14	8.0	0.20	2.7
LDT	3751-5750	0.25	10.5	0.27	3.5
MDV	5751-8500	0.40	10.5	0.31	3.5

As an alternative, a manufacturer can request Executive Officer approval to be exempt from the SC03 test portion of the SFTP. The Executive Officer will grant approval upon the manufacturer providing data, analysis, etc. demonstrating that the control system cannot be altered by the use of the air conditioning system.

- (5) The test procedures for determining compliance with the exhaust emission standards are set forth in the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," as amended September 27, 2010, and the "California Non-Methane Organic Gas Test Procedures," as amended July 30, 2002, which are incorporated herein by reference.
- (d) Evaporative Emissions. Evaporative emissions from certified engine packages that are manufactured for sale, sold, or offered for sale in California, or that are introduced, delivered or imported into California into commerce and that are subject to any of the standards prescribed in this article and the documents incorporated by reference herein must not exceed the evaporative emissions standards applicable to new light-duty motor vehicles as specified in Section 1976, title 13, CCR. The test procedures for determining compliance with such evaporative emission standards are set forth in the "California Certification Procedures for Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles for 2012 and subsequent Model Years", adopted [insert date], which is incorporated by reference herein.
- (e) Crankcase Emissions. The certified engine package must be equipped with a closed crankcase system and must not discharge crankcase emissions to the atmosphere.
- (f) All emissions testing must be performed on a worst case vehicle, as defined in the "California Certification Procedures for Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years", adopted [insert date], which is incorporated by reference herein.

As an alternative to performing testing on a worst case vehicle, a manufacturer may submit for Executive Officer approval carry over emission test data from a previously certified vehicle, meeting applicable California new light duty exhaust emission standards in Section 1961, title 13, CCR, and California new light duty evaporative emission standards in Section 1976, title 13, CCR having a similar certified engine configuration to the certified engine package. The Executive Officer shall approve such a request if the manufacturer demonstrates one of the following:

- (1) In the case of durability data, the manufacturer must demonstrate successfully that the previously generated durability data represent a worst case or equivalent rate of deterioration for all applicable emission constituents compared to the configuration selected for durability demonstration.
- (2) In the case of emission data, the manufacturer must demonstrate successfully that the previously generated emissions data represent a worst case or equivalent level of emissions for all applicable emission constituents compared to the configuration selected for emission compliance demonstration.
- (g) On-Board Diagnostic System. Except as allowed in (g)(1)-(g)(14) below, the certified engine package must comply with Section 1968.2, title 13, CCR for onboard diagnostic (OBD) requirements applicable to the model year of the engine. For the specific sections identified below, in lieu of complying with all applicable OBD requirements per Section 1968.2, the following alternate criteria can be used:
 - (1) 1968.2(d)(2.1.1)—Malfunction Indicator Light (MIL) location and required image: In lieu of the requirements of this section for location of MIL and the required image, text, and color for the MIL, the system may include a hardwired output for the MIL and include instructions in the installation requirements that the installer/purchaser must connect an indicator light to the output and locate the indicator light in a position that is readily visible to the operator of the vehicle while driving the vehicle and readily identifiable by an inspector as the MIL when performing an emission inspection.
 - (2) 1968.2(d)(3.2.1)—Minimum in-use monitoring performance ratios: In lieu of meeting the miminum ratios identified in this section (e.g., 0.336, etc.), the system may be designed to meet a minimum ratio of 0.100 for all monitors subject to minimum ratio requirements.
 - (3) 1968.2(e)(3.2.2)(A) and (e)(3.3)—Misfire malfunction criteria and monitoring conditions: The system may utilize a percentage of misfire as the malfunction criteria that equates to emissions not exceeding 3.0 times any of the applicable FTP standards in lieu of 1.5 times. If this percentage of misfire is determined to be lower than 2.5 percent, the manufacturer may set the malfunction criteria at 2.5 percent. For monitoring conditions, in lieu of monitoring for misfire under all positive torque conditions, with Executive Officer approval, the system may disable monitoring under light loads where the system may not be able to accurately discern positive and negative torque due to differences in vehicle configurations. Executive Officer approval shall

be granted upon determining the proposed monitoring conditions provide for maximum monitor enablement in positive torque conditions across various expected vehicle types and minimize the risk for false indications of misfire and for end vehicle configurations that have misfire disabled during significant portions of urban driving.

- (4) 1968.2(e)(4)—Evaporative system monitoring: The requirements of this section are not required.
- (5) 1968.2(e)(6.2.1)(C)—Cylinder air-fuel imbalance monitoring: The system may utilize a malfunction criteria of 3.0 times any of the applicable FTP standards in lieu of 1.5 times.
- (6) 1968.2(e)(11.2.2.)(B)—Cold start emission reduction strategy monitoring: The system may utilize a malfunction criteria of 3.0 times any of the applicable FTP standards in lieu of 1.5 times.
- (7) 1968.2(e)(15.1.3)—Comprehensive component monitoring: The system shall be required to monitor transmission related input or output components/systems comprehensive components only if the component or system is used as part of the diagnostic strategy for any other monitored system or component.
- (8) 1968.2(g)(2.1) and (2.2)—Diagnostic Connector location: In lieu of the requirements of this section for location of the diagnostic connector (e.g., in a fairly constrained area of the driver interior footwell), the system may include the standardized SAE J1962 compliant connector with the certified kit and include instructions in the installation requirements that the installer/purchaser must wire the connector appropriately and locate the connector in a position that is readily identifiable and accessible by a repair technician or an inspector when performing an emission inspection.
- (9) 1968.2(g)(4.8)—VIN in standardized data format: The manufacturer of the certified engine shall design the system to have the engine control module output the engine serial number and a designation of the manufacturer in lieu of the VIN to a generic scan tool in accordance with SAE J1979. The combined manufacturer designation and engine serial number shall be no more than 17 characters long, consist only of printable ASCII characters, and shall be padded with zeros at the front or between the manufacturer

- designation and the engine serial number to reach a total of 17 characters if fewer than 17 characters are used.
- (10) 1968.2(h)—Durability demonstration vehicle testing: All testing must be performed on a worst case vehicle, as defined in the "California Certification Procedures for Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years", adopted [insert date], which is incorporated by reference herein.

As an alternative to performing testing on a worst case vehicle, a manufacturer may submit for Executive Officer approval, carry over emission test data from a previously certified vehicle, meeting applicable California OBD requirements in Section 1968.2, title 13, CCR, using a certified engine configuration or an engine configuration that is representative of the certified engine package. Executive Officer approval shall be granted upon determining the proposed previously certified vehicle uses the same OBD II strategies and similar calibrations and is expected to have similar emission and OBD system test results.

- (11) 1968.2(j)(1.2) and (j)(2.2)—Production vehicle evaluation testing vehicle selection: In lieu of an actual production vehicle, manufacturers may utilize a slave vehicle or worst case vehicle for the test vehicle as long as the vehicle has the engine package installed in accordance with the instructions the manufacturer provides to its ultimate purchasers.
- (12) 1968.2(j)(2.3)—Production vehicle evaluation testing evaluation requirements: As an alternative to performing testing on each individual diagnostic, a manufacturer may submit for Executive Officer approval, a request to carry over test data for all unchanged diagnostics from a previously certified vehicle, meeting applicable California OBD requirements in section 1968.2, title 13, CCR, using a certified engine configuration or an engine configuration that is representative of the certified engine configuration. Executive Officer approval shall be granted upon determining the proposed previously certified vehicle uses the same OBD II strategies and similar calibrations and is expected to have identical test results. Manufacturers using this alternative are still required to perform testing on each individual diagnostic that is new, changed, or materially recalibrated for the certified engine package relative to the previously certified vehicle.

- (13) 1968.2(j)(3)—Production vehicle evaluation testing for in-use monitoring performance ratio: As an alternative to collecting and submitting data required in 1968.2(j)(3) on vehicles using the certified engine package, a manufacturer may submit for Executive Officer approval, a request to use data generated from previously certified vehicles, meeting applicable California OBD requirements in section 1968.2, title 13, CCR, using a certified engine configuration or an engine configuration that is representative of the certified engine configuration. Executive Officer approval shall be granted upon determining the proposed vehicles use the same OBD II strategies and similar calibrations and are expected to have similar in-use monitoring performance.
- 1968.5—Enforcement regulation: For purposes of selection of test vehicles in 1968.5(b)(3)(D), the Executive Officer shall only include vehicles in the test sample that have the engine installed in accordance with the installation requirements of the certified engine package. For purposes of a finding of noncomformance for emission and ratio testing in 1968.5(b)(6)(A) and (B) respectively, a finding of nonconformance shall be based on the criteria identified in sections 1968.5(b)(6)(A)(i) and (B)(i), respectively, for all model years.
- (h) Package Requirements. For each certified engine package manufactured for sale in California, the manufacturer must provide written materials, according to the requirements specified in the "California Certification Procedures for Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles for 2012 and subsequent Model Years", adopted [insert adoption date] which is incorporated by reference herein, including:
 - (1) Written instructions for installing the certified engine package into an SPCNS;
 - (2) Statement that the certified engine package must only be installed in an SPCNS with an N/V ratio less than the N/V ratio of the worst case vehicle and below the weight of the worst case vehicle;
 - (3) Statement that no changes may be made to the certified engine package;
 - (4) Statement that installation of a certified engine package into a vehicle other than an SPCNS is subject to the penalty provisions of Part 5, Division 26 of the Health and Safety Code;

- (5) Instructions that the certified engine package should be installed in the vehicle so as not to make it imposible to perform an enhanced area Smog Check inspection on the vehicle. Enhanced area is as defined in section 3340.1, title 16, CCR.
- (6) An engine owner's manual; and,
- (7) An affidavit to be completed if necessary by the installer.
- (i) Manufacturer Reporting Requirements. For each certified engine package manufactured for sale in California, the manufacturer must provide the following information to the Executive Officer by June 30 of the year following the model year of the certified engine package (for example, for a Model Year 2013 certified engine pacakge, the manufacturer would be required to report by June 30, 2014):
 - (1) engine identification number and an explanation of the identification code; and.
 - (2) the total number of certified engine packages marketed and produced for sale in California.

§ 2213. Emission Control Labels – Certified Engine Packages for Use in Specially Constructed Vehicle Engines.

(a) Purpose. The ARB recognizes that certain emissions-related parts must be properly identified and maintained in order for certified engine packages to comply with the applicable emissions standards. The purpose of this section is to require manufacturers to provide a label to the ultimate purchaser that provides vehicle owners and service mechanics with information needed to properly maintain certified engine packages.

(b) Applicability

- (1) All certified engine packages must comply with these labeling requirements.
- (2) The responsibility for compliance with this section rests with the manufacturer.

(c) Label Requirements.

(1) Engine Identification number. The manufacturer must permanently identify a certified engine package by direct stamping or embossment. The identification must be readily visible and readable (i.e., utilize block text that is a minimum of 2 millimeters in height), and resistant to heat, cold, or corrosive materials. A sample of the identification must be submitted in the application for certification.

(2) Emissions Control Label.

- (A) The manufacturer must provide a label with each certified engine package to the ultimate purchaser to be affixed to a fully assembled vehicle. Manufacturers must provide instructions to the ultimate purchaser to affix the label in such a manner that it cannot be removed without destroying or defacing the label, and shall not be affixed to any part that is likely to be replaced during the vehicle's useful life.
- (B) The label must adhere to the guidelines in the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", part 1, subpart C, section 3, as amended September 27, 2010, which incorporates by reference and amends 40 CFR 86.1807-01 "Vehicle Labeling."

- (C) Additional Label Requirements: The label must also contain the following sentence lettered in the English language in block letters and numerals which must be of a color that contrasts with the background of the label: "This engine is only for use in a Specially Constructed Vehicle, as defined in California VC Section 580."
- (D) Manufacturers are not required to comply with "California Environmental Performance Label Specifications for 2009 and Subsequent Model Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Passenger Vehicles".

§ 2214. Defects Warranty Requirements for Certified Engine Packages for Use in Specially Constructed Vehicles.

(a) Applicability.

This section shall apply to 2012 and subsequent model year certified engine packages for use in light-duty SPCNSs.

(b) General Defects Warranty Coverage.

The manufacturer of each certified engine package shall warrant to the ultimate purchaser and each subsequent purchaser that the certified engine package:

- (1) Is designed, built, and equipped so as to conform with all applicable regulations adopted by the ARB pursuant to its authority in chapters 1 and 2, part 5, division 26 of the Health and Safety Code; and
- (2) Is free from defects in materials and workmanship which cause the failure of a warranted part, including any defect in materials or workmanship which would cause the certified engine package's on-board diagnostic malfunction indicator light to illuminate, for a period of three years or 50,000 miles, whichever first occurs; and
- (3) Is free from defects in materials and workmanship which cause the failure of a warranted part described in subsection (c) for seven years or 70,000 miles, whichever first occurs.
- (4) The warranty period for a certified engine package shall begin on the date an SPCNS using that certified engine package is registered for use in California or two years after the certified engine package is purchased by the ultimate purchaser, whichever first occurs. However, as an alternative to beginning the warranty period on the date an SPCNS is registered for use in California or two years after the engine is purchased by the ultimate purchaser, a manufacturer may instead begin the warranty period on the purchase date of the certified engine package and warrant for a period of five years or 50,000 miles, which ever first occurs, that the certified enginge package is free from defects in materials and workmanship which cause the failure of a warranted part, including any defect in materials or workmanship which would cause the certified engine package's on-board diagnostic malfunction indicator light to illuminate.

- (c) "High-Priced" Warranted Parts
 - (1) Each manufacturer shall identify in its application for certification the "high-priced" warranted parts which are:
 - (A) subject to coverage as a warranted part in subsection (b)(2) above, and;
 - (B) have an individual replacement cost at the time of certification exceeding the cost limit defined in subsection (c)(3) below.
 - (2) The replacement cost shall be the retail cost to the ultimate purchaser of a certified engine package and includes the cost of the part, labor, and standard diagnosis. The costs shall be those of the highest-cost metropolitan area of California.
 - (3) The cost limit shall be calculated using the following equation:

Cost limit_n = \$300 x (CPI_{n-2} / 118.3)

where:

Cost $limit_n$ is the cost limit for the applicable model year of the certified engine package rounded to the nearest ten dollars.

n is the model year of the certified engine package.

 $_{n-2}$ is the calendar year two years prior to the model year of the certified engine package.

CPI is the annual average nationwide urban consumer price index published by the United States Bureau of Labor Statistics.

- (4) The cost limit shall be revised annually by the Executive Officer. The highest-cost metropolitan area in California shall be identified by the Executive Officer for use in this section. If a manufacturer seeks certification of a certified engine package before the applicable annual average CPI is available, the cost limit shall be calculated using the average of the monthly nationwide urban CPI figures for the most recent twelve month period for which figures have been published by the United States Bureau of Labor Statistics.
- (5) Each manufacturer shall submit to the Executive Officer the documentation used to identify the "high-priced" warranted parts required in this section. The documentation shall include the estimated retail parts costs, labor rates in dollars per hour, and the labor hours necessary to diagnose and replace the

- parts. The documentation is not required for certified engine packages certified before July 15, 2013.
- (6) The Executive Officer may reject or require modification of the manufacturer's list of "high-priced" warranted parts to ensure that such list includes all emission-related parts whose replacement cost exceeds the cost limit defined in subsection (c)(3).
- (d) Subject to the conditions and exclusions of subsection (i), the warranty on emission-related parts shall be interpreted as follows:
 - (1) Any warranted part which is not scheduled for replacement as required maintenance in the written instructions required by subsection (e) shall be warranted for the applicable warranty period defined in subsection (b)(2). If any such part fails during the period of warranty coverage, it shall be repaired or replaced by the manufacturer according to subsection (d)(4) below. Any such part repaired or replaced under the warranty shall be warranted for the remaining warranty period.
 - (2) Any warranted part which is scheduled only for regular inspection in the written instructions required by subsection (e) shall be warranted for the applicable warranty period defined in subsection (b)(2). A statement in such written instructions to the effect of "repair or replace as necessary" shall not reduce the period of warranty coverage. Any such part required or replaced under warranty shall be warranted for the remaining warranty period.
 - (3) Any warranted part which is scheduled for replacement as required maintenance in the written instructions required by subsection (e) shall be warranted for the period of time or mileage, whichever first occurs, prior to the first scheduled replacement point for that part. If the part fails prior to the first scheduled replacement, the part shall be repaired or replaced by the manufacturer according to subsection (d)(4) below. Any such part required or replaced under warranty shall be warranted for the remainder of the period prior to the first scheduled replacement point for the part.
 - (4) Repair or replacement of any warranted part under the warranty provisions of this article shall be performed at no charge to the certified engine package owner at a warranty station, except in the case of an emergency when a warranted part or a warranty station is not reasonably available to the certified engine package owner. In an emergency, repairs may be performed at any available service establishment, or by the owner, using any replacement part. The manufacturer shall reimburse the owner for his or her expenses including diagnostic charges for such emergency repair or replacement, not to exceed the manufacturer's suggested retail price for all warranted parts replaced and labor charges based on the manufacturer's recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate. A

certified engine owner may reasonably be required to keep receipts and failed parts in order to receive compensation for warranted repairs reimbursable due to an emergency, provided the manufacturer's written instructions required by subsection (e) advise the owner of this obligation.

- (5) Notwithstanding the provisions of subsection (d)(4) above, warranty services or repairs shall be provided at all of a manufacturer's dealerships, warranty stations or service providers which are franchised or under contract to service the subject vehicles or engines.
- (6) The certified engine owner shall not be charged for diagnostic labor which leads to the determination that a warranted part is defective, provided that such diagnostic work is performed at a warranty station.
- (7) The manufacturer shall be liable for damages to other vehicle components proximately caused by a failure under warranty of any warranted part.
- (8) Throughout the certified engine's warranty period defined in subsection (b)(2), the manufacturer shall maintain a supply of warranted parts sufficient to meet the expected demand for such parts. The lack of availability of such parts or the incompleteness of repairs within a reasonable time period, not to exceed 30 days from the time the vehicle or engine is initially presented to the warranty station for repair, shall constitute an emergency for purposes of subsection (d)(4) above.
- (9) Any replacement part may be used in the performance of any maintenance or repairs. Any replacement part designated by a manufacturer may be used in warranty repairs provided without charge to the vehicle owner. Such use shall not reduce the warranty obligations of the manufacturer, except that the manufacturer shall not be liable under this article for repair or replacement of any replacement part which is not a warranted part (except as provided under subsection (d)(7) above).
- (10) Any add-on or modified part exempted by the Air Resources Board from the prohibitions of Vehicle Code section 27156 may be used on a vehicle or engine. Such use, in and of itself, shall not be grounds for disallowing a warranty claim made in accordance with this article. The manufacturer shall not be liable under this article to warrant failures of warranted parts caused by the use of such an add-on or modified part.
- (11) The Executive Officer may request and, in such case, the manufacture shall provide, any documents which describe the manufacturer's warranty procedures or policies.
- (e) Each manufacturer shall furnish with each certified engine package, written instructions for the maintenance and use of the vehicle or engine by the owner,

- and the instructions shall be consistent with this article and Section 5(b)(1) of the "California Certification Procedures for Light-Duty Engine Packages for Use In Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years," (adopted DATE), which is incorporated by reference herein.
- (f) Each manufacturer shall furnish with each new certified engine package a list of the "high-priced" warranted parts established by subsection (c).
- (g) Each manufacturer shall submit the documents required by subsections (c)(5), (e), and (f) with its application for certification pursuant to Section 7 of the "California Certification Procedures for Light-Duty Engine Packages for Use In Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years," (adopted DATE), which is incorporated by reference herein. The Executive Officer may reject or require modification of any of the documents required by subsections (c), (e), and (f) for, among other reasons, incompleteness and lack of clarity. Approval by the Executive Officer of the documents required by subsections (c), (e), and (f) shall be a condition of certification. The Executive Officer shall approve or disapprove the documents required by subsections (c), (e), and (f) within 90 days of the date such documents are received from the manufacturer. Any disapproval shall be accompanied by a statement of the reasons thereof. In the event of disapproval, the manufacturer may petition the Board to review the decision of the Executive Officer.
- (h) Vehicle Inspection Program.
 - (1) This subsection applies to light-duty specially constructed vehicles that have 2012 and subsequent model new certified engine packages which fail to pass a smog check inspection pursuant to Health and Safety Code section 44012 after the warranty period of three years or 50,000 miles, whichever occurs first, has expired, but before the warranty period of seven years or 70,000 miles, whichever occurs first, has expired. The provisions of this section shall be contained in the warranty statement required pursuant to Section 10 of the "California Certification Procedures for Light-Duty Engine Packages for Use In Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years," (adopted DATE), which is incorporated by reference herein.
 - (2) The owner of a certified engine package in a light-duty specially constructed vehicle which fails an inspection during the period described in subsection (h)(1) may choose to have the certified engine package repaired at a warranty station.
 - (A) If the warranty station identifies that the inspection failure was caused by the failure or malfunction of a "high-priced" part defined in subsection (c), then the manufacturer shall be liable for expenses involved in detecting and correcting the part failure or malfunction,

- unless the warranty station demonstrates that the part failure or malfunction was caused by abuse, neglect, or improper maintenance as specified in subsection (i).
- (B) If the warranty station demonstrates that the inspection failure was caused by one or more conditions excluded from warranty coverage pursuant to subsection (i), the certified engine package owner shall be liable for all diagnostic and repair expenses. Such expenses shall not exceed the maximum repair costs permissible under the inspection program.
- (C) If the warranty station determines that the inspection failure was caused by one or more defects covered under warranty pursuant to these regulations and in combination with one or more conditions excluded from warranty coverage pursuant to subsection (i), then the certified engine package owner shall not be charged for the diagnostic and repair costs related to detecting and repairing the warrantable defects.
- (3) In the alternative, the owner of a light-duty specially constructed vehicle which fails the inspection may choose to have the certified engine package repaired at other than a warranty station. If a warrantable defect is found, the vehicle owner may deliver the vehicle to a warranty station and have the defect corrected free of charge. The certified engine package manufacturer shall not be liable for any expenses incurred at a service establishment not authorized to perform warranty repairs, except in the case of an emergency as defined in subsection (d)(4). If the vehicle owner chooses to have a warrantable defect repaired at other than a warranty station, the upper cost limit pursuant to Health and Safety Code section 44017 shall not apply to the repair.

(i) Exclusions.

The repair or replacement of any warranted part otherwise eligible for warranty coverage under subsections (d) and (h) shall be excluded from such warranty coverage if the manufacturer demonstrates that the engine has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for the repair or replacement of the part.

- (j) Certified Engine Package Owner Obligations.
 - (1) The owner of any certified engine package warranted pursuant to this article shall be responsible for the performance of all required scheduled maintenance specified in the written instructions furnished to the owner pursuant to subsection (e). Such maintenance may be performed by the owner, at a service establishment of the owner's choosing, or by a person or persons of the owner's choosing.

(2) Except as specified in subsection (i), failure of the certified engine package owner to ensure the performance of such scheduled maintenance or to keep maintenance records shall not, per se, be grounds for disallowing a warranty claim.

(k) Warranty Card.

The manufacturer shall provide a warranty card, or online warranty registration equivalent, with each certified engine package intended for California sale or use, as described in the "California Certification Procedures for Light-Duty Engine Packages for Use in Light-Duty Specially Constructed Vehicles for 2012 and Subsequent Model Years", adopted [insert date], and incorporated by reference herein.

- (I) Emissions Control System Warranty Statement.
 - (1) The manufacturer shall furnish a copy of the warranty statement with each 2012 and subsequent model year certified engine package for use in a specially constructed vehicle, as specified in the "California Certification Procedures for Engine Packages for Use in Specially Constructed Vehicles for 2012 and Subsequent Model Years", adopted [insert date], and incorporated by reference herein.
 - (2) The manufacturer shall submit the warranty statement with the manufacturer's application for new certified engine package to the Executive Officer. Approval by the Executive Officer of the documents shall be a condition of certification. The Executive Officer shall approve or disapprove the documents within 90 days of receipt from the manufacturer. Any disapproval shall be accompanied by a statement of the reasons therefore. In the event of disapproval, the manufacturer may petition the Board to review the decision of the Executive Officer.
- (m) Mediation; Finding of Warrantable Condition.
 - (1) This section is intended to provide a mechanism for mediating unresolved emissions warranty disputes between engine owners and manufacturers or their agents.
 - (2) An engine owner may request that the Executive Officer mediate a warranty claim.
 - (A) Upon receipt of such a claim the Executive Officer, or the Executives Officers's representative, may make a determination regarding whether the claim is meritorious on its face and, if meritorious, shall notify the appropriate dealer, or manufacturer of the claim. The party against

- whom a complaint is made shall be given a reasonable time in which to respond. The Executive Officer may conduct an informal conference, and may request additional information and evidence.
- (B) Upon examination of the facts submitted by the parties concerned, the Executive Officer, or the Executive Officer's representative, may find that a warranted part, or a certified engine package's nonconformity with any California statutorily authorized motor vehicle emissions inspection and maintenance program, is eligible for warranty coverage pursuant to this article. If such a finding is made, the Executive Officer shall issue a Finding of Warrantable Condition.
- (C) The Finding of Warrantable Condition shall include the name of the vehicle or engine package owner, name of manufacturer of the certified engine package, and model of certified engine package, engine family, odometer reading, date of inspection, identification of the defective part or other warrantable condition and the signature of the person issuing the Finding.

§ 2215. Performance Warranty Requirements for Certified Engine Packages for Use in Specially Constructed Vehicles.

(a) Applicability.

This section shall apply to 2012 and subsequent model year certified engine packages for use in light-duty SPCNSs.

(b) General Performance Warranty Requirements.

A manufacturer shall warrant, beginning on the date an SPCNS using that certified engine package is registered for use in California or two years after the engine is purchased by the ultimate purchaser, whichever first occurs, to the ultimate purchaser and each subsequent purchaser that the certified engine package:

- (1) Is designed, built, and equipped so as to conform with all applicable regulations adopted by the ARB pursuant to its authority in chapters 1 and 2, part 5, division 26 of the Health and Safety Code; and
- (2) Will, for a period of three years or 50,000 miles, whichever first occurs, pass an inspection established under section 44012 of the Health and Safety Code ("inspection").
- (3) As an alternative to beginning the warranty period on the date an SPCNS is registered for use in California or two years after the engine is purchased by the ultimate purchaser, a manufacturer may warrant for a period of five years or 50,000 miles, whichever first occurs, that the SPCNS with the certified engine package will pass an inspection established under section 44012 of the Health and Safety Code ("inspection), and may begin the warranty period on the purchase date of the certified engine package.

(c) Written Instructions.

- (1) Each manufacturer shall furnish with each certified engine package, written instructions for the required maintenance and use of the vehicle or engine by the owner, and the written instructions shall be consistent with this article and Section 5(b)(1) of the "California Certification Procedures for Light-Duty Engine Packages for Use In Light-Duty Specially Constructed Vehicles For 2012 and Subsequent Model Years," (adopted DATE), which is incorporated by reference herein applicable regulations in article 2 of this subchapter.
- (2) Each manufacturer shall submit the documents required by subsection (c)(1) above with its application for certification pursuant to Section 7 of the "California Certification Procedures for Light-Duty Engine Packages for Use In Light-Duty Specially Constructed Vehicles For 2012 and Subsequent Model Years," (adopted DATE), which is incorporated by reference herein.

- (3) The Executive Officer may reject or require modification of the written instructions for, among other reasons, incompleteness or lack of clarity. Approval by the Executive Officer of the written instructions shall be a condition of certification. The Executive Officer shall approve or disapprove the written instructions within 90 days of the date such documents are received from the manufacturer. Any disapproval shall be accompanied by a statement of the reasons thereof. In the event of disapproval, the manufacturer may petition the Board to review the decision of the Executive Officer.
- (d) Proper Use and Maintenance.
 - (1) An emission performance warranty claim may be denied if the manufacturer demonstrates that the failure of the inspection was directly caused by abuse, neglect, or improper maintenance as reflected by a failure to maintain or use the vehicle or certified engine package in accordance with the written instructions.
 - (2) Except as provided in subsection (d)(5), a manufacturer may deny an emission performance warranty claim on the basis of noncompliance with the written instructions only if:
 - (A) An owner is not able to comply with a request by a manufacturer for evidence pursuant to subsection (d)(4); or
 - (B) Notwithstanding the evidence presented pursuant to subsection (d)(4), the manufacturer is able to prove that the vehicle failed an inspection because the vehicle or certified engine package was abused, the required maintenance and use was performed in a manner resulting in a component being improperly installed or a component or related parameter being adjusted substantially outside of the manufacturer's specifications, or maintenance was performed on the certified engine package which resulted in the removing or rendering inoperative of any component affecting the certified engine package's emissions.
 - (3) When determining whether an owner has complied with the written instructions, a manufacturer may require an owner to submit evidence of compliance only with those written instructions for which the manufacturer has an objective reason for believing:
 - (A) Were not performed, and;
 - (B) If not performed, could be the cause of the particular vehicle's failed inspection.

- (4) Evidence of compliance with a maintenance instruction may consist of:
 - (A) A maintenance log book which has been validated at the approximate time or mileage intervals specified in the written instructions by someone who regularly engages in the business of servicing light-duty vehicles or light-duty vehicle engines for the relevant maintenance; or
 - (B) A repair order, sales receipt, or similar evidence showing that the certified engine packag has been submitted for scheduled maintenance at the approximate time or mileage intervals specified in the written instructions to someone who regularly engages in the business of servicing light-duty vehicles or light-duty vehicle engines for the purpose of performing the relevant maintenance; or
 - (C) A statement by the certified engine package owner that the maintenance was performed at the approximate time or mileage interval specified in the written instructions using proper replacement parts.
- (5) In no case may a manufacturer deny an emission performance warranty claim on the basis of:
 - (A) Warranty work or predelivery service performed by any facility authorized by the manufacturer to perform such work or service; or
 - (B) Work performed in an emergency situation to rectify an unsafe condition, including an unsafe driveability condition, attributable to the manufacturer, provided the certified engine package owner has taken steps to put the certified engine package vehicle back in a conforming condition in a timely manner; or
 - (C) Any cause attributable to the manufacturer; or
 - (D) The use of any fuel which is commonly available in the geographical area in which the vehicle or engine is located, unless the written instructions specify that the use of that fuel would adversely affect the emission control devices and systems of the certified engine package, and there is commonly available information for the certified engine package owner to identify the proper fuel to be used.
- (6) The certified engine package owner may perform maintenance or have maintenance performed more frequently than required in the written instructions.
- (7) Except as specified in subsection (d)(2)(B) above, failure of the certified engine package owner to ensure the performance of such scheduled

maintenance or to keep maintenance records shall not, per se, be grounds for disallowing a warranty claim.

- Repair, adjustment, or replacement of any part under the warranty provisions of (e) this article shall be performed at no charge to the certified engine package owner at a warranty station, except where a warranted part is not available to the certified engine package owner within a reasonable time (in no case more than 30 days) after the certified engine package is initially presented to the warranty station for repair. In case of such unavailability, repairs may be performed at any available service establishment, or by the owner, using any replacement part. The manufacturer shall reimburse the owner for his or her expenses including diagnostic charges for such repair or replacement, not to exceed the manufacturer's suggested retail price for all warranted parts replaced and labor charges based on the manufacturer's recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate. A certified engine package owner may reasonably be required to keep receipts and failed parts in order to receive reimbursement due to such unavailability, provided the manufacturer's written instructions advise the owner of this obligation.
- (f) The manufacturer shall be liable for damages to other vehicle components proximately caused by a failure under warranty of any warranted part.
- (g) Any replacement part may be used in the performance of any maintenance or repairs. Any replacement part designated by a manufacturer may be used in warranty repairs provided without charge to the certified engine package owner. Such use shall not reduce the warranty obligations of the manufacturer, except that the manufacturer shall not be liable under this article for repair or replacement of any replacement part which is not a warranted part (except as provided under subsection (d) above).
- (h) Any add-on or modified part exempted by the Air Resources Board from the prohibitions of Vehicle Code section 27156 may be used on a vehicle or certified engine package. Such use, in and of itself, shall not be grounds for disallowing a warranty claim made in accordance with this article. The manufacturer shall not be liable under this article to warrant failures of warranted parts caused by the use of such an add-on or modified part.
- (i) Warranty Claim Procedures.
 - (1) A warranty claim may be submitted by bringing a certified engine package to any repair facility authorized by the manufacturer to service that certified engine package.
 - (2) The manufacturer shall establish procedures as to the manner in which a claim under the emission performance warranty is to be processed. The procedures shall provide for a final decision and repair of a warrantable

condition by the manufacturer within a reasonable time, not to exceed 30 days from the time at which the certified engine package is initially presented for repair, or unless a delay:

- (A) is requested by the certified engine package owner, or
- (B) is caused by an event not attributable to the manufacturer or the warranty station.
- (3) Within the time period specified in subsection (i)(2), the manufacturer shall provide the owner, in writing, with an explanation as to why the claim is being denied.
- (4) Failure to notify a certified engine package owner that a warrantable condition does not exist within the required time period of subsection (i)(2), for reasons other than those provided for in subsections (i)(2)(A) and (B), shall result in the manufacturer being responsible for repairing the certified engine package free of charge to the certified engine package owner.
- (5) The manufacturer shall incur all costs associated with a determination that an emission performance warranty claim is valid
- (j) Warranty services or repairs shall be provided at all of a manufacturer's dealerships, warranty stations, or service providers which are franchised or under contract to service the subject vehicles or engines.
- (k) The certified engine package owner shall not be charged for diagnostic labor which leads to the determination of a warrantable condition provided that such diagnostic work is performed at a warranty station.
- (I) Throughout the certified engine package's warranty period defined in subsection (b), the manufacturer shall maintain a supply of warranted parts sufficient to meet the expected demand for such parts. The lack of availability of such parts or the incompleteness of the repairs within a reasonable time period, not to exceed 30 days from the time the certified engine package is initially presented to the warranty station for repair, shall constitute an unavailability of parts for purposes of subsection (e).
- (m) The Executive Officer may request and, in such case, the manufacturer shall provide, any documents which describe the manufacturer's warranty procedures or policies.
- (n) Certified Engine Package Owner Obligations.
 - (1) The owner of any certified engine package warranted pursuant to this article shall be responsible for the performance of all required scheduled

- maintenance specified in the written instructions furnished to the owner pursuant to subsection (c)(1). Such maintenance may be performed by the owner, at a service establishment of the owner's choosing, or by a person or persons of the owner's choosing.
- (2) Except as specified in subsection (d), failure of the vehicle or engine owner to ensure the performance of such scheduled maintenance or to keep maintenance records shall not, per se, be grounds for disallowing a warranty claim.
- (o) Mediation; Finding of Warrantable Condition
 - (1) This section is intended to provide a mechanism for mediating unresolved emissions warranty disputes between owners of certified engine packages and manufacturers or their agents.
 - (2) A certified engine package owner may request that the Executive Officer mediate a warranty claim.
 - (A) Upon receipt of such a claim the Executive Officer, or the Executives Officers's representative, may make a determination regarding whether the claim is meritorious on its face and, if meritorious, shall notify the appropriate dealer, or manufacturer of the claim. The party against whom a complaint is made shall be given a reasonable time in which to respond. The Executive Officer may conduct an informal conference, and may request additional information and evidence.
 - (B) Upon examination of the facts submitted by the parties concerned, the Executive Officer, or the Executive Officers's representative, may find that a warranted part, or a certified engine package's nonconformity with any California statutorily authorized motor vehicle emissions inspection and maintenance program, is eligible for warranty coverage pursuant to this article. If such a finding is made, the Executive Officer shall issue a Finding of Warrantable Condition.
 - (C) The Finding of Warrantable Condition shall include the name of the certified engine package owner, certified engine package manufacturer and model, engine identification number, engine family, odometer reading, date of inspection, identification of the defective part or other warrantable condition and the signature of the person issuing the Finding.

Note: Authority cited: Sections 39600, 39601, 43000, 43100, 43101, 43102, 43104, and 43105, Health and Safety Code. Reference: Sections 39002, 39003, 43000, 43100,

43101, 43102, 43104, 43105, 43106, 43205, Health and Safety Code, and 580 Vehicle Code.

§ 2216. Warranty Reporting Requirements for Certified Engine Packages for Use in Specially Constructed Vehicles.

(a) Applicability

This section shall apply to 2012 and subsequent model year light-duty motor vehicle engines certified for use in specially constructed vehicles.

- (b) Warranty Reporting Requirements.
 - (1) A manufacturer shall retain and review unscreened warranty claims for each certified engine package family on a production year basis for a period of three years following the production year and shall submit a warranty information report quarterly to ARB during the three year period. The warranty information report shall contain the following information:
 - (A) The manufacturer's name;
 - (B) A description of each class or category of certified engine package, including the model year and engine family;
 - (C) The cumulative number and percentage of certified engine packages covered by the Executive Order for which a warranty replacement or other warranty work was identified; and
 - (D) The number of each type of certified engine package produced for sale in California.

(2) Alternative Procedures

- (A) A manufacturer may use an alternative procedure to those specified in Section 2216 (b)(1), provided the Executive Officer has determined that the alternative procedure will produce substantially equivalent results. In making such a determination, the Executive Officer shall consider the capacity of the alternative procedure to:
 - 1. ensure early detection of failing components within the useful life of the vehicles or engines;
 - track failing components by engine family;
 - assure prompt notification of the Executive Officer when a systematically failing component is indicated;
 - 4. provide objective, complete and easily monitored data; and

- 5. be audited by the Executive Officer.
- (3) Any exhaust and/or evaporative emission control components that are used in the manufacturers' regular production California-certified vehicles and also used in the certified engine package would be subject to corrective action when the warranty claim trigger levels (four percent or 50 parts, whichever is greater) in CCR, section 2143 are exceeded.
- (4) For confirmed warranty rates greater than four percent or 50 parts, whichever is greater, including a certified engine package or ECS in California-certified vehicles produced by the same manufacturer and equipped with the same engine components or ECS components, the Executive Officer may initiate an ordered recall as provided in section 2217.

§ 2217. Recall Procedures for Motor Vehicle Engines Certified for Use in Specially Constructed Vehicles.

(a) Applicability.

This section shall apply to 2012 and subsequent model year certified engine packages.

(b) Recall Procedures.

A manufacturer shall be notified whenever the Executive Officer has determined, based on emissions warranty information reports, enforcement testing results, or any other information, that more than four percent of the certified engine packages covered under each Executive Order, or more than four percent of California-certified engine packages produced by the manufacturer and having the same components as the certified engine package, although properly maintained and used, contain a failure in an emission-related component which, if uncorrected, may result in the vehicles' or engines' failure to meet applicable standards. In such a situation, the certified engine package and/or specific components used in the certified engine package or ECS will be subject to corrective action, including recall, to correct such failures, as specified in the "Procedures for Reporting Failure of Emission-Related Components," Article 2.4, title 13, CCR.

§ 2218. Requirements for Installers of Certified Engine Packages for use in Specially Constructed Vehicles.

(a) Applicability.

This section shall apply to installers of 2012 and subsequent model year certified engine packages.

(b) Requirements.

- (1) Affidavit. An installer must sign and date the affidavit provided by the manufacturer, as required in section 2212(h)(6), confirming under penalty of perjury that the certified engine package has been installed into an SPCNS per the manufacturer's written instructions. The signed and dated affidavit must be submitted to the manufacturer and a copy must be submitted to the ultimate purchaser.
- (2) Record Keeping. Installers must maintain written and photographic records, for not less than two years, of each vehicle built with a certified engine package. Installers must provide for immediate inspection of records documenting the proper assembly of each SPCNS upon the request of ARB.

(c) Installation Warranty.

Each installer of a certified engine package for use in an SPCNS shall warrant to the ultimate purchaser that the certified engine package was installed per the manufacturer's instructions

- (1) The installer shall install the certified engine package in a certified configuration and shall agree to indemnify the ultimate purchaser for the cost of repair of any vehicle as a result of an improper installation of the certified engine package or ECS.
- (2) The installer shall agree to indemnify the ultimate purchaser for any penalties that may be imposed as a result of an improper installation of the certified engine package or ECS.
- (3) The warranties and agreements to indemnify shall be effective for 1 year or 12,000 miles, from the date of installation, whichever first occurs. This warranty shall cover customer service and the full repair or replacement costs including the cost of diagnosis, labor, and parts, including any part on the certified engine package or ECS that is damaged due to the improper installation of the certified engine package or ECS.

APPENDIX B

California Environmental Protection Agency AIR RESOURCES BOARD

PROPOSED

CALIFORNIA CERTIFICATION PROCEDURES FOR LIGHT-DUTY ENGINE PACKAGES FOR USE IN LIGHT-DUTY SPECIALLY CONSTRUCTED VEHICLES FOR 2012 AND SUBSEQUENT MODEL YEARS

Adopted: [Insert Date]

Note: All text is proposed for adoption. As authorized by title 2, California Code of Regulations, section 8, the use of underlines to indicate addition or adoption is omitted.

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NOTE: This document is incorporated by reference in sections 2210 through 2218, title 13, California Code of Regulations (CCR). It contains the majority of the requirements necessary for certification of a new certified engine package, as defined in section 2211(a)(2) for sale in California, in addition to containing the exhaust and evaporative emission standards and test procedures for these engines.

For the purpose of this procedure, the term ARB refers to the California Air Resources Board, and the term "Executive Officer", or his or her authorized representative or designate

CALIFORNIA CERTIFICATION PROCEDURES FOR ENGINE PACKAGES FOR USE IN SPECIALLY CONSTRUCTED VEHICLES FOR 2012 AND SUBSEQUENT MODEL YEARS

1. Applicability.

This document describes the procedures for evaluating and certifying certified engine packages, as defined in section 2211(a)(2) of title 13, California Code of Regulations.

2. Emissions Standards.

The exhaust emissions standards applicable to certified engine packages are specified in 13 CCR Section 2212, which incorporates by reference "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted August 5, 1999, as last amended September 27, 2010 and "California Evaporative Emissions Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles", adopted August 5, 1999, and last amended December 2, 2009.

3. Worst Case Vehicle.

The criteria for determining the worst case vehicle for a certified engine package is set forth below:

(a) ARB will consider the "worst case" vehicle for exhaust emission purposes to be a light duty vehicle which (1) with respect to emission deterioration over the vehicle's useful life, produces the greatest stress on the emission related components or (2) with respect to certification testing, has the greatest probability of exceeding any of the applicable emission standards. The following criteria shall be considered when selecting the worst case vehicle:

engine displacement, vehicle test weight, vehicle road load, vehicle frontal area, calibration, emission control system configuration and calibration, transmission, and engine speed to vehicle speed (N/V) ratio. Unless otherwise indicated by engineering evaluation of information supplied by the manufacturer, or available to ARB staff from other sources, the Executive Officer shall select the highest vehicle road load within the highest test weight class as a "worst case" vehicle.

(b) ARB will consider the "worst case" vehicle for evaporative emissions purposes to be a light duty vehicle which produces the highest evaporative emissions. The following criteria shall be considered when selecting the worst case vehicle: the canister working capacity, fuel tank vapor space, fuel tank configuration, and purge flow.

4. Vehicle Testing.

- (a) Exhaust emissions. The manufacturer must demonstrate compliance with these procedures by showing that the exhaust emissions from the worst case vehicle with the certified engine package installed is in compliance with the California new vehicle exhaust emission standards for the vehicle class and model year of the of the test vehicle in section 1961(a)(1), title 13, California Code of Regulations (CCR), when tested in according to the following test procedures:
 - (1) "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles," adopted August 5, 1999, as last amended September 27, 2010, and the "California Non-Methane Organic Gas Test Procedures," as amended July 30, 2002, which are incorporated herein by reference.
 - (2) "50° Exhaust Emission Standards." Manufacturers must also demonstrate compliance with the 50° Exhaust Emission Standards for LEV II passenger cars or light duty trucks, as applicable, as outlined in the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted August 5, 1999, as last amended September 27, 2010.
 - (3) "Highway NOx Standard." The maximum emissions of oxides of nitrogen (NOx) measured on the federal Highway Fuel Economy Test (HWFET; 40 CFR 600 Subpart B, which is incorporated herein by reference) must not be greater than 1.33 times the passenger car and light duty truck standard set forth in section 1961(a)(1), CCR. Both the projected emissions and the HWFET standard shall be rounded in accordance with the ASTM E29-67 to

- the nearest 0.1 g/mi (or 0.01 g/mi for vehicle certified to the 0.05 or 0.02 g/mi NOx standards) before being compared.
- (4) "Supplemental Federal Test Procedure (SFTP) Off-Cycle Emission Standards." Manufacturers must also demonstrate compliance with the SFTP Off-Cycle Standards for LEV II passenger cars or light duty trucks, as applicable, as outlined in the "California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", adopted August 5, 1999, as last amended September 27, 2010, subpart D, section 2, SFTP General Provisions for California, which incorporates by reference and amends 40 CFR 86.1810-01. As an alternative, a manufacturer can request Executive Officer approval to be exempt from the SC03 test portion of the SFTP. The Executive Officer will grant approval upon the manufacturer providing data, analysis, etc. demonstrating that the control system cannot be altered by the use of the air conditioning system.
- (b) Evaporative Emissions. The manufacturer must also demonstrate compliance with these procedures by showing that the evaporative emissions from the worst case vehicle with the certified engine package installed is in compliance with the California new vehicle evaporative emission standards for the vehicle class and model year of the of the test vehicle in Section 1976, title 13, CCR. The test procedures for determining compliance with the evaporative emission standards are set forth in "California Evaporative Emissions Standards and Test Procedures for 2001 and Subsequent Model Motor Vehicles", adopted August 5, 1999, and last amended December 2, 2009, which in turn incorporates by reference and modify 40, CFR, 86.130-78 through 86.143-90 as they existed July 1, 1989.
- (c) Grouping of Engines and Evaporative Emissions Control System (ECS).
 - (1) This procedure shall apply to each certified engine package type separately, except that a manufacturer may group engines in the same engine family for the purpose of selecting one representative emissions test engine and establishing deterioration factors (DF). If grouping of certified engine packages is approved, ARB will issue one Executive Order (EO) covering all engine models in the group. The engine family criteria in 40 CFR 86.094-24, as it existed on November 17, 2011 should be used to determine whether one engine may represent other engines for testing and establishing DFs.

- (2) Evaporative ECS should be grouped into evaporative families per 40 CFR 86.078-24, as it existed on November 17, 2011. Evaporative ECS components are those components which may contribute to fuel evaporative emissions or running loss emissions, and components designed to control evaporative emissions. Evaporative ECS components may include, but are not limited to, canister, purge valve, roll-over valve, fuel lines, hoses, connectors, fuel tank, fuel cap seal, fuel pump seals (non-immersed pump only), and fuel injection system (fuel injectors, fuel rail, pressure regulator, etc.). If the evaporative component is not required to be provided, or offered in the engine package to the ultimate purchaser, use components recommended in the manufacturer's installation manual.
- (d) The engine package must be installed in the worst case vehicle in accordance with the instructions the manufacturer provides to its ultimate purchasers. The worst case vehicle with the certified engine package installed must meet the accumulation requirements of Title 40, CFR, 86.094-26(a)(3)(i).,as it existed on November 17, 2011.
- (e) Subject to advance approval by the Executive Officer, manufacturers may utilize carryover of previously generated emission data, from a previously certified vehicle with a similar certified engine configuration of the engine package for which the manufacturer seeks to obtain certification.
- (f) Confirmatory Testing. The Executive Officer may require that any test vehicle be submitted to the Air Resources Board, at such place or places as the Air Resources Board may designate, for the purposes of conducting confirmatory emissions tests. The Executive Officer may also specify that such testing be conducted at the manufacturer's selected laboratory facility, in which case instrumentation and equipment specified by the Executive Officer must be made available by the manufacturer for test operations. Confirmatory testing will be performed within 30 days after ARB's receipt of all required vehicle emission test data. If the confirmatory test results indicate that any regulated pollutant exceed the applicable standards, the Air Resources Board will deny the manufacturer's certification request.

5. Delivery of Engines.

- (a) When a manufacturer delivers a certified engine package that has been certified under this procedure to an ultimate purchaser, the following components must also accompany the engine:
 - (1) The certified engine package must include an evaporative canister, purge valve, and purge logic.
 - (2) The certified engine package must include a complete exhaust emission system with all critical components included. A manufacturer must also provide a statement that the certified engine package is not legal for use in an SPCNS unless all required exhaust and evaporative controls are installed.
- (b) In addition to the components above, the following written materials must accompany the engine package:
 - (1) The manufacturer must furnish with each certified engine package written instructions for the required maintenance and use of the certified engine package by the ultimate purchaser, and the written instructions shall be consistent with this section and must meet the contents and format requirements of 40 CFR, Section 1051.130, as it existed November 17, 2011. (References to the federal emission standards shall mean California exhaust and evaporative emission requirements.)
 - (A) The manufacturer must include fuel tank specifications, e.g., tank material, maximum capacity, minimum distance from the engine, gas cap seals, filler neck, pressure/vacuum relief settings, etc. in the installation manual to ensure that the assembled vehicle will comply with the evaporative emission standard.
 - (B) The manufacturer must submit the above instructions with the manufacturer's preliminary application for each certified engine package for approval by the Executive Officer.
 - (C) The manufacturer must include instructions that the certified engine package should be installed in the vehicle so as not to make it impossible to perform an enhanced area Smog Check inspection on the vehicle. Enhanced area is as defined in section 3340.1, title 16, CCR.
 - (D) The Executive Officer may reject or require modification of written instructions for, among other reasons, incompleteness or lack of clarity. Approval by the Executive Officer of the written instructions shall be a condition of certification.

- (2) A statement that the certified engine package, exhaust ECS, and evaporative ECS must be installed in an SPCNS with an N/V ratio less than the N/V ratio of the worst case vehicle and below the weight of the worst case vehicle. The statement must specify the N/V ratio and weight limits not to be exceeded. This statement may be included in the written instructions, in paragraph (1) above.
- (3) A statement that no changes may be made to the certified engine package and evaporative ECS, including, but not limited to: changes to the fuel metering system; changes to the ignition system, changes to the camshaft; and modifying, recalibrating, removing, or failing to properly install any other specified component. This statement may be included in the written instructions, in paragraph (1) above.
- (4) A statement that failure to meet the requirements of paragraphs (1) through (3) above will cause the vehicle to violate ARB's certification requirements which may subject the ultimate purchaser to the penalty provisions of Part 5, Division 26 of the Health and Safety Code. Penalties can be applied. This statement may be included in the written instructions, in paragraph (1) above.
- (5) A label that meets the requirements of Section 2223, title 13, CCR, and an explanation of where and how the label is to be permanently attached on the vehicle.
 - An engine owner's manual that is to be provided to the ultimate purchaser. The owner's manual provided by the manufacturer must contain maintenance instructions for the ultimate purchaser that comply with 40 CFR 86.004-38, as it existed on November 17, 2011 The owner's manual must contain a statement that disconnecting, modifying, or altering any emission control system on a certified engine package constitutes illegal tampering that is prohibited by state law.
- (6) A notice, printed on a separate sheet of paper in 12 point or larger type explaining the documentation, record keeping, notification, access to records requirements for installers of certified engine packages in the state of California specified in section 9 below.
- (7) An affidavit (triplicate copies), which must be completed by the installer, indicating that all of the above-described requirements for the proper installation of the certified engine package and the record keeping and notification requirements described in section 11 below have been read and understood. Provide a mailing address for the affidavit to be sent.

(8) A warranty card (duplicate copies) requesting the certified engine package make and model, the serial number of the engine involved, the date of installation, and the installer's name (and company as applicable) from the installer. Provide a mailing address for the warranty card to be sent.

6. Manufacturer Production Reporting.

A manufacturer certifying engine packages under this procedure shall submit to ARB a report that provides the total number and serial numbers of certified engine packages produced for the model year, as specified in Section 2212(g), title 13, CCR, by June 30 of the year following the model year of the certified engine packages. For example, manufacturer reports would be due by June 30, 2014, for model year 2013.

7. Application.

A manufacturer that desires to have an engine package certified under this procedure must submit a copy of the written application required herein that demonstrates compliance with each of the requirements specified in title 13, CCR sections 2210 through 2218 and the requirements specified in these certification procedures.

Manufacturers planning to obtain ARB certification for the first time should send a "Letter of Intent" to certify engines in California to:

Chief
Mobile Source Operations Division
California Air Resources Board
9480 Telstar Avenue, Suite 4
El Monte, CA 91731

Attn: On-Road Certification/Audit Section

The Letter of Intent should include general information on the company's product offering and contact information including (i) persons authorized to sign documents for submittal to ARB, (ii) persons authorized to submit signed documents to ARB, and (iii) persons authorized to communicate with ARB staff during the certification review process. Upon receiving the "Letter of Intent", the ARB will assign a manufacturer code to the manufacturer and register the authorized personnel in the ARB's DMS. Thereafter, all certification related documents must be submitted electronically according to the format described by the ARB

8. Issuance of Executive Orders (EO).

ARB will issue an EO to the manufacturer for a certified engine package that complies with the requirements of title 13, CCR sections 2210 through 2218 and these certification procedures.

9. Installer Requirements.

An installer shall be required to:

- (a) Install a certified engine package in accordance with installation instructions provided by the manufacturer, acquire other necessary parts, per the manufacturer's recommendations and instructions, and install as recommended and according to the manufacturer's instructions.
 - (1) An installer shall not install a certified engine package in a vehicle that exceeds the weight or N/V limits used to certify the engine package.
 - (2) An installer shall not modify the certified engine package and emission related components provided by the manufacturer.
- (b) Permanently affix the required manufacturer's emission label in a readily accessible location on the vehicle as specified by the manufacturer.
- (c) Maintain, for a period of not less than two years, written and photographic records documenting (1) the N/V ratio; (2) weight; (3) evaporative canister installation (photograph required); (4) installation of the label meeting the requirements of section 5 above (photograph required); (5) the appearance of the finished SPCNS from both the right and left sides (photographs required); and (6) for ECS using one or more oxygen sensors, photographic evidence that the oxygen sensors were installed in the proper location. An installer shall, upon request, provide such written and photographic records to ARB within 10 working days.
- (d) Notify ARB within 10 days of installing a certified engine package into an SPCNS, and the location where inspections can be performed and where records will be kept.

- (e) Report to ARB all certified engine packages installed in SPCNSs each year, no later than January 1. Reports should include vehicle make and model, engine make and model, and engine serial number.
- (f) Provide an installation warranty of 1 year or 12,000 miles and provides a statement under penalty of perjury, that it installed the certified engine package was in accordance with the manufacturer's installation instructions.
- (g) Complete and return to the manufacturer an affidavit, as provided by the manufacturer according to section 4, subsection (i) above, confirming under penalty of perjury, the certified engine package has been installed per the manufacturer's instructions into an SPCNS. A copy of the completed affidavit must also be given to the ultimate purchaser.

10. Emissions Control System Warranty Statement.

Each manufacturer shall furnish a copy of the following statement with each certified engine package for use in an SPCNS:

CALIFORNIA EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board (and manufacturer's name, optional) is pleased to explain the emission control system warranty on your (year) engine. In California, new motor vehicle engines must be designated, built, and equipped to meet the State's stringent anti-smog standards. (Manufacturer's name) must warrant the emission control system on your engine for the period of time listed below provided there has been no abuse, neglect, or improper maintenance of your engine.

Your emission control system may include parts such as the carburetor or fuel-injection system, the ignition system, catalytic converter (or other after-treatment device), and engine computer. Also included may be hoses, belts, connectors, and other emission-related assemblies. Where a warrantable condition exists, (manufacturer's name) will repair your engine at no cost to you, including diagnosis, parts, and labor.

MANUFACTURER'S WARRANTY COVERAGE:

For 2012 and subsequent model year engines sold for use in specially constructed vehicles.

For 3 years or 50,000 miles (or a longer period of time or mileage, optional), whichever first occurs.

If your SPCNS with certified engine package fails a Smog Check inspection, or if any emission-related part on your certified engine package is defective, the defective part and/or all necessary repairs and adjustments will be made by (manufacturer's name) to ensure that your emissions control system (enter warranty type: Parts, Performance, etc).

OWNER'S WARRANTY RESPONSIBILITIES:

- As the certified engine package owner, you are responsible for the performance of the required maintenance listed in your owner's manual. (manufacturer's name) recommends that you retain all receipts covering maintenance on your certified engine package, but (manufacturer's name) cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.
- You are responsible for presenting your certified engine packageequipped specially constructed vehicle to a (manufacturer's name) authorized repair facility as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.
- As the certified engine package owner, you should also be aware that (manufacturer's name) may deny you warranty coverage if your engine or a part has failed due to abuse, neglect, improper maintenance, or unapproved modifications.

If you have any questions regarding your warranty rights and responsibilities, you should contact (insert chosen manufacturer's contact) at 1-XXX-XXXX or the California Air Resources Board at 9528 Telstar Avenue, El Monte, CA 91731.

11. Warranty Card.

The manufacturer shall provide a warranty card, or online warranty registration equivalent, with each certified engine package intended for California sale or use. The warranty card shall be supplied and filled out in triplicate; the original for the

customer, one copy for the installer to keep (if applicable), and one copy to be sent back to the manufacturer. The copy to be returned to the manufacturer shall have pre-paid postage and be of sufficient size to allow for mailing without the use of a separate envelope.

The warranty card shall include the following:

- (a) The general terms and conditions of the emission control warranty;
- (b) A statement that the certified engine package has been designed and manufactured to meet the warranty requirements;
- (c) A place for the customer's signature in acknowledgement of the emission control warranty;
- (d) The engine serial number;
- (e) The vehicle model year, make, model, and odometer reading on which the certified engine package was installed;
- (f) The date of certified engine package purchase;
- (g) The date of certified engine package installation if applicable; and
- (h) The name of the assembly shop or facility, if applicable.

12. Violations and Penalties.

Violations of these procedures are subject to the penalty provisions of Part 5, Division 26 of the Health and Safety Code.

Appendix C - Estimate of Costs for Proposed Regulation and Certification Procedures for Engine Packages for use in SPCNS 2012 and Later

Assumption is 100 certified engines packages will be installed in SPCNS vehicles annually, and three manufacturers (33 each).
Assumption is 2 dealerships (of the engine package manufacturer) and 10 independent repair shops will do installations, statewide. Each do 4 installs per year.
The remaining installs are done by hobbyists themselves.
Note that staff-estimated dollar per hour pay rates listed below include personnel overhead costs.

Manufacturers (three total)

Action	Cost	Determination of Values	Frequency	Notes
Technical development Certification testing Sales Reporting Warranty reporting	\$25,000 \$50,000 \$160 \$160	4 hours at \$40/hour 4 hours at \$40/hour	One time, or at major technology changes Annually Annually Quarterly	Possibly much less cost if carry-over of data occurs
Emissions-related diagnostic & repair Installation instructions	\$3,200	Two hours at \$120/hour, per v 20 hours at \$120/hour, 20 hours at \$40/hour	Two hours at \$120/hour, per warranty claim, 5% warranty rate, annual total 20 hours at \$120/hour, One time, or at major technology changes	
Summary for each manufacturer One time costs Annual costs	\$28,200 \$51,196			
Installers (twelve total) Action	Cost	Determination of Values	Frequency	Notes
Fill out affidavit and mail, take photographs Report annually Emissions-related diagnostic & repair	\$60 \$40 \$48	30 minutes at \$120/hour One hour at \$40/hour Two hours at \$120/hour, per v	90 minutes at \$120/hour Per installation One hour at \$40/hour Annual total Two hours at \$120/hour, per warranty claim, 5% warranty rate, annually	Each installer does 4 installs per year.
Summary for each installer Installation recordkeeping costs, annually Installation reporting and repair costs, annually	\$240			
End User (100 total) Action	Cost	Determination of Values	Frequency	Notes
Purchase certified engine package Have certified engine package installed	\$2,800	\$7,600-\$4,800 12 hours staff time at \$120/hr plus ~\$600 in parts	One time	Incremental cost over average engine cost Incremental cost over average engine installation cost
Summary for each end user who installs own engine Purchased & installed costs Annual costs	(52 total) \$2,800 \$0	,	Summary for each end user who pays an installer (48 total) \$4,800 \$0 assumes negligible additional installation cost if end user installs engine themselves	staller (48 total) f end user installs engine themselves

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annual

annual

annual

TOTAL ANNUAL COST OF REGULATION**

Total annual cost for installers** Total annual costs for Mfrs**

End user (installing own engine)

End user (paying installer)

annually

Testing, reporting, warranty costs per year Total for year for four events

Reporting and warranty repair

2 2 2 3 8 8

\$28,200 \$51,196 \$240 \$88 \$2,800 \$0 \$4,800 \$0 \$6

per install per install per install

One-time development/tech change costs

Number

each

equivalent annual annual annual

annual

one-time

TOTAL COST

Manufacturer Installer

annualized over 5 years

which staff assumes occurs at 5 year intervals. These one-time costs are annualized.

^{**} The assumptions are 100 certified engines packages will be installed in SPCNS vehicles annually, three manufacturers of certified engines packages, and 12 installers each doing 4 installations per year, with the remaining installs beng done by hobbyists themselves

State of California AIR RESOURCES BOARD

ENFORCEMENT PENALTIES: BACKGROUND AND POLICY

Pursuant to Senate Bill 1402 (Dutton, Chapter 413, Statutes of 2010)

September 30, 2011

PREFACE

This document has been prepared by the Air Resources Board (ARB) pursuant to Health and Safety Code Section 43024 which was adopted as part of Senate Bill 1402 (SB 1402, Dutton, Chapter 413, Stats. 2010). Section 43024 provides:

43024. (a) No later than March 1, 2011, the state board shall publish a penalty policy for civil or administrative penalties prescribed under Chapter 1 (commencing with Section 43000) to Chapter 4 (commencing with Section 43800), inclusive, and Chapter 6 (commencing with Section 44200).

- (b) The policy shall take into consideration all relevant circumstances, including, but not limited to, all of the following:
 - (1) The extent of harm to public health, safety and welfare caused by the violation.
 - (2) The nature and persistence of the violation, including the magnitude of the excess emissions.
 - (3) The compliance history of the defendant, including the frequency of past violations.
 - (4) The preventive efforts taken by the defendant, including the record of maintenance and any program to ensure compliance.
 - (5) The innovative nature and the magnitude of the effort required to comply, and the accuracy, reproducibility, and repeatability of the available test methods.
 - (6) The efforts of the defendant to attain, or provide for, compliance.
 - (7) The cooperation of the defendant during the course of the investigation and any action taken by the defendant, including the nature, extent, and time of response of any action taken to mitigate the violation.
 - (8) The financial burden to the defendant.

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EXECUTIVE SUMMARY

Millions of Californians continue to breathe unhealthful air. Many areas in California exceed health-based air quality standards and cannot tolerate additional, illegal emissions of smog-forming compounds and diesel soot. For many toxic air contaminants, such as benzene and formaldehyde, there are no known safe levels of exposure. There is no practical way Californians can individually protect themselves from air pollution. Children, the elderly and people with heart and lung disease are particularly at risk.

The Air Resources Board (ARB) approaches this challenge with the conviction that betterment of public health goes hand-in-hand with economic health.

The bottom line of ARB's enforcement program is the same as its overall mission: "To promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state." The ARB aims to reduce air emissions through fair, consistent and comprehensive enforcement of air pollution laws and by providing compliance assistance.

In 2009, the ARB began to explore ways to improve compliance and make its enforcement process more transparent. Staff solicited public comment in a widely announced Oct. 12, 2009 workshop in Sacramento, which drew a large audience and much participation. Many commenters encouraged ARB to increase the transparency of its enforcement process. The Enforcement Division reported the results of its outreach efforts at the Board's Jan. 28, 2010 meeting and committed to developing a written penalty policy that explains how it resolves violations and determines penalties.

The California Legislature underscored the importance of ARB's enforcement outreach in approving Senate Bill 1402, which became law on Sept. 28, 2010. Appendix A contains a copy of the bill. Among other requirements, SB 1402 directs the ARB to publish by March 1, 2011 a penalty policy that takes certain circumstances into account when assessing penalties. This document responds to that directive.

Part 1 provides context and background for the penalty policy. It outlines California's air pollution laws, regulations and corresponding penalties and details ARB's enforcement program, which includes public outreach and compliance assistance workshops. The handling of penalty revenue also is discussed.

Part 2 is the proposed penalty policy itself and related Cal/EPA guidance documents. The policy calls for consideration of "all relevant circumstances," in

determining the penalty amount. By law, penalty levels must be set at levels to ensure compliance and deter violations. They may be based on any relevant evidence, including a violator's financial condition. Such circumstances, along with the eight factors enumerated in SB 1402 (see Preface), must all be considered in determining penalties for violations of laws under the Board's jurisdiction.

For easy reference, Appendix B of this document presents a matrix of most of the laws and regulations ARB enforces, with the corresponding penalties.

The penalty policy explains how ARB works to consistently reach swift and fair resolution of violations.

Fairness is at the heart of an effective enforcement program—one that benefits those who invested in pollution controls and maintains consistency in the level of penalties issued for similar violations. To be fair, the Board also takes into account the specific circumstances, causes, results and actors—all of which vary from case to case.

As a result, comparisons between individual cases of similar violations may be invalid. Similarly, the policy does not have a mathematical formula for calculating penalties. Such a formulaic approach would not properly weigh individual circumstances and might result in an unjust or ineffective penalty.

Fairness also calls for proportionality, meaning monetary sanctions should be severe enough to deter future violations but proportionate to the financial wherewithal of the company or individuals involved.

ARB's penalty determinations are designed to prevent harm to the public and the environment, not to drive people out of business. Penalties may be reduced in cases of financial hardship. Also, for example, ARB's consumer product regulations commonly provide a "sell-through" period, allowing businesses to sell their remaining inventory of newly prohibited, higher-polluting products for a limited period before enforcement takes effect. The ARB's Enforcement Division generally launches an extensive public outreach campaign with the rollout of a new regulation so the regulated community isn't caught by surprise or misinformed.

The Enforcement Division takes great care to engage regulated industries and businesses in developing, understanding and complying with each regulation it adopts. Over the years, the enforcement staff has grown more specialized and involved in public outreach. The division's compliance assistance workshops annually draw thousands of from small business, industries, local air pollution control districts and other groups. Enrollment more than doubled in 2009 to 9,000.

The ARB resolves thousands of violations a year and annually deposits millions of dollars in penalties in an Air Pollution Control Fund controlled by the California Legislature.

Over the years, ARB regulations have evolved from focusing almost exclusively on large enterprises such as engine manufacturing and fuel production to medium and small operations. This is particularly the case with enforcement of the Board's diesel risk reduction regulations that affect owners of truck and bus fleets of any size. The Board's strategy for attaining cleaner diesel emission standards traditionally called for accelerated retirement of older, higher polluting diesel trucks and buses. Recent regulations, however, also require fleet operators to retrofit certain model years of higher-polluting diesel vehicles and equipment that are still years away from retirement. There are more than 500.000 heavy-duty diesel trucks on California's roads today.

ARB puts considerable efforts into drafting regulations that are enforceable, that phase in regulatory requirements in ways that foster compliance and backs them up with outreach and education for the regulated community. ARB has carefully organized its enforcement program and deploys its resources to address areas of most concern. The results can be reviewed in the annual enforcement reports ARB publishes and posts on its webpage at http://www.arb.ca.gov/enf/reports/reports.htm.

Enforcement also has grown more active. The number of cases or citations closed in 2009 totaled 4,054, compared with 1,535 in 2002. Penalties collected in 2009 totaled \$16.3 million, up from \$11.3 million collected in 2002. For more enforcement statistics, please visit the ARB Enforcement Division website at: http://www.arb.ca.gov/enf/enf.htm.

ARB's enforcement process can be summarized in five steps: (1) finding violations through inspections, investigations or complaints, (2) determining the penalty, (3) notifying the responsible party, (4) providing the responsible party an opportunity to explain and ask questions and (5) resolving the violation informally if possible. These steps may vary, depending on the type of violation.

When a settlement cannot be reached, ARB generally refers the matter to a prosecutor, usually the Attorney General, for civil litigation or criminal prosecution if warranted. Administrative hearings may be held for certain mobile source citations.

The proposed penalty policy fulfills the requirements of SB 1402. The policy extends ARB's practice of explaining the basis of its penalty determinations to include more details in its written demands for a penalty or settlement, as SB 1402 requires. Those details include the governing law and a quantification of excess emissions where practicable.

The policy also formalizes the Board's longtime penalty-setting practice of taking into consideration "all relevant circumstances," including the eight SB 1402 factors. Those factors include the extent of public harm caused by the violation and the defendant's compliance history and level of cooperation in the investigation.

ARB's efforts to improve the transparency of its enforcement process go beyond the fulfillment of SB 1402's requirements. For example, ARB now posts online all settlement agreements, complete with explanations of penalty determinations.

The Board staff worked with the interested public and regulated community on refining the penalty policy in public workshops and in response to public comments. When this policy was published, efforts were still underway to implement and interpret The Global Warming Solutions Act of 2006 (AB 32). Although this policy reflects some principles that are common to all enforcement efforts, this policy is not intended to determine how regulations issued under AB 32 will be written or implemented.

PART 1: BACKGROUND ON ARB ENFORCEMENT

I. INTRODUCTION

To fully understand ARB's penalty policy, it is important to understand the Board's overall mission, goals, environmental justice policies and enforcement program.

A. Mission

To promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state.

B. Major Goals

- ☐ Provide healthful air to all Californians
- Protect public from exposure to Toxic Air Contaminants
- Reduce California's emission of greenhouse gases
- Provide leadership in implementing and enforcing air pollution control regulations

- Provide innovative approaches for complying with air pollution regulations
- Base decisions on best possible scientific and economic information
- □ Provide quality service to the public

C. Environmental Justice Policies

ARB is committed to making the achievement of environmental justice an integral part of its activities. State law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies.

The Board approved its Environmental Justice Policies and Actions on Dec. 13, 2001, consistent with the directives of state law. They are available at http://www.arb.ca.gov/ch/programs/ej/ej.htm

D. ARB's Enforcement Program

The ARB designed its enforcement program to achieve immediate compliance, deter future violations and to make sure that people who follow the rules are not disadvantaged by those who don't.

ARB resolves several thousand violations a year through a swift and informal settlement process and annually deposits several million dollars in penalties in an Air Pollution Control Fund that is controlled by the California Legislature.

When a settlement cannot be reached, ARB generally refers the matter to a prosecutor, usually the Attorney General, for civil litigation or to a District Attorney if criminal prosecution is warranted. Administrative hearings are available for some of ARB's cases.

ARB's regulations have become increasingly complex and have reached larger and more diverse industrial and business sectors. Consequently, the need to provide compliance assistance and a clear enforcement policy has become more critical.

II. LEGAL FRAMEWORK

A. Laws and Regulations

The Air Resources Board enforces a variety of laws and regulations to stop illegal air pollution. The statutes are found in the **California Health and**

Safety Code (HSC), which recognizes air pollution sources as either "vehicular" or "non-vehicular."

- Vehicular: cars, trucks and other motorized mobile sources.
- Non-vehicular: stationary sources such as oil refineries, factories, dry cleaners and auto body shops. Such sources include "consumer products," meaning chemically formulated products for household or institutional use. Regulated products include cleaning compounds, aerosol paints, perfumes and other personal care products.

Most of the air quality statutes the ARB enforces are in HSC's **Division 26**, which is divided into five **Parts**. Division 26 gives the ARB responsibility for control of vehicular sources. It allocates primary control of the non-vehicular sources to the **local air pollution control districts**, which are subject to ARB oversight. ARB regulations are in **Titles 13 and 17** of the **California Code of Regulations** (CCR).

For easy reference, Appendix B of this document presents a matrix of most of the laws and regulations ARB enforces, with the corresponding penalties.

B. Regulations

In proposing an air pollution regulation, ARB staff documents why it is needed, inventories the sources of emissions and their contribution to the problem and surveys existing control options. ARB then publicly issues a draft regulatory proposal, solicits comments from various stakeholders and refines the proposal based on those comments. The staff contacts stakeholder groups — typically representatives from industry, the environmental community and public health professionals — and holds public workshops. The goal of this iterative process is to resolve as many stakeholder issues as possible before staff presents the proposed regulation to the Board for adoption. ARB follows the same steps when a regulation requires re-evaluation and amendment. After regulations are adopted, ARB expends considerable efforts to help the affected industry comply with it.

C. Penalties

California's air quality laws and regulations apply the legal doctrine of "strict liability," meaning a prohibited act constitutes a violation no matter one's intent or the amount of care taken to avoid violations. Under strict liability, the circumstances of a violation are taken into account to determine the appropriate penalty, not to excuse the violation. The doctrine is common to environmental laws nationwide (including the federal Clean Air Act), because pollution violations occur in the course of ongoing business activity and usually are not committed intentionally or even negligently. In some cases, higher maximum penalties are

available for intentional or negligent violations. But without strict liability, air pollution laws would have little deterrent effect.

Maximum penalties are specified for each type violation:

Stationary Sources and Consumer Products (Part 4 of Division 26, HSC)

There are civil penalties (sections 42401 through 42403) and criminal penalties (sections 42400 through 42400.8). Violators may be punished using either, but not both (section 42400.7). Most violations are punished civilly.

Maximum penalty amounts are based on the degree of a violator's intent. The range begins at \$1,000 per violation per day, which can be imposed with no finding of intent (strict liability). Penalties top at \$1 million per violation per day for corporate violators and \$250,000 per violation per day for individuals, in cases of willful and intentional emissions of air contaminants that result in great bodily harm or death. ARB also can obtain a court order or "injunction" to stop violations from taking place (section 41513). In criminal cases, violators also face possible jail sentences of 30 days to 1 year per violation per day.

Part 4 penalty provisions also apply to violations of ARB's consumer products regulations (Title 17, California Code of Regulations, sections 94500-94575), and indoor air cleaner regulations (sections 94800-94810).

The list of factors that must be considered in determining a penalty under Part 4 (section 42403) is similar to those required under SB 1402 (section 43024).

□ Air Toxics Penalties (Part 2 of Division 26, HSC)

ARB enforces state and some federal Air Toxic Control Measures (ATCMs) under section 39674 of Part 2. That section provides for penalties of up to \$10,000 per violation, per day. Higher penalties may also apply because certain ATCMs may also be enforced under section 39675 provisions of Part 4, stationary sources, described above. Because the regulations ARB adopts to control diesel particulate matter are in part adopted pursuant to ARB's authority to control air toxics, violations of the ARB's diesel retrofit regulations, for example, may also carry penalties under Health and Safety Code sections 39674 and 39675.

□ Mobile Sources and Fuels Penalties (Part 5 of Division 26, HSC)

Unlike Part 4, Part 5 relies almost exclusively on civil penalties. Transactions involving new motor vehicles that are not certified to ARB's emission standards are subject to civil penalties of up to \$5,000 per vehicle per violation (section 43154). These are the hallmark penalties that safeguard ARB's stringent motor vehicle emission standards. They were upheld in *People ex rel*.

State Air Resources Board v. Wilmshurst (1999) 68 Cal.App.4th 1332, which rejected many of the legal challenges to ARB's ability to enforce its vehicle certification programs.

Other requirements carrying specific penalties for violations selling vehicles that violate ARB's emission standards [\$5,000 per vehicle (section 43211)], violating ARB test procedures [\$50 per vehicle (section 43212)] and tampering with pollution control devices (\$1,000 per violation for car dealers (section 43012)].

There is a "catchall" provision (section 43016) for violations of requirements that do not carry a specific penalty. It provides for penalties of up to \$500 per violation and is commonly applied to violations of the Small Off-Road Engine regulations (Title 13 CCR sections 2400-2409).

The SB 1402 penalty factors now formally apply to mobile source violations. Section 43031 applies a similar list of factors to violations of ARB's fuels regulations.

As for ARB's fuel regulations, willful violations are subject to civil penalties of up to \$250,000 per day, plus removing any economic benefit. Negligent violations are subject to penalties of up to \$50,000 per day, while strict liability violations are subject to penalties of up to \$35,000 per day (sections 43027 and 43030.)

It is a criminal offense to knowingly violate an ARB fuels regulation (section 43020). The misdemeanor is punishable by up to \$1,000 per day of violation and a maximum six months jail time.

ARB can obtain a court order to stop any violation of a Part 5 requirement from occurring (section 43017).

III. ARB's ENFORCEMENT PROCESS

A. Finding the violation

ARB learns about violations through inspections, tips from the public, referrals from other agencies, mandatory emissions reporting and voluntary disclosure. How ARB learns about a violation may make a difference in how it calculates the penalty. Concealing violations, for example, may result in a maximum penalty.

B. Determining the penalty

When it finds a violation, ARB determines a proposed penalty amount based on applicable laws and court decisions. The penalty amount may be adjusted based on other relevant circumstances, such as the violator's financial

position and history of violations. In some cases, each item (say a vehicle or piece of equipment that is not certified to ARB emission standards) triggers a penalty. In other situations, each day a violation continues is a separate violation.

C. Notifying the responsible party

Every person ARB believes has violated a law is notified. The notice may be a citation issued (say on a roadside inspection of big rig truck with smoking exhaust), in a letter informing the person of an apparent violation or in a more formal "Notice of Violation." In rare cases, the first notice will be a legal pleading requiring a response and appearance in court to face charges. No matter the form, all notifications contain the information required by SB 1402. ARB explains the basis for any penalty it demands, and violators may request a reduced penalty based on mitigating circumstances ARB had previously not known about. Likewise, written demands explain:

- Laws or regulations on which the penalty is based.
- How the penalty amount was determined, including mitigating or aggravating factors.
- ☐ The penalty's per unit basis, if any.
- Whether the law violated specifies emission limits, and if so, a quantification of excess emissions where practicable (Health and Safety Code section 39619.7).

D. Opportunity to discuss

Everyone ARB notifies of violating any law or regulation is given one or more opportunities to explain the circumstances and to ask about the basis of the accusation. Depending on the seriousness and scope of the violations, the discussion may be a phone call, meetings with ARB staff or an exchange of correspondence. These discussions are a two-way street. The ARB seeks to confirm and learn more about the violations, while the violator may want to explain that no violation occurred or outline points that could lower the penalty.

E. Resolution

Most violations are quickly resolved when the violator mails in a fine or negotiates a settlement by phone or in person. Violations that are disputed sometimes require more information gathering and discussion before an agreement is reached.

When a settlement cannot be reached, ARB generally refers the matter to a prosecutor, usually the Attorney General, for civil litigation or criminal prosecution if warranted. In most cases, ARB has discretion whether to initiate an administrative hearing prior to litigation. Given its success in obtaining mutually agreeable settlements, ARB has had little need for these administrative hearings.

IV. PUBLIC COMMUNICATIONS AND OUTREACH

ARB issues press releases announcing its settlements in cases involving large penalties. All settlement agreements complete with explanations of penalty determinations are posted online at: http://www.arb.ca.gov/enf/casesett/casesett.htm. In addition, ARB publishes a detailed report of its enforcement activities each year at: http://www.arb.ca.gov/enf/reports/reports.htm. A copy of ARB's 2010 enforcement report is attached as Appendix E.

Much effort goes to engage regulated industries and small businesses in developing, understanding and complying with each regulation it adopts. Staff widely broadcasts enforcement advisories, maintains web pages and list-serves on regulatory developments, distributes brochures and fact sheets, publishes articles in trade journals and regularly responds to public inquiries.

ARB's Office of the Ombudsman specializes in helping owners of small businesses and start-ups navigate permitting, resolve compliance issues and find financial assistance and incentive programs.

Over the years, ARB's enforcement staff has offered compliance assistance workshops for thousands of people from industry, small business, academia, local air districts and other groups. Enrollment more than doubled in 2009 to 9,000.

V. PENALTY REVENUE

ARB staff records penalty checks then deposits them into the Air Pollution Control Fund, which is administered by the California Legislature. Money in the fund must be appropriated by the Legislature before it can be spent.

Some cases are resolved by paying part of the penalty (not to exceed 25 percent) to a Supplemental Environmental Project as described in Appendix D.

VI. DEVELOPING AN ARB PENALTY POLICY

In 2009, the Enforcement Division began to explore ways to improve compliance and better assist a growing regulated community that faces increasing complex air pollution laws and regulations.

In the largest listserve broadcast in ARB history, staff announced an Oct. 12, 2009 public workshop to discuss enforcement policy. See: http://www.arb.ca.gov/enf/meetings/meetings.htm. Staff followed up with hundreds of phone calls to a wide spectrum of people interested in ARB enforcement. The workshop drew a large attendance and wide participation. Many commenters expressed support for ongoing enforcement outreach and encouraged ARB to increase the transparency of its enforcement process.

The Enforcement Division reported the results of its outreach efforts at the Board's Jan. 28, 2010 meeting and committed to developing a penalty policy in consultation with stakeholders.

As ARB conducted its enforcement policy discussions, the Legislature considered SB 1402. The version of SB 1402 enacted and signed into law (see Appendix A) requires ARB to publish a penalty policy by March 1, 2011 that is applicable to specified vehicular air pollution violations. (See Health and Safety Code section 43024.)

This document responds to that directive. Because the principles governing ARB's penalty calculations are common across ARB's programs (see Health and Safety Code sections 42403, 43024 and 43031), the policy is designed to apply to all the programs the ARB has historically enforced.

PART 2: ENFORCEMENT PENALTY POLICY

VIII. ARB CONSIDERS ALL RELEVANT CIRCUMSTANCES IN ASSESSING PENALTIES INCLUDING EIGHT STATUTORY FACTORS

A. Introduction

Health and Safety Code sections 42403, 43024 and 43031 require that penalties "shall take into consideration all relevant circumstances, including, but not limited to," eight specified factors. This analysis must account for legal authorities that provide that penalty levels must be set at levels to ensure compliance and deter violations, that penalties may be based on any relevant evidence, and must relate to the violators' financial condition. It also requires recognition that, as the Legislature has declared, air quality laws protect the public health and welfare. These circumstances, along with the eight factors enumerated in Health and Safety Code sections 42403, 43024 and 43031 must all be considered in calculating penalties. Cal/EPA has published guidance documents on penalty-related topics, one on self-disclosure of violations (attached as Appendix C) and the other on supplemental environmental projects (attached as Appendix D). These guidance documents and ARB mission statements are also relevant circumstances that ARB considers in calculating penalties. They are discussed at the end of this section.

B. General Penalty Principles

A penalty's ultimate purpose is to promote compliance with the law. The Legislature determines the appropriate penalty in the first instance by establishing an amount in statute, based on the environmental and health values that the Legislature sought to protect against a particular violation. Many statutes provide for penalties "not more than" the maximum, giving courts and ARB some discretion to reduce the maximum amount. The circumstances of individual cases may or may not provide reasons to reduce penalties below the maximum.

Three key principles guide penalty determinations: the need for deterrence, fairness, and swift correction of environmental problems. ARB typically exercises its discretion by considering the circumstances of the particular violation, past penalties in similar cases, and the potential costs and risk associated with litigating particular violations.

<u>Deterrence</u>. To achieve the goal of deterrence, every penalty must impose a consequence that will deter both the violator and others from future violations. In keeping with that goal, an adequate penalty must deprive a violator of any economic benefit resulting from the violation and include an additional amount reflecting the seriousness of the violation. In many cases, the amount of any economic benefit may be smaller than the proposed penalty, difficult to calculate, or both. Accordingly, ARB does not routinely calculate a precise economic benefit amount unless the facts suggest that such benefit is significant or easily determined.

<u>Fairness</u>. To treat the regulated community fairly requires both consistency and flexibility. Treating similar situations similarly is key to fairness. The consideration of each case must be flexible enough to reflect legitimate differences between violations.

Swift Resolution. The third key goal is swift resolution of both environmental problems and pending cases. Prompt resolution of disputes limits environmental harm, promotes good environmental practices and enhances a penalty's deterrent effect.

C. General Legal Considerations in Calculating Penalties

The determination of an appropriate penalty depends on the purpose and meaning of the particular statute, and is informed by the larger statutory scheme and case law.

The statutes establishing penalties for violations of ARB program requirements are discussed above and listed in the matrix in Appendix B. In some statutes the Legislature carefully distinguished between intentional

conduct, knowing failure to correct a violation, negligence, and strict liability, setting forth different maximum penalties for each. Accordingly, when determining a penalty for an intentional violation subject to the penalty set forth in section 42402.3, for example, it may be inappropriate to automatically consider intent as an aggravating factor. Conversely, the absence of intent may not be a significant mitigating factor for strict liability violations. Many of the penalty statutes the Air Resources Board applies were adopted decades ago. To maintain the deterrent effect the Legislature intended at the time these statutes were adopted, current penalties are appropriately set toward the maximum ranges the statutes provide.

Case law interpreting penalty statutes also informs the meaning and operation of penalty provisions. Those cases uniformly note that the purpose of penalties is to punish and deter violations. California courts, like federal courts interpreting the federal Clean Air Act, have stated that the statutory maximum is the presumptive starting point, subject to reductions based on mitigating factors a violator can establish. These cases are discussed in more detail below, but it is important to note the reason for air quality laws in the first place—to protect public health and safety—and acknowledge that this also weights the calculation toward substantial penalties.

D. Air Quality Laws Protect Public Health and Safety

Calculating penalties for violations of California air quality laws must account for the fact that these laws protect the public health, safety and welfare of all Californians. The Legislature declared this in Health and Safety Code section 39000, which provides:

"The Legislature finds and declares that the people of the State of California have a primary interest in the quality of the physical environment in which they live, and that this physical environment is being degraded by the waste and refuse of civilization polluting the atmosphere, thereby creating a situation which is detrimental to the health, safety, welfare, and sense of well-being of the people of California."

The important public policy interests involved in air quality cases justify substantial penalties for violations. Many areas in California fail to attain ambient air quality standards and cannot tolerate additional, illegal emissions. In the case of toxic air contaminants, there are no known safe exposure thresholds. There is no practical way for people to protect themselves from air pollution, so air quality violations must be prevented wherever possible.

¹ Compare Health and Safety Code sections 42402 [\$10,000 strict liability], 42402.1 [\$25,000 negligence], 42402.2 [\$40,000 knowing], 42402.3 [\$75,000 intentional]. See also Health and Safety Code section 43027, subd. (a) [\$250,000 intentional], (b) [\$50,000 negligent], and (c) [\$35000 strict liability].

E. All Relevant Evidence is Considered in Calculating Penalties

As provided in SB 1402 and elsewhere, the proper penalty amount is an issue that can be proven by any relevant evidence. (See: Health and Safety Code sections 42403, 43031 and 43024; Evidence Code section 350.) "Relevant evidence" is a very wide term and means any evidence that would be admissible in court and has a tendency to prove what the proper penalty should be. (See: Evidence Code sections 210 and 350.)

F. General Case Law on Civil Penalties

Courts have not interpreted most of the air quality penalty provisions in the Health and Safety Code, but they have considered other civil penalty statutes. These courts have recognized that civil penalties have several purposes: punishment, deterring future violations, motivating compliance, and preventing unjust enrichment and unfair business advantage.

For example courts have said a civil penalty is "unquestionably intended as a deterrent against future misconduct and does constitute a severe punitive exaction by the state...." (People v. Superior Court (Kaufman) (1974) 12 Cal.3d 421, 431.) Civil penalties "do partake of the nature of punishments for wrongdoing [,] accomplish a chastisement of the wrongdoer and act as a deterrent against similar misconduct" by the violator and others. (People v. Superior Court (Kardon) (1973) 35 Cal.App.3d 710, 713.) "[C]ivil penalties may have a punitive or deterrent aspect, [but] their primary purpose is to secure obedience to statutes and regulations imposed to assure important public policy objectives." (Kizer v. County of San Mateo (1991) 53 Cal.3d 139, 147-148 [279 Cal.Rptr. 318] cited in City and County of San Francisco v. Sainez (2000) 77 Cal.App.4th 1302, 1315 [92 Cal.Rptr. 418].

G. Case Law on Air Quality Penalties

The concepts developed in civil penalty cases in other contexts have been applied to California air quality law. Discussing the civil penalties provided in Health and Safety Code section 43154 for violations of California's vehicular air quality certification requirements, the court in *People ex rel. State Air Resources Board v. Wilmshurst* (1999) 68 Cal.App.4th 1332, explained at page 1351 that when air quality violations occur, maximum penalties are presumed and the violator has the obligation to demonstrate that a lesser penalty amount is appropriate:

"In addition to disgorging illicit gains and obtaining recompense, a civil penalty also has the purpose of deterring future misconduct. (State of California v. City & County of San Francisco (1979) 94 Cal.App. 3d 522, 531 [156 Cal.Rptr. 542]; People v. Bestline

Products, Inc. (1976) 61 Cal.App.3d 879, 924 [132 Cal.Rptr. 767].) Regulatory statutes would have little deterrent effect if violators could be penalized only where a plaintiff demonstrated quantifiable damages. (State of California v. City & County of San Francisco, supra, 94 Cal.App.3d at p. 531.) Further, "A penalty statute presupposes that its violation produces damages beyond that which is compensable." (Ibid., italics added.) The burden of proving that actual damages are less than the liquidated maximum provided in a penalty statute lies with the defendant, and in the absence of evidence in mitigation a court is free to assess the full amount. (Id. at pp. 531-532.)"²

In settling cases, ARB computes the maximum penalty as a reference point, but proposes a penalty based on the facts, law and circumstances of the particular case.

H. Penalties Must Also Relate to the Violator's Financial Condition

To accomplish their intended goals, civil penalties must bear some relationship to the violator's financial condition. The relevance of a violator's financial information was established in *People* v. *Toomey* (1985) 157 Cal.App.3d 1, 24-25. In *Toomey* the court reiterated the holding in *People* v. *Superior Court (Kardon)* (1973) Cal.App.3d 710, 713, that civil penalty provisions are sufficiently similar to exemplary damages as to permit discovery of a violator's financial condition. The *Kardon* court explained the necessity of financial information: "a relatively small penalty might suffice for the small operator, while the same penalty would be paid with little hurt by the wealthy one" (*Kardon*, at p. 713.) More recently, the court observed in *City and County of San Francisco* v. *Sainez*, *supra*, at p. 1319:

"Accordingly, we hold that, as in the case of substantive due process protection against excessive punitive damages awards, substantive due process protection against civil penalties under the

² Similarly, courts calculating Clean Air Act (CAA) and Clean Water Act (CWA) fines often start with the maximum penalty. (*United States v. Dell'Aquilla* (3d Cir. 1998) 150 F.3d 329, 338 [CAA]; *United States v. B & W Inv. Properties* (7th Cir. 1994) 38 F.3d 362, 368 [CAA]; *Atlantic States Legal Foundation, Inc. v. Tyson Foods, Inc.* (11th Cir. 1990) 897 F.2d 1128, 1137 [under CWA "the point of departure for the district court should be the maximum fines for such violations"]; *United States v. Midwest Suspension & Brake* (E.D. Mich. 1993) 824 F. Supp. 713, 735 [CAA]; *United States v. Hoge Lumber Co.* (N.D. Ohio 1997) Case No. 3:95CV7044, 1997 U.S. Dist. LEXIS 22353 [CAA]; *U.S. v. Vista Paint Corp.* (C.D.Cal.1996) 1996 WL 477053, 1996 U.S. Dist. LEXIS 22129, *27 [CAA calls for top-down approach starting with the maximum].)

rationale of *Hale* and *Kinney* allows inquiry into a defendant's full net worth, not just the value of the particular property at issue in the case."

Applying this holding, the *Sainez* court upheld a civil penalty that totaled 28.4 percent of the violators' net worth and 120 percent of the illegal rents they charged. The court took note of *U.S. v. Lippert* (8th Cir. 1998) 148 F.3d 974, 976, 978 where "[a] net worth of about \$500,000 has been held enough ability to pay to uphold a penalty of \$353,000...."

Accordingly, a violator's financial condition always is relevant to determining an appropriate penalty and ARB takes it into account. Health and Safety Code section 42403 mentions it in relation to determining civil penalties for violations of ARB requirements adopted pursuant Part 4 of Division 26 of the Health and Safety Code. SB 1402 made it expressly applicable to Part 5 or mobile source violations via the new Health and Safety Code section 43024.

I. SB 1402's Statutory Factors

Several enforcement provisions in statutes implemented by ARB set forth considerations pertinent to determining the penalty amount to be assessed or recovered in settlement. Health and Safety Code sections 42403, 43024, and 43031 require consideration of "all relevant circumstances, including but not limited to" eight separate, but somewhat interrelated, factors. Because the eight factors are nearly identical in those three statutes, this Policy focuses on the wording found in SB 1402's section 43024. However, as provided in SB 1402 and ARB's other penalty assessment statutes, penalty calculations must be made in consideration of the totality of the circumstances, both factual and legal, not just be based on the non-exclusive list of factors the penalty assessment statutes enumerate.

In Health and Safety Code section 43024, SB 1402 provides that penalties "shall take into consideration all relevant circumstances, including, but not limited to, all of the following:

- (1) The extent of harm to public health, safety, and welfare caused by the violation.
- (2) The nature and persistence of the violation, including the magnitude of the excess emissions.
- (3) The compliance history of the defendant, including the frequency of past violations.
- (4) The preventive efforts taken by the defendant, including the record of maintenance and any program to ensure compliance.
- (5) The innovative nature and the magnitude of the effort required to comply, and the accuracy, reproducibility, and repeatability of the available test methods.

- (6) The efforts of the defendant to attain, or provide for, compliance.
- (7) The cooperation of the defendant during the course of the investigation and any action taken by the defendant, including the nature, extent, and time of response of any action taken to mitigate the violation.
- (8) The financial burden to the defendant."3

J. The Penalty Factors Explained

The factors in SB 1402 and ARB's other penalty assessment statutes can affect a penalty determination in either direction. Applying the factors in any particular case involves a weighing process because the factors are somewhat vague and seldom command a particular penalty in any case. Although no circumstance allows a penalty to exceed the statutory maximum, a violation that involves public harm, illegal emissions, repeat violations, intent, impact on a particular regulatory program, unfair business advantage or similar factors, may justify a penalty at or near the maximum penalty, despite the presence of other mitigating factors. As case law provides, penalty calculations must start at the maximum but can be mitigated, if possible, down from there. The burden is on the violator to make the case for mitigation.

Each of Health and Safety Code section 43024's eight factors are discussed below. Based on experience, some of the most common considerations in penalty calculations are whether the penalty is set at a level sufficient to discourage violations, illegal emissions, the violator's financial condition and his or her compliance history and cooperation with the investigation.

(1) "The extent of harm to public health, safety, and welfare caused by the violation" refers to injury to air quality, property, persons, or the implementation of an air quality regulation. In cases involving vehicles, engines, pieces of equipment, fuels or products not certified to ARB's air quality standards, the emissions from these illegal units are illegal and excess as well. These types of violations undermine ARB's emission standards, the lynchpin of the emission reductions achieved under ARB's regulations. Since acquiring the data necessary to quantify these illegal emissions (when it exists at all) can be time consuming and expensive, ARB makes these calculations where practicable in accordance with SB 1402 (see: Health and Safety Code section 39619.7). Whether quantifiable or not, wherever there is a violation of a requirement ARB is charged with enforcing and there are emissions to the air, the violation

³ Health and Safety Code section 42403 is very similar, as is section 43031, pertaining to fuels violations. Instead of "financial burden to the defendant," section 43031 subd. (b)(8) sets forth the eighth factor as follows: "For a person who owns a single retail service station, the size of the business." Because the "financial burden" of paying a penalty will depend in large part on the "size of the business," the two formulations are conceptually very similar. To the extent there is any difference, we note that the financial burden on a defendant or the size of any enterprise may constitute a "relevant circumstance" under any of the statutes.

involves illegal, excess emissions. Removing illegal units from the state is very difficult.

Recordkeeping, reporting and certification obligations are important. Air quality programs cannot function properly without them and violations of these types of obligations warrant substantial penalties. Depending on the circumstances, violations involving things like proven clerical errors and typographical mistakes may warrant nominal penalties.

- (2) "The nature and persistence of the violation, including the magnitude of the excess emissions" refers to the type of illegal conduct, quantity and type of pollutant, length of time the violation extended over, as well as the considerations discussed under factor (1).
- (3) "The compliance history of the defendant, including the frequency of past violations" refers to whether defendant has had environmental violations within the past several years. Because penalties are imposed to deter violations and motivate compliance, a repeat violation indicates that the prior penalty was inadequate and should be augmented. If the prior violations are closer factually or temporally to the present one, this argues for a higher penalty augmentation. The absence of prior violations may argue for mitigating the penalty.
- (4) "The preventive efforts taken by the defendant, including the record of maintenance and any program to ensure compliance" refers to acts, including installation, operation or maintenance of equipment, to comply, and systematic attempts to prevent or promptly identify and correct violations. It does not refer to actions required by a permit, the rules, or the normal standard of care.
- (5) "The innovative nature and the magnitude of the effort required to comply, and the accuracy, reproducibility, and repeatability of the available test methods" refers to creative methods or unusual efforts to comply that should be encouraged, even if not entirely successful as well as the accuracy of test methods used to determine violations. This factor does not refer to efforts that are common in an industry.
- (6) "The efforts of the defendant to attain, or provide for, compliance" is related to factor (4) and refers to actions taken *prior to* the violation to ensure compliance.
- (7) "The cooperation of the defendant during the course of the investigation and any action taken by the defendant, including the nature, extent, and time of response of any action taken to mitigate the violation" refers to actions taken *after* a violation is detected. Cooperation with the

investigation includes providing information on the violation in a complete and timely manner. Mitigation includes improvements to prevent future violations. A mere return to compliance is not mitigation. A special policy applies to self-disclosed violations discovered through a systematic audit process: Cal/EPA's October 2003 "Recommended Guidance on Incentives for Voluntary Disclosure." That Guidance is designed to encourage "regulated entities to prevent or to discover voluntarily, disclose, and correct violations of federal, state and local environmental requirements through the use of routine, systematic application of an environmental compliance auditing program." It defines the terms "environmental audit" and "gravity based penalties," provides incentives to conduct environmental audits and self-disclose violations, and lists conditions that must be met for the Guidance to apply. For more information, the Cal/EPA Guidance is discussed in greater detail below and is attached as Appendix C. The criteria that Guidance contains can be difficult to meet in certain cases. The ARB considers reducing penalties for self-disclosures that do not meet all of the Guidance criteria.

(8) "The financial burden to the defendant" refers to the burden of the penalty to the violator in terms of continued viability of business, fraction of assets, revenues, gross income, or income represented by the portion of the penalty in excess of any economic benefit. Proposed penalties may be adjusted for financial burden only after a defendant adequately reveals its finances for recent years. Special case law has been developed to deal with financial issues and is discussed above.

K. Penalty Reductions under the California Environmental Protection Agency Voluntary Disclosure Guidance

Penalties may be reduced under the Cal/EPA Voluntary Disclosure guidance. The criteria the Guidance contains can be difficult to meet in certain cases. The ARB considers reducing penalties for self-disclosures that do not meet all of the Guidance criteria.

i. Introduction

The California Environmental Protection Agency (Cal/EPA) issued its "Recommended Guidance on Incentives for Voluntary Disclosure" in October of 2003. It is attached as Appendix C. This Guidance is designed to encourage "regulated entities to prevent or to discover voluntarily, disclose, and correct violations of federal, state and local environmental requirements through the use of routine, systematic application of an environmental compliance auditing program." The Guidance **defines** the terms "environmental audit" and "gravity based penalties", provides **incentives** to conduct environmental audits and self-disclose violations and lists **conditions** that must be met for the Guidance to apply.

ii. Voluntary Disclosure Guidance-Definitions

"Environmental Audit" is a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements.

"Gravity based penalties" are that portion of a penalty over and above the economic benefit gained by noncompliance, whether or not they are labeled that way. In other words, the punitive portion of the penalty is the gravity based part.

iii. Incentives-Why a Company Would Do Environmental Audits

The major incentives to encourage self-audits, prompt disclosure, and correction may include: significantly reducing or not seeking gravity based civil penalties, declining to refer for criminal prosecution companies that self-report, and refraining from routine requests for audits.

iv. Conditions FOR A Voluntary Self-Disclosure to Reduce Penalties

- 1. The violation was discovered through an environmental audit or other objective, documented, **systematic** procedure or practice reflecting the regulated entity's due diligence in preventing, detecting, and correcting violations.
- The violation was discovered voluntarily and not due to a legal mandate.
- 3. The disclosure must be **prompt** and in writing, no more than 21 days after the violation is discovered.
- 4. The disclosure must be **independent**, meaning it is not made in reaction to a pending government enforcement action or third party complaint.

- 5. The violation was **corrected immediately**.
- 6. The violator agrees to prevent recurrences.
- 7. The violation (or similar violation) must not have occurred at the same facility within the past three years.
- 8. The violation is **not serious**, meaning it did not cause actual harm, present an imminent or substantial endangerment to, human health or the environment, or violate the specific terms of any judicial or administrative order, or consent agreement.
- 9. The violator **fully cooperated** with the regulatory agency.

Note: Nothing in this modifies the Cal/EPA "Recommended Guidance on Incentives for Voluntary Disclosure," dated October of 2003.

L. Penalty Allocations under the California Environmental Protection Agency Supplemental Environmental Projects Guidance

Some cases may be resolved by paying part of the penalty (not to exceed 25 percent) to a supplemental environmental project, provided that the criteria of the Cal/EPA Supplemental Environmental Projects Guidance are met.

i. Introduction

The California Environmental Protection Agency (Cal/EPA) issued its "Recommended Guidance on Supplemental Environmental Projects (SEP)" in October of 2003. It is attached as Appendix D. This Guidance notes that, "Although SEPs may not be appropriate in all instances, they can play an important [role in] . . . an effective enforcement program."

The Guidance:

- defines the term "SEP";
- lists legal guidelines for and categories of SEPs;
- discusses the proper ratio between SEP funds and penalty funds in settlements; and.
- counsels that all SEPs should be well-defined and implementable.

SEPs are "environmentally beneficial projects that [an alleged violator] agrees to undertake in settlement of an enforcement action, but which the [alleged violator] is not otherwise legally required to perform." For example, the funds an alleged violator expends to come into compliance are not properly

considered part of a SEP, but funds the same entity might expend to reduce emissions below regulatory requirements could be considered a SEP.

ii. Guidelines for SEPs

ARB has broad discretion in settling cases, including the discretion to include SEPs as part of its settlements. Nevertheless, SEPs must further the statutory goals of ARB and cannot violate public policy. The Cal/EPA SEP Guidance contains the following elements to ensure that these requirements are met.

- SEPs must be consistent with ARB's underlying statutes and advance at least one of the objectives of the statutes involved in the enforcement action.
- SEPs must have an adequate nexus with ARB's enforcement responsibilities, i.e., reduce the environmental or health impact of the violation or the likelihood that such a violation will reoccur.
- SEPs must be clearly defined.
- SEPs should not directly benefit the alleged violator. For example, a SEP that funds the purchase of products manufactured by the alleged violator would be inappropriate.

Categories of SEPs include: environmental compliance promotion, enforcement projects, emergency planning, pollution prevention/reduction, environmental restoration/protection, public health or any other projects that are consistent with the Guidance. Two types are not allowed: general educational or public environmental awareness projects and projects unrelated to environmental protection. Such projects lack a nexus with the laws involved in ARB enforcement actions, would not advance the goals of ARB's programs and may directly benefit the alleged violator.

iii. Proper Ratio of SEP Funds to Penalty Funds

In general, a SEP should constitute no more than 25 percent of the total settlement. For example, if a settlement is reached for a total of \$1,000,000, it should include a payment of at least \$750,000 in penalty funds and any SEP should not exceed \$250,000.

Note: This summary is only informational and does not modify the Cal/EPA "Recommended Guidance on Supplemental Environmental Projects" dated October 2003.

Appendix A

Senate Bill 1402 (Stats. 2010 Chap. 413) [THIS PAGE LEFT INTENTIONALLY BLANK]

Senate Bill No. 1402

CHAPTER 413

An act to amend Section 43023 of, and to add Sections 39619.7 and 43024 to, the Health and Safety Code, relating to air pollution, and declaring the urgency thereof, to take effect immediately.

[Approved by Governor September 28, 2010. Filed with Secretary of State September 28, 2010.]

LEGISLATIVE COUNSEL'S DIGEST

SB 1402, Dutton. State Air Resources Board: administrative and civil penalties.

(1) Existing law subjects violators of air pollution laws to specified civil and administrative penalties. Existing law imposes various duties on the State Air Resources Board relative to the reduction of air pollution.

This bill would require a written communication from the state board alleging that an administrative or civil penalty will be, or could be, imposed either by the state board or another party, including the Attorney General, for a violation of air pollution law, to contain specified information. The bill would require this information and final mutual settlement agreements reached between the state board and a person alleged to have violated air pollution laws to be made available to the public.

The bill would require the state board to prepare and submit to the Legislature and the Governor a report summarizing the motor vehicle pollution administrative penalties imposed by the state board for calendar year 2011, and annually thereafter, and would require the state board to publish a penalty policy for motor vehicle pollution laws that is based on specified criteria.

(2) This bill would declare that it is to take effect immediately as an urgency statute.

The people of the State of California do enact as follows:

SECTION 1. Section 39619.7 is added to the Health and Safety Code, to read:

- 39619.7. (a) A written communication from the state board alleging that an administrative or civil penalty will be, or could be, imposed either by the state board or another party, including the Attorney General, for a violation of air pollution law, shall contain a clear explanation of all of the following:
- (1) The manner in which the administrative or civil penalty amount was determined, including the aggravating and mitigating factors the state board

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considered in arriving at the amount, and, where applicable, the per unit or per vehicle basis for the penalty.

(2) The provision of law or regulations under which the alleged violator is being assessed the administrative or civil penalty, including the reason that provision is most appropriate for that violation.

(3) Whether the administrative or civil penalty is being assessed under a provision of law that prohibits the emission of pollution at a specified level, and if so, a quantification of the specific amount of pollution emitted in excess of that level, where practicable. This quantification may be based on estimates or emission factors.

(b) The information described in subdivision (a) and all final mutual settlement agreements reached between the state board and a person alleged to have violated air pollution laws shall be made available to the public.

SEC. 2. Section 43023 of the Health and Safety Code is amended to read:

43023. (a) As an alternative to seeking civil penalties under Chapter 1 (commencing with Section 43000) to Chapter 4 (commencing with Section 43800), inclusive, and Chapter 6 (commencing with Section 44200), for violation of state board regulations, the state board may impose an administrative penalty, as specified in this section, for a violation of this part, or any rule, regulation, permit, variance, or order of the state board pertaining to vehicular air pollution control except as otherwise provided in this division. An administrative penalty imposed pursuant to this section shall not exceed the amount that the state board is authorized to seek as a civil penalty for the applicable violation, and an administrative penalty imposed pursuant to this section shall not exceed ten thousand dollars (\$10,000) for each day in which there is a violation up to a maximum of one-hundred-thousand-dollars (\$100,000) per penalty assessment proceeding for any violation arising from the same conduct. This one hundred thousand dollar (\$100,000) maximum penalty limitation does not apply in any judicial proceeding involving violations committed under this part.

(b) Nothing in this section restricts the authority of the state board to negotiate mutual settlements under any other penalty provision of law that exceeds ten thousand dollars (\$10,000) for each day in which there is a violation up to a maximum of one hundred thousand dollars (\$100,000) per

penalty assessment proceeding.

(c) The administrative penalties authorized by this section shall be imposed and recovered by the state board in administrative hearings established pursuant to Article 3 (commencing with Section 60065.1) and Article 4 (commencing with Section 60075.1) of Subchapter 1.25 of Chapter 1 of Division 3 of Title 17 of the California Code of Regulations, except that the hearings shall be conducted by an administrative law judge appointed by the Office of Administrative Hearings.

(d) Nothing in this section authorizes the state board to impose penalties for categories of violations for which the state board may not seek penalties

in a civil action.

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- (e) If the state board imposes any administrative penalties pursuant to this section, the state board shall not bring any action pursuant to, or rely upon, Chapter 4 (commencing with Section 17000) of Part 2 of Division 7 of the Business and Professions Code.
- (f) In determining the amount of any administrative penalty imposed pursuant to this section, the state board shall take into consideration all relevant circumstances, including, but not limited to, those factors specified in subdivision (b) of Section 43031.
- (g) After an order imposing an administrative penalty becomes final pursuant to the hearing procedures identified in subdivision (c), and no petition for a writ of mandate has been filed within the time allotted for seeking judicial review of the order, the state board may apply to the Superior Court for the County of Sacramento for a judgment in the amount of the administrative penalty. The application, which shall include a certified copy of the final order of the administrative hearing officer, shall constitute a sufficient showing to warrant the issuance of the judgment.
- (h) This section does not apply to any violation for which a penalty may be assessed pursuant to Chapter 1.5 (commencing with Section 43025).
- (i) This section is not intended, and shall not be construed, to grant the state board authority to assess an administrative penalty for any category of violation that was not subject to enforcement by the state board as of January 1, 2002.

(i) Any administrative penalty assessed pursuant to this section shall be

paid to the Treasurer for deposit in the General Fund.

- (k) A party adversely affected by the final decision in the administrative hearing may seek independent judicial review by filing a petition for a writ of mandate in accordance with Section 1094.5 of the Code of Civil Procedure.
- (1) This section applies only to violations that occur on or after January 1, 2002.
- (m) The state board shall prepare and submit to the Legislature and the Governor a report summarizing the administrative penalties imposed by the state board pursuant to this section for calendar year 2011, and annually thereafter.
- SEC. 3. Section 43024 is added to the Health and Safety Code, to read: 43024. (a) No later than March 1, 2011, the state board shall publish a penalty policy for civil or administrative penalties prescribed under Chapter 1 (commencing with Section 43000) to Chapter 4 (commencing with Section 43800), inclusive, and Chapter 6 (commencing with Section 44200).
- (b) The policy shall take into consideration all relevant circumstances, including, but not limited to, all of the following:
- (1) The extent of harm to public health, safety, and welfare caused by the violation.
- (2) The nature and persistence of the violation, including the magnitude of the excess emissions.
- (3) The compliance history of the defendant, including the frequency of past violations.

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(4) The preventive efforts taken by the defendant, including the record of maintenance and any program to ensure compliance.

- (5) The innovative nature and the magnitude of the effort required to comply, and the accuracy, reproducibility, and repeatability of the available test methods.
 - (6) The efforts of the defendant to attain, or provide for, compliance.
- (7) The cooperation of the defendant during the course of the investigation and any action taken by the defendant, including the nature, extent, and time of response of any action taken to mitigate the violation.
 - (8) The financial burden to the defendant.
- SEC. 4. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order that air pollution penalties are imposed in furtherance of state goals as quickly as possible, it is necessary that this act take effect immediately.

Appendix B

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item#	Regulation or Program CA Regulatory or Statulory Code Program Internet Site	Enforceable Requirements	Enforcement Processes	Griteria	Applicable Max. Penalties
۳.	Acrosal Coating Products Title 17, CCR, Sections 947/0-94701 http://www.arb.ce.gov/consprod/regs/2008/apimirtab.odf_	Administrative Requirements (Labeling, Dating, Reporting), Maximum Incremental Reactivity (MIR) Limits	Field Inspections, Laboratory Confirmatory Testing	Health and Safety Code §42,403	Heaith and Safety Code §§42400 - 42402,3, \$1,000 or \$10,000 per violation per day, ligher if negligenee, knowledge or intent
74	Affermarket Parts Trite 13 CCR 1900+, 2030-31, 2047-48, 220-2207, 2220-2225 California Felicle Code (CFC), Section 27156 Mitpilwww.arb.sa.usvensprograftermkt/allemikt.htm.	Valid CA Executive Order Advertising E.O. Number Label Requirements Legal Application Warratty New Engine Compliance	Field inspections Emission Testing Audit Testing Self Disclosure Certification/Exemptions, Field Inspections, Manufacturer and Dealer Audits, Informants	Healih and Safety Code \$4302.4	Health and Safety Code §43154 maximum \$5000 if the vehicle is eligible for CA DMY registration Health and Safety Code §43016 \$500 if not eligible for CA DMY registration 43212 \$50 label violation
£ ,	Agricultural Equipment, In-Use http://www.atb.cu.gov/ag/gglag.cor/actractor.htm.	Regulation under development	PROPOSED REGULATION	Health and Safety Code \$42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not currected
4	Antiperspirants and Deodorants Trile 17, CCR, Sections 94500-94506.5 http://www.arb.cn.gov/conspired/regs/2018/ando.pdf	Administrative Requirements (Labeling, Dating, Reporting), Medium and High Volatility Organic Compound Limits	Field Inspections, Laboratory Confirmatory Testing	Health and Safety Code §42403	Heaith and Safety Code §§42400 - 42402.3, \$1,000 or \$10,000 per violation per day, higher if negligence, knowledge or intent
'n	Asbestos NESHAP 40 CFR, Part 61, Subpart M http://w.w.arb.ca.sowbrilf/asbestosiashesios.htm.	Notification Requirements Sampling/Analysis Requirements Certification/Training Requirements	Field Inspections Record and Certification Verification	·	Section 113(b) of the Clean Air Act , 42 US Code §7413(b) Up to \$25,600 per day per violation
9	Automotive Refrigerant, Small Containers Title 17, CCR, 95562-95368 McDirin www.arb.ca.povitenach.2009/Historicsubfro.pdf	Regulation adopted. Awaiting OAL approval.	PROPOSED REGULATION	Health and Safety Code \$42503	Health and Safety Code §§42400 - 42402.3, \$1,000 or \$10,000 per violation per day, higher if negligence, knowledge or intent
	Cargo Tank Vapor Recovery Title 17, CCR, Section 94014 http://www.atb.ca.gov/enficardotanks/cargotanks.htm	Annual Leak Decay Testing Recordkeeping Test Company Audits	Field Testing Inspections and Audits Complaints	Health and Safety Code §42403	Health and Safety Code §§42400 - 42402.3, \$1,000 or \$10,000 per violation per day, higher if negligence, knowledge or intent
&	Composite Wood ATCM Title 17, CCR, Section 93120-93120.12 http://www.erb va.gov/loxics/compwood/compwood/htm.	Third Party Certification Requirements Recordiceping Requirements Labeling Requirements	Field Inspections. Record Audits Label Verification Enitssions Testing	Health and Safety Code, \$42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
<u> </u>	Construction Equipment, In-Use Title 13, CCR, Section 2449 http://www.arh.cn.gov/insprogractieseElatin	Reporting Requirements Identification Number Engine Retrofit/Repower/Replacement	Field Inspections, Reporting and Fleets/Facility Audits, Informants	Health and Safety Code \$42403	Health and Safety Code §§39674, 39675, SI,000 or SIO,000 per violation per day, tigher if not corrected

Matrix of Regulations and Corresponding Penalties

ltem #	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Enforceable Requirements	Enforcement Processes	Criteria	Applicable Max. Penalties
g1	Ü	Administrative Requirements (Labeling, Dating, Reporting), Volatile Organic Compound (VOC) Limits, Toxic Prunivitions, Global Warming Potential	Field Inspections, Laboratory Confirmatory Testing	Health and Safety Code 42403	Health and Safety Code §§39674, 42400 - 42402.3, \$1,000 or \$10,000 per violation per day, higher if negligence, knowledge or intent
=	Consumer Products, Alternative Control Plan http://www.art.co.pow/cousprod/regs/2008/asp.nslf	Enforceable Sales Records. Recordkeeping	Recordkeeping audits	Health and Safety Code \$42403	Health and Safety Code §§42400 - 42402.3, \$1,000 or \$10,000 per violation per day, higher if negligence, knowledge or intent
12	Diesel Emission Control System, Verified Title 13, CCR. Sections 2706(g), 2707(c), and 2709 http://www.apb.co.gov.chjesof/verdes/verchlun	Vehicle and Engine Label Requirements Certification/Verification Standards	Field Inspections, Facility and Mauufacturer Audits Self Reporting	Health and Safety Code \$42403	Reath and Sakety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
52	Dry Cleaner Verification http://www.qrb.cu.gov/toxics/dryclean.dryclean.htm.	Notification, RecordReeping and Reporting Requirements Equipment Replacement Operator Certification	Field Inspections Equipment Verification Record Audits	Health ang Safety Code \$42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not currected
7	Fuel Containors and Spouts, Portable Trile 13, CCR. Sections 2467-2467.9 http://www.arb.cu.gov/consmod/lusl-gonJainers/pfc.pfcreg2015.pdf	Administrative Requirements (Labeling, Dating, Reporting), Certification Requirements, Performance Standards	Field Inspections, Laboratory Confirmatory Testing	Health and Safety Code \$43024	Health and Safety Code §43016 \$500 per portable fuel container or spout
21	Fuel Distributor (Motor Vehicle Fuel) Health and Sefery Code, Seation 43026 https://www.no.com/files/distributions/	Registration Recordkeeping	Review Registration Review Documents	Health and Safety Code \$43031	Health and Safety Code, Section §43026
¥	Huels Trife 13, CCR, Sections 2250 to 2259, 2260 to 2276; 2280 to 2285; 2290 to 2293.5; and 2299 to 2299.5 http://www.arb.ca.gov/fuels/luels.lum	Fuel Standards Reporting Requirements Recordkeeping Fuel Testing	Field Inspections Record Audits Review Submitted Reports	Health and Safety Code §43031	Health and Safety Code §43027 - §43030, \$25,000 (faire or missing records), \$35,000 per violation per day (fuel standards), higher if negligence or intent
11	Heavy-Duty Vehicle Inspection Program Title 13, CCR, Sections 2180-2189 Intribution, and conference of the filter	Smoke Opacity Standards Tampering	Field Inspections, Informants	13 CCR 2180 et seg. Harris et. al case law	Health and Safety Code §44011.6; \$300 First Citation; \$800 After 45 Days; \$1800 2nd Citation in 12 Mouths
=	Idling, Commercial Vehicle/Sleeper Berth Tille 13, CCR, Section 1956.8 and 2485 http://www.atb.ca.gov/insprps/tenele-icl/ing/tenele-icl/ing.htm	ldling Time Restriction	Field Inspections, Public Complaints	Health and Safety Gode \$42403	Health and Safety Cnde §§39674, 39675, \$1,000 or \$10,000 per violation per day; \$300 minimum per §43704
61	Indoor Air Cleaning Devices Title 17, CCR, 94800-94810 http://www.arb.cs.gov/regact2007/mud07/fmalreg02.add	Administrative Requirements (Labeling, Dating, Reporting), Certification Requirements, Ozone Emission Limits	Field Inspections, Laboratory Confirmatory Testing	Health and Safety Code \$42403	Health and Safety Code §§42400 - 42402.3, \$1,000 or \$10,000 per violation per day, higher if negligence, knowledge or intent
20	MartucWatercraft Trie 13 CCR 2440-2448 http://www.arb.ss.gov/nsprog/elffood/rocmarine/htm.	Valid CA Executive Order Test Protedures/Emissions Labels Warranty	Field Inspections Emission Testing Audit Testing	Health and Safety Code § 43016	SSO for test procedure violations under HSC \$43212

Item #	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Enforceable Requirements	E nforcement Processes	Criteria	Applicable Max. Penalties
21	Mator Vehiclas/Eugines, New HSC 43150-43154 bitp://www.arb.ca.gov/insprog/caroad/outord.htm.	Valid CA Executive Order Test Procedures/Emissions Labels Warranty	Field Inspections Emission Testing Audit Testing Self Disclosure	Wilmshurst Cese law	Health and Safety Code §43154 maximum \$5000 if the vehicle is cligible for CA DMV registration Health and Safety Code §43016 \$500 if not eligible for CA DMV registration §43212 \$50 label violation
22	Off-Highway Recreational Vehicles True 13 CCR 2410-2415 http://www.arb.ch.gov/msprogolfrosd/orrec/orrec/lun	Valid CA Executive Order Test Procedures/Emissions Labels Warranty	Field Inspections Emission Testing Audit Testing Self Disclosure	Health and Safety Code \$43150 Health and Safety Code \$43016	Health and Safety Code 43154 maximum \$5000 if the vehicle is eligible for CA DMV registration Health and Safety Code §43016 \$500 if not eligible for CA DMV registration §43212 \$50 label violation
£ £	Off-Road Engine Certification, Compression Ignition Title 13 CCR 2420-2427 http://www.aitb.ca.agov/mspressiofficad/ore-unm/ore-outp-fun.	Valid CA Executive Order Test Procedures/Emissions Labels Warranty	Field Inspections Emission Testing Audit Testing Self Disclosure	Health and Safety Code &43024	Health and Safety Code §43154 maximum SS000 if the vehicle is eligible for CA DMV registration Health and Safety Code §43016 \$500 if not eligible for CA DMV registration §43212 \$50 label violation
24	Off Road Engine Certification, Small Title 13 CCR 2400-2409 ittin'/www.arb.sa_kov/insprogroeffoad/sure/sore.htm.	Valid CA Executive Order Test Procedures/Emissions Labels Warranty	Field Inspections Emission Testing Audit Testing Self Disclosure	Health and Safety Code 543024	HSC 43016 Max. S500/eng. S50 for test proceedure visitations under HSC 43212
25	Off-Road New Diesel Engine Standards Certification Title 13, CCR, Sections 2420-2427 www.nth.cn.gov/ntspirocjuffreal/ofsic/tellogicuto/itlu	New Engine Compliance	Certification, In-Use Compliance Testing, Selective Enforcement Audits, Field Inspections,	Health and Safety Code \$43024	Health and Safety Code §43154 maximum \$5000 to the vehicle is eligible for CA DMV registration Health and Safety Code §43016 5500 if not eligible
26	On-Road Henry-Duty Vehicle Engine Certification Label Program Title 13, CCR, Section 2180-2189 http://www.aub.ca.sov/en/Ehdvin/bin.htm	Manufacturer-installed emissions label must be in place to show that engine met U.S. EPA standards at time of manufacture.	Field Inspections, Informants	13 CCR 2180 et seq.	Health and Safety Code §44011.6; 5300 First Citation; 5800 After 45 Days; S1800 2nd Citation in 12 Months
12.	On-Road Heavy-Dury Vehiete On-Board Diagnostics Title 13, CCR, Sections 1968.2, 1968.5, 20.35, 20.37, and 20.38, www.nrb.ca.gov/nisprog.belgrose-belgrose-hm.	New Engine Compliance	Certification, Field Inspections, Laboratory Confirmatory Testing	Health and Safety Code \$43024	Health and Safety Code §43154 maximum \$5000 per vehicle
	On-Road New Diesel Engine Emission Standards Certification Title 13. California Code of Regulations (CCR). Sections 1956.8, 1971. and 1971.1) https://www.adh.co.agus/mgs/ngs/fort/wed/cer/west1.php	New Engine Compliance	Certification, In-Use Compliance Testing/Selective Enforcement Audits, Field Inspections, Manufacturer and Dealer Audits	Health and Safety Code \$43024	Health and Safety Code §43154 maximum \$5000 per vebiele
29	Outboard Marine Tanks and Components, Portable Tule 13, CCR, 2468-2468.10 http://www.ntb.en.renvirennel/2008/pout2008/bolffto.pdf	Administrative Requirements (Labeling, Dating, Reporting), Certification Requirements, Performance Standards	Field Inspections, Laboratory Confirmatory Testing	Health and Sefety Code \$43024	Health and Safety Code §43016 \$500 per Marine Tank or Component
30	Periodic Smoke Inspection Program Trile 13, CCR, Sections 2190-2194 http://www.anb.ca.gov/EntPluk/prikk/bip.htm	Smoke Opacity Standards Recordkceping Requirements	Reporting and Audits. Fleets/Facility Audits, Informants	Health and Safety Code §43024	Health and Safety Code §43016

Rem # CA F Portable Equipment Tule 13, CCR. Section State		Enforceable Requirements	Enforcement Processes	Criteria	Applicable Max. Penalties
	Title 13, CCR, Section 2450 and Title 17, CCR, Section 93116 http://www.jath.ca.pov/poutable/nortable.htm	Engine Certification Standards P Registration and Labeling Requirements	Field Inspections by Air Districts, Program Oversight by ARB, Informants	Health and Safety Code §42403	Health and Safety Code §§39674,39675, \$1,000 or \$10,000 per violation pet day, higher if not corrected
Public Tra	Public Agencies and Utilities Floets Title 13, CCR, Sections 2022 and 2022. I http://www.ntb.ga.gov/mspnos.gublicfleets/publiefleets.htm.	Flect Recordkeeping Requirements Vehicle Labeling Requirements	Field Inspections, Reporting and Fleets/Facility Audits	Health and Safety Code \$42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
33 Tale 13, CC		Fleet Recordkesping Reporting Requirements	Reporting, Fleets/Facility Audits	Health and Safety Code \$42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
Railroad Strategies Ph/4 34 http://www.arb.ca.ge	wheprogicificad locaflocalum	Idling Time Restrictions Thel Specifications	Reporting and Audits, Plects/Facility Inspections, Field Inspections, Public Tips, Informants	Railroad MOLL	ARB/Railroad Statewide Agreement \$400 first violution \$800 second violation - same year \$1200 third violation - same year
School Bus 35 The 13, CC	School Bus Iding and Idling at Schools Title 13, CCR, Section 2480 Ittp://www.grb.cn.gov/husnrog/schoolbus/schoolbus.idin	Idling Standards Fleet Recordkeeping Requirements	Field Inspections, Public Complaints	Health and Safety Code, \$42403	Health and Safety Code §§39674 (\$1,000 or \$10,000 per violation) and 39642 (\$300 Minimum)
Solid Wast Title 13, CC 36 www.arb.ce		Fleet Recordkeeping Requirements Vehicle Laboling Requirements	Field Inspections, Reporting and Fleets/Facility Audits	Health and Safety Code \$42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
Spark Igni Tite 13 CC 37 http://www.	Spark Lguited Engine Trie 13 CCR 2430-2439 http://www.adc.co.gov/inspacyclfroad/orspark/orspark htm.	Valid CA Excentive Order Fest Procedures/Emissions Labels Warranty	Field Inspections Emission Testing Audit Testing Self Disclosure	Health and Safety Code \$43024	HSC §43016 Max. \$500/eng. \$50 for test procedure violations under HSC 43212
Stationary Title 17, CC 38 http://www.	Stationary Diesel Engines Title 17, CCR, Section 93115 http://www.ath.ca.gov/djesel/statsretchtm	Engine Certification Standards Registration and Labeling Requirements	Field Inspections by Air Districts, Program Oversight by ARB	Health and Safety Code \$42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not . corrected
Transport Title 13, CC 39 http://www	Transport Refrigeration Units Title 13, CCR, Section 2477, Article 8 http://www.aab.ca.gov/diesektru.htm	Facility Reporting Equipment Registration and Labeling Engine Retroft/Repower/Replacement	Field Inspections Reporting and Audits, Informants	Health and Safety Code §42403	Health and Salety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
Trucks am Trile 13, Co	Trucks and Buses, In-Use Diesel Tile 13, CCR. Section 2025 (PROPOSED) http://www.arb.ca.gov/inspray/contdiesel/ourdiesel.htm	Reporting Requirements Identification Number Engine Retrofit/Repower/Replacement	Field Inspections, Reporting and Fleets/Facility Audits, Informants	Health and Safety Code \$42,403	Bealth and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
Truck and Title 17, C http://www	Truck and Trailer Efficiency (Greenhouse Gas Meas.) Title 17, CCR, Section 95300 (PROPOSED) http://www.atb.ra.gov/cc/hddtgs/htgtg.	Fleet Recordkeeping Requirements Reporting Requirements	Field Inspections, Flects/Facility Audits	Health and Safety Code 542403	Health & Safety Code §38580

	Regulation or Program		Enforcement		
Item #	CA Regulatory or Statutory Code Program Internet Site	Enforceable Requirements	Processes	Griteria	Applicable Max. Penalties
42	Trucks, Heavy-Duty Drayage Tille 13, CCR, Section 2027 Sith: News, arb.ca, gov/msprogrop:ogsQipegimask/partransk.htm	Recordkeeping and Reporting Requirements Engine Retroft/Repower/Replacement	Reporting and Audits, Field Inspections, Public Tips	Health and Safety Code §42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
63	Vapor Recovery Title 17, CCR, Sections 94000 to 94013 http://www.arb.ce.gov/vapor/vapor.htm	Certilled Vapor Recovery Systems	Field Inspections, Complaints, District Referrals	Health and Safety Code §42403	HSC §42409 Criminal Penalty for Violations HSC §42402 Violation of emission limitations; CIVII Penalty
44	Vessel (Ocean-Going) Incineration ATCM Title 17, CCR, Section 93119 http://www.anl.ca.gov/regnet/ssolDk/gonit/6.htm.	Recordkeeping Requirements	Field Inspections, Record Audits	Health and Safety Code §42403	Health and Safety Code §§39674, 39675, \$1,000 or \$10,000 per violation per day, higher if not corrected
\$4	Vessels, Fuel Sulfur and Other Operational Requirements for Ocean-Going Trile 13, CCR, Sections 2299,2 and Title 17, CCR, Section 93118.2 http://www.arb.ea.gev/ports/ingingvess/ingingvess/linn	Recordiceping Requirements Fuel Specifications	Field Inspections, Informants	Health and Safety Code \$42403	Health and Safety Code §39674, §39675 (\$1000 or \$10,000), Penalty determined by above sections, per violation per hour

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Appendix C

Cal/EPA's October 2003 "Recommended Guidance on Incentives for Voluntary Disclosure"

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CAL/EPA RECOMMENDED GUIDANCE ON INCENTIVES FOR VOLUNTARY DISCLOSURE

October 2003

Purpose

This Guidance is designed to enhance the protection of human health and the environment by encouraging regulated entities to prevent or to discover voluntarily, disclose, and correct violations of federal, state and local environmental requirements through the use of routine, systematic application of an environmental compliance auditing program.

Definitions

For purposes of this Guidance, the following definitions apply:

"Environmental Audit" is a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements.

"Due Diligence" encompasses the regulated entity's systematic efforts, appropriate to the size and nature of its business, to prevent, detect, disclose, and correct violations through all of the following:

- Compliance policies, standards, and procedures that identify how employees and agents are to meet the requirements of laws, regulations, permits, and other sources of authority for environmental requirements;
- Assignment of overall responsibility for overseeing compliance with policies, standards, and procedures, and assignment of specific responsibility for assuring compliance at each facility or operation;
- 3. Mechanisms for systematically assuring that compliance policies, standards, and procedures are being carried out. These include monitoring and auditing systems reasonably designed to detect and correct violations, periodic evaluation of the overall performance of the compliance management system, and a means for employees or agents to report violations of environmental requirements without fear of retaliation;

- 4. Efforts to communicate effectively the regulated entity's standards and procedures to all employees and other agents whose duties involve environmental compliance;
- 5. Appropriate incentives to managers and employees to perform in accordance with the compliance policies, standards, and procedures, including consistent enforcement through appropriate disciplinary mechanisms; and
- 6. Procedures for the prompt and appropriate disclosure and correction of any violations, and for any necessary modifications to the regulated entity's program to prevent future violations.

"Environmental audit report" means the analysis, conclusions, and recommendations resulting from an environmental audit, but does not include data obtained in, or testimonial evidence concerning, the environmental audit.

"Gravity based penalties" are that portion of a penalty over and above the economic benefit of noncompliance, whether or not they are labeled as such, i.e., the punitive portion of the penalty, rather than that portion representing a defendant's economic gain from non-compliance. (For further discussion of this concept, see "A Framework for Statute-Specific Approaches to Penalty Assessments," #GM-22, 1980, U.S. EPA General Enforcement Policy Compendium. See also the particular penalty statutes and regulations for the individual enforcing agency bringing the action).

"Regulated entity," means any person, facility, or entity, including a federal, state, or municipal agency, regulated under federal, state, or local environmental laws.

C. Incentives

This section identifies the major incentives provided to encourage self-audits, prompt disclosure and correction. These may include significantly reducing or not seeking gravity based civil penalties, declining to refer for criminal prosecution companies that self-report, and refraining from routine requests for audits.

1. Waiving Gravity Based Penalties

Where the regulated entity establishes that it satisfies <u>all</u> of the conditions of Section D, gravity based penalties for violations of environmental requirements may be waived if allowed by applicable statute. Gravity based penalties (defined in Section B) generally reflect the seriousness of the violator's behavior. It would be appropriate to waive a portion of such penalties for violations discovered through due diligence or environmental audits, recognizing that these voluntary efforts play a critical role in protecting human health and the environment by identifying, correcting, and ultimately preventing violations. The conditions set forth in Section D, which include prompt

disclosure and expeditious correction must be satisfied for any portion of gravity based penalties to be waived.

Any economic benefit obtained as a result of noncompliance should be recovered, even when all other conditions of the Guidance are met. Economic benefit could be waived, however, if the enforcing agency determines that it is insignificant. The recovery of economic benefit is important for two reasons. First, it provides an incentive to comply in a timely manner. Taxpayers expect to pay interest or a penalty fee if their payments are late; the same principle should apply to corporations that have delayed their investment in compliance. Second, it is fair because it protects responsible companies from being undercut by their noncomplying competitors, thereby preserving a level playing field.

Reduction of Gravity Based Penalties

Gravity based penalties for violations of environmental requirements can be reduced to the extent the regulated entity satisfies the conditions of Section D below. The enforcing agency, may, at its sole discretion, reduce the gravity based penalties further as a credit for investment in Supplemental Environmental Projects (See Cal/EPA guidance on Supplemental Environmental Projects.).

The complete waiver of gravity based civil penalties should be available only to companies that meet the higher standard of reporting as a result of conducting an environmental auditing or systematic compliance management. However, to provide encouragement for the kind of self-policing that benefits the public, gravity based penalties can be significantly reduced for a violation that is voluntarily discovered, promptly disclosed, and expeditiously corrected, even if it was not found through an environmental audit particularly where the company agrees to implement an environmental compliance management procedure. Cal/EPA expects that this will encourage companies to come forward and work with regulatory agencies to resolve environmental problems and begin to develop an effective compliance management program.

3. No Criminal Recommendations

The enforcing agency may decline to recommend to a prosecuting authority that criminal charges be brought against a regulated entity where they determine that all of the conditions in Section D are satisfied, so long as the violation does not demonstrate or involve:

- a. A management practice that concealed or condoned environmental violations; or
- b. Knowing or negligent involvement in or deliberate ignorance of the violations by corporate officials or managers.

Whether or not an enforcing agency refers the regulated entity for criminal prosecution under this section, they may reserve the right to recommend prosecution of the criminal acts of individual managers or employees.

This Guidance has important limitations. It will not apply, for example, where corporate officials are consciously and knowingly involved in, or willfully blind to, violations, or conceal or condone noncompliance. Since the regulated entity must satisfy all of the conditions of Section D, violations that caused serious harm or that may pose imminent or substantial endangerment to human health or the environment are not covered by this Guidance.

Nothing in this guidance should be construed to restrict the power of a city attorney, district attorney, county counsel, or the Attorney General to bring any criminal proceeding otherwise authorized by law or to prevent an enforcing agency from cooperating with, or participating in, such a proceeding.

4. No Routine Request for Audits

It is not recommended that an enforcing agency routinely request environmental audit reports to initiate an investigation of the entity. If the enforcing agency has independent reason to believe that a violation has occurred however, it is reasonable to expect that they seek any information relevant to identifying violations or determining liability or extent of harm, including any audits that the facility may have conducted.

D. Conditions

This section describes the nine conditions that a regulated entity must meet in order for an enforcing agency not to seek (or to reduce) gravity-based penalties for violations of environmental laws. As explained in the Summary above, regulated entities that meet all nine conditions may avoid gravity-based civil penalties unless otherwise mandated by statute.

1. Systematic Discovery

The violation was discovered through:

- a. an environmental audit; or
- b. an objective, documented, systematic procedure or practice reflecting the regulated entity's due diligence in preventing, detecting, and correcting violations. The regulated entity must provide accurate and complete documentation to the enforcing agency as to how it exercises due diligence to prevent, detect, and correct violations according to the criteria for due diligence outlined in Section B. The enforcing agency may require as a condition of penalty mitigation that

a description of the regulated entity's due diligence efforts be made publicly available.

2. Voluntary Discovery

The violation was identified voluntarily, and not through a legally mandated auditing, monitoring, or sampling requirement prescribed by statute, regulation, permit, variance, judicial or administrative order, or consent agreement.

3. Prompt Disclosure

The regulated entity must have fully disclosed in writing to the appropriate federal, state or local agency, a specific violation promptly after the violation is discovered. Promptly is nominally defined as 21 working days or such shorter period as provided by law.

The 21 day period begins when the regulated entity discovers that a violation has, or may have, occurred. The trigger for discovery is when any officer, director, employee or agent of the facility has an objectively reasonable basis for believing that a violation has, or may have, occurred. Where an entity has some doubt about the existence of a violation, the recommended course is for it to disclose and allow the regulatory authorities to make a definitive determination.

The 21 working day period may not always be appropriate. Many laws and permits require immediate notification. In other instances where circumstances are complex, do not present a serious threat, and take longer to evaluate, disclosures within 21 days may not be practical. The enforcing agency may accept later disclosures as "prompt" where the regulated entity meets its burden of showing that the additional time was needed to determine compliance status and did not expose the public to unreasonable risk. Conversely, if the violation objectively represented an imminent threat to human health or the environment, reporting within 21 working days will not be deemed reasonable. Satisfaction of the prompt disclosure condition is solely within the discretion of the enforcing agency.

This condition recognizes that it is critical for enforcing agencies to receive timely and accurate reports of violations, in order to have clear notice of the violations and the opportunity to respond if necessary. Prompt disclosure is also evidence of a facility's good faith attempt to achieve or return to compliance as soon as possible.

4. Discovery and Disclosure Independent of Government or Third Party Plaintiff

Regulated entities must have taken the initiative to find violations and promptly report them, rather than reacting to knowledge of a pending enforcement action or third party complaint. Thus this condition specifies that the violation has to have been identified and disclosed by the regulated entity prior to:

- The commencement of a federal, state, or local agency inspection or investigation, or the issuance by such agency of an information request to the regulated entity or related industries;
- b. Notice or commencement of a citizen suit;
- c. The filing of a complaint by a third party;
- d. The reporting of the violation to a government agency by a "whistle blower" employee, rather than by one authorized to speak on behalf of the regulated entity; or
- e. The imminent discovery of the violation by a regulatory agency.

5. Correction and Remediation

The regulated entity corrected the violations immediately, certified in writing that the violations have been corrected, and took appropriate measures as determined by the appropriate agency to remedy any environmental or human harm resulting from the violation. Where appropriate, the enforcing agency will require that to satisfy conditions 5, 6, and 8, a regulated entity enter into a publicly available written agreement, administrative consent order, variance, or judicial consent decree, particularly where compliance or remedial measures are complex or a lengthy schedule for attaining and maintaining compliance or remediating harm is required.

This Guidance requires the violation to be corrected immediately reflecting the expectation that regulated entities will move quickly to meet their obligations under the law. While it is expected that violations must be corrected immediately, there will be those violations that require longer-term remedies, such as where significant capital expenditures are involved, or where regulatory oversight is required. The regulated entity will be expected to do its utmost to achieve compliance under the law, and the appropriate enforcing agency will retain sole discretion to determine whether the regulated entity timely corrected and remediated the violations.

6. Prevent Recurrences

The regulated entity agrees in writing to take steps to prevent a recurrence of the violation, which may include improvements to its environmental auditing or due diligence efforts.

7. No Repeat Violations

The violation (or similar violation) shall not have occurred at the same facility within the past three years. This three year time period begins to run when the government has given the violator notice of the violation, without regard to when the violation cited in the notice actually occurred. For purposes of this determination, a violation includes:

- a. Any noncompliance with a federal, state, or local environmental law or regulation identified in a conviction, plea agreement, judicial order, final administrative order, consent agreement, variance, or in a notice of violation or inspection report.
- b. Any act or omission for which the regulated entity has previously received penalty mitigation from a federal, state or local agency.

This condition bars repeat or chronic offenders from receiving penalty reduction and benefits both the public and law-abiding entities by ensuring that penalties are not waived for those entities that have previously been notified of violations and have failed to prevent repeat violations. The enforcing agency should consider all the facts and circumstances relating to any prior violation in determining whether it is a repeat violation.

This condition applies if the entity was operating under the same ownership and/or management when both violations occurred. When the facility is part of a multi-facility organization, relief under this guidance is unavailable if the same or a closely related violation occurred as part of a pattern of similar violations at one or more of these facilities within the past five years.

8. Serious Violations Excluded

The violation is not one which (I) resulted in actual harm, or which may present an imminent or substantial endangerment to, human health or the environment, or (2) violates the specific terms of any judicial or administrative order, or consent agreement.

This condition makes clear that violations that result in actual harm or which may present an imminent or substantial endangerment to public health or environment are excluded from consideration under this guidance.

The Guidance also excludes penalty reductions for violating the specific terms of any judgment, order, consent agreement, or plea agreement. Once an order or agreement is in effect, there is little incentive to comply if there are no sanctions for violating its specific requirements. The exclusion in this section also applies to any failure to implement any response, removal, or remedial action covered by a written judgment, order or agreement.

9. Cooperation

The regulated entity timely and fully cooperated as requested by any regulatory agency and provided the agency with the information it needs to determine applicability of this Guidance. Cooperation includes, at a minimum; timely providing all requested documents, and access to employees and the facility; and providing assistance in

investigating the violation, other related compliance problems, and any environmental consequences related to the violations. The regulated entity must not hide, tamper with, or destroy possible evidence following discovery of potential environmental violations.

This section makes clear that recalcitrant violators are excluded from consideration under this guidance. To be considered under the guidance, all entities that have been ordered or requested to come into compliance shall have done so pursuant to any time frame described by the enforcing agency. Entities that are determined to have refused lawful orders shall not benefit from their recalcitrance.

E. Economic Benefit

The enforcing agency should retain full discretion to recover any economic benefit gained as a result of noncompliance to preserve a "level playing field" in which violators do not gain a competitive advantage over regulated entities that do comply. The enforcing agency may forgive all or any portion of the penalty for violations which meet Conditions 1 through 9 in Section D, and which in its opinion do not merit the full penalty due to the insignificant amount of any economic benefit.

In determining economic benefit, the enforcing agency should also take into consideration any documented expenditures the regulated entity has made to create and implement an environmental audit or due diligence program, which can be significant. Such expenditures may counterbalance the economic benefit of the violations.

F. Applicability

At the discretion of the enforcing agency, this Guidance may be applied to settlement of claims for administrative or civil penalties for violations under statutes and regulations within the jurisdiction of enforcing agencies.

It is within the discretion of the enforcing agency to determine whether it is appropriate that a regulated entity that has received penalty mitigation for satisfying specific conditions under this Guidance receive additional penalty mitigation for satisfying the same or similar conditions under other policies for the same violation(s).

This Guidance sets forth factors for consideration that will guide the enforcing agencies in the exercise of their enforcement discretion, and is intended as guidance only. It does not create any rights, duties, obligations, or defenses, implied or otherwise, in any third parties. This guidance is not promulgated in regulation or statute and as such is not binding on any Board, Department or local agency.

This Guidance can be used in settlement negotiations for both administrative and civil judicial enforcement actions. It is not intended for use in pleading, at hearing, or at trial. The Guidance may be applied at the enforcing agency's discretion to the settlement of

administrative and judicial enforcement actions instituted prior to, but not yet resolved, as of the effective date of this Guidance.

G. Scope Of Guidance

Cal/EPA has developed this document as a guide for settlement actions involving a broad range of environmental violations. All enforcing agencies are encouraged to adopt similar policies in order to assure statewide consistency in application.

H. Making Disclosures

Disclosures should be made to state and local agencies that have jurisdiction over their reported violations, i.e. to the local air district for air violations, to the local CUPA and/or the Department of Toxic Substance Control for hazardous waste violations. A copy may also be sent to Cal/EPA, attention legal unit. Reports to the US EPA should follow the guidelines set forth in their guidance.

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Appendix D

Cal/EPA's October 2003 "Recommended Guidance on Supplemental Environmental Projects"

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CAL/EPA RECOMMENDED GUIDANCE ON SUPPLEMENTAL ENVIRONMENTAL PROJECTS

October 2003

A. Introduction

In settlement of environmental enforcement cases, Cal/EPA's Boards, Departments and Offices (BDOs) and local counterparts must insist upon terms that require defendants/respondents achieve and maintain compliance with environmental laws and regulations and where appropriate, pay a penalty for violations. The recovery of economic benefit and the imposition of additional gravity based penalties should be considered in every case. Additional relief remediating the adverse public health or environmental consequences of the violations at issue should be included in the settlement to offset the effects of the particular violation. As part of the settlement, the agreement may require the defendant/respondent to undertake supplemental environmentally beneficial expenditures that exceed regulatory requirements. These additional projects are known as supplemental environmental projects, or SEPs.

Evidence of a violator's commitment and ability to perform a SEP is factor in determining whether a SEP is appropriate. Although SEPs may not be appropriate in all instances, they can play an important part of an effective enforcement program. SEPs can play a role in securing additional significant environmental or public health protection. SEPs may be particularly appropriate to further the objectives in the statutes administered by the BDOs and local agencies, and to achieve policy goals such as pollution prevention and environmental restoration.

B. SEP Procedure

In evaluating a proposed project to determine if it qualifies as a SEP, the following five-step procedure may be used:

- Ensure that the project meets the basic definition of SEP (See Section B).
- 2. Ensure that all legal guidelines, including nexus, are satisfied (See Section C).
- 3. Ensure that the project fits within one (or more) categories of SEPs (See Section D).
- 4. Ensure that the cost of the project is appropriate in relationship to the fines paid (See Section E).
- 5. Ensure that the project satisfies all of the implementation and other criteria. (See Section F, G, and H).

This guidance is intended to apply to all civil judicial and administrative enforcement actions taken under the authority of the environmental statutes and regulations administered by the Cal/EPA BDOs. It may also be used by local authorities enforcing related environmental ordinances and codes. Claims for stipulated penalties for violations of orders or settlement agreements should not be mitigated by the use of a SEP. This guidance is intended to assist in the settlement of an enforcement action, and thus is not intended for use by any party at a hearing or trial. In addition, the amount of any penalty mitigation that may be given for a SEP is strictly within the discretion of the administering agency, as is the determination of whether the use of a SEP is appropriate in any particular case.

C. Definition and Key Characteristics of a SEP

Supplemental environmental projects are defined as environmentally beneficial projects that a defendant/respondent agrees to undertake in settlement of an enforcement action, but which the defendant/respondent is not otherwise legally required to perform. The three key parts of this definition are elaborated as follows:

- "Environmentally beneficial" means a SEP must improve, protect, or reduce risks to public health or the environment at large. While in some cases a SEP may provide the alleged violator with certain benefits, there must be no doubt that the project primarily benefits the public health or the environment.
- 2. "In settlement of an enforcement action" means (1) The enforcing agency has the opportunity to help shape the scope of the project before it is implemented; and (2) the project is not commenced until after the enforcing agency has identified a violation (e.g., issued a notice of violation, administrative order, or complaint).
- 3. "Not otherwise legally required to perform" means the SEP is not required by a federal, state, or local law or regulation. Further, SEPs cannot include actions that the defendant/respondent may be legally required to perform, such as:
 - Injunctive relief in the instant case, or in another legal action that an enforcement agency could bring;
 - part of an existing settlement or order in another legal action; or
 - federal, state or local requirements.

SEPs may include activities that the defendant/respondent will become legally obligated to undertake two or more years in the future. Such "accelerated compliance" projects are not allowable, however, if the regulation or statute provides a benefit (e.g., a higher emission limit) to the defendant/respondent for early compliance.

Performance of a SEP reduces neither the stringency nor timeliness requirements of applicable environmental statutes and regulations. Of course, performance of a SEP does not alter the defendant/respondent's obligation to remedy a violation expeditiously and return to compliance.

For many of these projects, the defendant/respondent may lack the experience, knowledge or ability to conduct and /or implement the project. In these instances the defendant/respondent should be required to contract with an appropriate expert to develop and implement the compliance promotion project

D. Legal Guidelines

Environmental regulatory agencies have broad discretion to settle cases, including the discretion to include a SEP as an appropriate part of the settlement. The legal evaluation of whether a proposed SEP is within the regulatory agencies' authority and consistent with all statutory and constitutional requirements may be a complex task and should be thoroughly evaluated by the individual agency.

As noted by the Attorney General, statues and case law allow administrative agencies to settle cases prior to trial or hearing containing sanctions that an agency would not otherwise have the authority to impose (Attorney General Opinion No. 00-510, July 25, 2000). The Attorney General also notes the ability to enter into creative settlements is limited by the caveat that no such settlement shall violate public policy and must further the goals and purposes of the agency. The Opinion concluded that an agency may not enter into a settlement that requires payment of funds that support activities unrelated to the regulatory enforcement responsibilities of the agency.

With this in mind, the following are required when a SEP is considered:

- A project cannot be inconsistent with any provision of the underlying statutes. In addition a project shall advance at least one of the declared objectives of the environmental statutes that are the basis of the enforcement action.
- 2. All projects should have adequate "nexus" to the regulatory enforcement responsibilities of the agency. Nexus is the relationship between the violation and the proposed project. This relationship exists if the project remediates or reduces the probable overall environmental or public health impacts or risks to which the violation at issue contributes, or if the project is designed to reduce the likelihood that similar violations will occur in the future.
- 3. The type and scope of each SEP should be clearly defined in the signed settlement document. Thus a SEP that has terms that are intended to be defined after the settlement document is entered into should be avoided.

E. Categories of Supplemental Environmental Projects

There are several types of projects that may be appropriate as SEPs:

1. Environmental Compliance Promotion

An environmental compliance promotion project provides training, technical support, or publication media to other members of the regulated community to: (1) identify, achieve and maintain compliance with applicable statutory and regulatory requirements; (2) avoid committing a violation with respect to such statutory and regulatory requirements; or (3) go beyond compliance by reducing the generation, release or disposal of pollutants beyond legal requirements. Acceptable projects may include, for example, producing or sponsoring a seminar directly related to correcting widespread or prevalent violations within the defendant/respondent's economic sector.

Environmental compliance promotion SEPs are acceptable where the primary impact of the project is focused on the same regulatory program requirements that were violated, and where the administering agency has reason to believe that compliance in the sector would be significantly advanced by the proposed project. The defendant/respondent should be required to note in any promotional material or credits that the production of the promotion is in response to an enforcement action against the respondent/defendant.

2. Enforcement Projects

Such projects may include contributions to environmental enforcement, investigation and training programs as provided in Penal Code section 14300 and/or contributions to nonprofit organizations such as the California District Attorneys Association, the Californian Hazardous Materials Investigators Association and the Western States Project. These supplemental projects should be consistent with the settlement contribution guidelines for these respective organizations,.

Emergency Planning and Preparedness

An emergency planning and preparedness project provides assistance, such as computers and software, equipment, or training, to an emergency response or planning entity. This is to enable these organizations to fulfill their obligations under the federal Emergency Right to Know Act and state statutes to collect information to assess the dangers of hazardous chemicals present at facilities within their jurisdiction, to develop emergency response plans, to train emergency response personnel and to better respond to chemical spills.

Emergency planning and preparedness SEPs are acceptable where the primary impact of the project is within the same emergency planning district affected by the violations.

4. Pollution Prevention

A pollution prevention project is one which reduces the generation of pollution through "source reduction," i.e., any practice which reduces the amount of any hazardous substance, pollutant or contaminant entering any waste stream or otherwise being released into the environment prior to recycling, treatment or disposal. (After the pollutant or waste stream has been generated, pollution prevention is no longer possible, and the waste must be handled by appropriate recycling, treatment, containment, or disposal methods.)

Source reduction may include equipment or technology modifications, process or procedure modification, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, inventory control, or other operation and maintenance procedures. Pollution prevention also includes any project that protects natural resources through conservation or increased efficiency in the use of energy, water, or other materials. "In-process recycling," wherein waste materials produced during a manufacturing process are returned directly to production as raw materials on site, is considered a pollution prevention project.

In all cases, for a project to meet the definition of pollution prevention, there must be an overall decrease in the amount and/or toxicity of pollution released to the environment, not merely a transfer of pollution among media. This decrease may be achieved directly or through increased efficiency (conservation) in the use of energy, water, or other materials.

5. Pollution Reduction

If the pollutant or waste stream already has been generated or released, a pollution reduction approach, which employs recycling, treatment, containment or disposal techniques, may be appropriate. A pollution reduction project is one which results in a decrease in the amount and/or toxicity of any hazardous substance, pollutant or contaminant entering any waste stream, or otherwise being released into the environment by an operating business or facility by a means which does not qualify as "pollution prevention." This may include the installation of more effective end-of-process control or treatment technology. This also includes "out-of-process recycling," wherein industrial waste collected after the manufacturing process and/or consumer waste materials are used as raw materials for production off-site, reducing the need for treatment, disposal, or consumption of energy or natural resources.

6. Environmental Restoration and Protection

An environmental restoration and projection project is one that goes beyond repairing the damage caused by the violation to enhance the condition of the ecosystem or immediate geographic area adversely affected. These projects may be used to restore or protect natural environments (such as ecosystems) and man-made environments such as facilities and buildings. Also included, is any project that protects the ecosystem from actual or potential damage resulting from the violation or improves the overall condition of the ecosystem. Examples of such projects include: restoration of a wetland in the same ecosystem in which the

facility is located; projects which provide for the protection of threatened or endangered species by improving critical habitat impacted by facility operations; or purchase and management of a watershed area by the defendant/respondent to protect a drinking water supply where the violation, e.g., a reporting violation, did not directly damage the watershed, but potentially could lead to damage due to unreported discharges.

With regards to man-made environments, such projects may involve the remediation of facilities and buildings provided such activities are not otherwise legally required. This includes the removal/mitigation of contaminated materials, such as soils, asbestos and leaded paint, which are a continuing source of releases and/or threat to individuals.

7. Public Health

A public health project provides diagnostic, preventative and/or remedial components of human health care that is related to the actual or potential damage to human health caused by the violation. This may include epidemiological data collection and analysis, medical examinations of potentially affected persons, collection and analysis of blood/fluid/tissue samples, medical treatment and rehabilitation therapy. Public health SEPs are acceptable only where the primary benefit of the project is to the population that was harmed or put at risk by the violations.

8. Other Types of Projects

Other types of projects may be determined to have environmental merit that do not fit within the above categories but are otherwise fully consistent with all other provisions of this guidance.

Projects that are Not Acceptable as SEPs

The following are examples of the types of projects that should not be allowable as SEPs:

- a. General education or public environmental awareness projects, e.g., sponsoring public seminars, conducting tours of environmental controls at a facility, or promoting recycling in a community.
- b. Conducting a project, which, though beneficial to a community, is unrelated to environmental protection, e.g., making a contribution to charity, or donating playground equipment.

F. Penalties

Even when conditions exist which justify the approval of a SEP, the penalty policies of the BDOs should still require that an adequate monetary penalty be assessed. This penalty should be sufficient to provide a deterrent effect as well as to remove any unfair competitive advantage or economic benefit gained by the facility defendant/respondent's prior noncompliance. Penalties help create the level playing field that businesses require to adequately address their environmental compliance needs, by ensuring that violators do not obtain an unfair economic

advantage over their competitors. Allowing "one free bite of the apple" is a disincentive for voluntary compliance, hurts law abiding businesses and requires the regulator to become the compliance manager for business, a function that is neither appropriate or within our limited resources. Penalties also encourage regulated entities to adopt pollution prevention and recycling strategies in order to minimize their pollutant discharges and reduce their potential liabilities.

In general, supplemental projects should be no more than 25 percent of the total settlement, exclusive of projected administrative costs.

G. Oversight and Drafting Enforceable SEPs

The settlement agreement should accurately and completely describe the SEP. It should describe the specific actions to be performed by the defendant/respondent, and provide for a reliable and objective means to verify that the defendant/respondent has timely completed the project. This may require the defendant/respondent to submit periodic reports to the appropriate government agency or court. If an outside auditor is necessary to conduct this oversight, the defendant/respondent should be made responsible for the cost of any such activities in the settlement document. The defendant/respondent remains responsible for the quality and timeliness of any actions performed or any reports prepared or submitted by the auditor. A final report certified by an appropriate corporate official, and evidencing completion of the SEP, should be required.

The defendants/respondents should be required to quantify the benefits associated with the project and provide a report setting forth how the benefits were measured or estimated. The defendant/respondent should agree that whenever it publicizes a SEP or the results of the SEP, it will state in a prominent manner that the project is being undertaken as part of the settlement of an enforcement action.

Settlements should specify that enforcing agencies are entitled to oversee SEP implementation to ensure that a project is conducted pursuant to the provisions of the settlement. The settlement should specify the legal recourse if the SEP is not adequately performed to the agency's satisfaction whether the SEP is performed by the violator or a third party contractor. Government should not retain authority to manage or administer the SEP.

The type, scope, and timing of each project are determined in the signed settlement agreement. Settlements in which the defendant/respondent agrees to spend a certain sum of money on a project(s) to be determined later are not recommended, however on a case by case basis where it is impractical to include the specifics of a project because it is not identified or fully developed at the time of the settlement, the violator should be required to open an escrow account and place funds in the account prior to finalizing settlement. This account would then be utilized to finance the projects as they are developed.

If necessary, there should also be a commitment in the SEP for long term monitoring and upkeep of the SEP. For example, if the SEP requires the construction of a wetland, then there should be a continuing input of water to the wetland so it retains its wetland character.

Pollution prevention, reduction, or environmental restoration projects should be defined narrowly for purposes of meeting supplemental environmental project policy guidelines. They should only be eligible as supplemental projects if they are designed to reduce, prevent, or ameliorate the effects of pollution at the defendant/respondent's facility or environ, as appropriate.

A defendant/respondent's offer to conduct a study regarding they own facility and/or operations, without an accompanying commitment to implement the results should not be eligible for penalty reduction.

The enforcing agency has sole discretion to decide whether it is technically and/or economically feasible to implement the results. There should be a clause in the agreement specifying that the penalty "offset" will be rescinded and the final assessed penalty reinstated in full should the agency decide that the results can be implemented but the defendant/respondent is unwilling to do so.

The form of SEPs easiest to oversee and implement are those that require a donation to a third party made at the time settlement is entered into. More difficult are those that require defendant/respondent to carry on activity over a period of time. These SEPs can require significant staff time to oversee and may be difficulty to enforce if difficulties re encountered.

H. Failure of a SEP and Stipulated Penalties

If a SEP is not completed satisfactorily, the defendant/respondent should be required pursuant to the terms of the settlement document, to pay stipulated penalties for its failure. The determination of whether the SEP has been satisfactorily completed (i.e., pursuant to the terms of the agreement) and whether the defendant/respondent has made a good faith, timely effort to implement the SEP is at the sole discretion of the enforcing agency.

I. Documentation and Confidentiality

In each case in which a SEP is included as part of a settlement, an explanation of the SEP with supporting materials must be included as part of the settlement agreement. The explanation of the SEP should demonstrate that the criteria set forth herein are met by the project and include a description of the expected benefits associated with the SEP. Settlement agreements should not allow that documentation and explanations of a SEP are confidential.

Appendix E

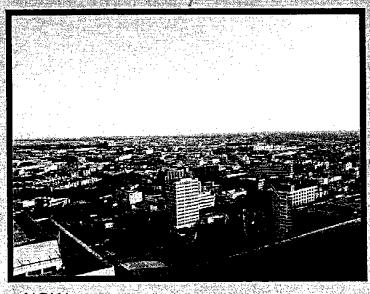
2010 Enforcement Report

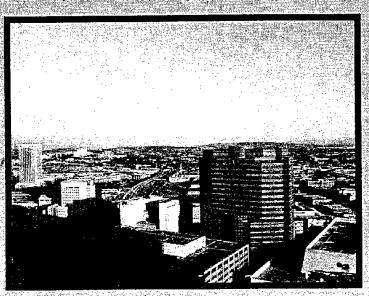
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CALIFORNIA AIR RESOURCES BOARD'S 2010 ANNUAL ENFORCEMENT REPORT



California has come a long way in 44 years and our future is bright





@ Air Resources Board

2010 ANNUAL ENFORCEMENT REPORT ARB ENFORCEMENT DIVISION June 2011

To learn more about ARB Enforcement Programs or to file an air pollution complaint, please visit

http://www.arb.ca.gov.

To file a complaint by phone, call the Statewide Hotline at (800) 952-5588

or

The Vehicle Complaint Hotline at (800) END-SMOG - (800) 363-7664.

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ACRONYM LIST

AB Assembly Bill

AFS Air Facility System

APCD Air Pollution Control District
APCF Air Pollution Control Fund

AQMD Air Quality Management District

ARB Air Resources Board

ATCM Air Toxic Control Measure

AG Attorney General

BAAQMD Bay Area Air Quality Management District

BHP Brake-horsepower
BOE Board of Equalization

CAP Compliance Assistance Program

CAPCOA California Air Pollution Control Officers Association

CADMV California Department of Motor Vehicles

CARBOB California Reformulated Blendstocks for Oxygenate Blending

CaRFG3 California Reformulated Gasoline Phase III

CHE Cargo Handling Equipment
CAS Compliance Assistance Section

CCDET California Council on Diesel Education and Technology

CCR California Code of Regulations
CEM Continuous Emission Monitoring

CHP California Highway Patrol
CNC Certificate of Noncompliance

CPES Consumer Products Enforcement Section

CTS Compliance Training Section
DRRP Diesel Risk Reduction Plan

DA District Attorney

ECLP Emission Control Label Program

ED Enforcement Division
EJ Environmental Justice

EPA Environmental Protection Agency FOE Fundamentals of Enforcement

GHG Greenhouse Gas

GHGES Greenhouse Gas Enforcement Section

GVWR Gross Vehicle Weight Rating

HDD Heavy-Duty Diesel

HDVIP Heavy-Duty Diesel Vehicle Inspection Program

H&SC Health and Safety Code

HC Hydrocarbon

LBS Pounds

LSI Large Spark-Ignition

MLD Monitoring and Laboratory Division
MOU Memorandum of Understanding
MSCD Mobile Source Control Division
MSOD Mobile Source Operations Division

MTBE Methyl Tertiary-Butyl Ether

MY Model Year

MSEB Mobile Source Enforcement Branch

NESHAP National Emissions Standards for Hazardous Air Pollutants

NOV Notice of Violation
NOx Nitrogen Oxide
NSR New Source Review
OGV Ocean-Going Vessel

OHRV Off-Highway Recreational Vehicle

OLA Office of Legal Affairs

PAH Polynuclear Aromatic Hydrocarbons

PAU Public Agencies and Utilities

PERP Portable Equipment Registration Program

PM Particulate Matter
PPM Parts per Million

PSI Pounds per Square Inch

PSIP Periodic Smoke Inspection Program
SAE Society of Automotive Engineers

SB Senate Bill

SEIES Strategic Environmental Investigations and Enforcement Section

SEP Supplemental Environmental Project

SORE Small Off-Road Engine
SSD Stationary Source Division

SSES Stationary Source Enforcement Section

SWCV Solid Waste Collection Vehicle

TAC Toxic Air Contaminant
TFV Transit Fleet Vehicle

TRU Transport Refrigeration Unit

UB Urban Bus

USEPA United States Environmental Protection Agency

VDECS Verified Diesel Emission Control Strategy

VC Vehicle Code

VEE Visible Emissions Evaluation VOC Volatile Organic Compound

EXECUTIVE SUMMARY

For all of its clean-air successes, California continues to suffer the most severe air pollution in the country. Millions of residents continue to breathe unhealthful air that taxes their lungs and heart. A key public health priority of the Board is protecting California communities from illegal emissions of smog-forming compounds and diesel soot. There is no practical way Californians can individually protect themselves from air pollution making the enforcement program essential to effectively carrying out ARB's mission. Children, the elderly and people with impaired breathing and heart troubles are particularly at risk.

The Air Resources Board's mission is "to promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state." The Board approaches this challenge with the recognition that improved public health goes hand-in-hand with economic health. It aims to reduce air pollution through fair, consistent and comprehensive enforcement of air pollution laws and by providing compliance assistance.

Addressing the Challenge of Diesel Pollution

Illegal diesel emissions remained the Board's top enforcement priority in 2010. Diesel pollution is a silent killer. The ultra-tiny, airborne particles in diesel exhaust can penetrate more deeply into lungs, and even enter the bloodstream, triggering death in people with pre-existing heart diseases. A comprehensive body of evidence links these particles to cardiovascular disease and premature deaths, and in 2010 the link between premature death and fine particle pollution (PM2.5) was deemed by the U.S. EPA to be causal— the highest level of scientific certainty.

The Board identified the particles from diesel engines as a Toxic Air Contaminant in 1998, finding it responsible for 70 percent of the known cancer risk from air pollutants in California. This action was followed by the Board adopting a comprehensive plan to reduce at least 85 percent of the diesel soot and the associated health risk by 2020.

The Board began regulating emissions from both new and existing diesel-fueled equipment and vehicles. It started with public transit buses, followed by school buses and garbage trucks, public utility vehicles and transit buses, then heavy-duty trucks and off-road equipment such as bulldozers and irrigation pumps. The most recent additions include offshore ships, tugboats and the cargo trucks and handling equipment at ports and rail yards.

Ports, Rail Yards, Freeways: A New Focus

In 2010 the Enforcement Division focused particularly on neighborhoods near ports, rail yards and freeways – and, in some cases, all three. It overcame budget limitations by collaborating with local air districts and local police on ticketing truck drivers for excessive engine idling.

Staff worked with residents and local officials in identifying problem areas and coordinated with Cal Trans on posting "No Idling" signs at these hot spots.

Reductions in diesel risk are especially needed where port trucks are heavily concentrated, such as in West Oakland, Wilmington, Long Beach and the City of Commerce. The Enforcement Division made these ports high priority targets in 2010, the year the Board's regulation of the drayage (port) trucks took effect. The rule puts ports and rail yards off limits to the dirtiest trucks – those with model-year 1993 or older engines – and limits entry of newer trucks that are past their prime to those with exhaust filters.

The 3,094 inspections in 2010 resulted in 356 violations – an 80 percent compliance rate. Staff soon discovered that trucks hauling goods transported by rail had a much higher non-compliance rate than those working the ports, so the enforcement focus shifted to the intermodal rail yards. Inspectors also focused on companies that defeated the intent of the regulation by staging their dirtier, non-compliant trucks just outside port and rail yard gates for transfer of loads. As with other heavy-duty diesel vehicles, port trucks are subject to Board limits on engine idling and exhaust smoke.

Transport Refrigeration Units

Enforcement staff also turned much of its attention to trucks equipped with diesel-powered refrigeration systems. Though their horsepower and related emissions are relatively small compared to the trucks themselves, significant numbers of these Transport Refrigeration Units congregate at truck stops and food distribution centers, posing an increased health risk for nearby workers and residents. The refrigeration engines are among the latest in a series of diesel-fueled equipment and vehicles to be regulated as part of the diesel reduction program.

Staff cited owners and operators of all 2002 model-year and older refrigeration units that had not been retrofitted or repowered to meet the diesel emission standard. The 6,119 field inspections in 2010 netted 2,318 violations. The 62 percent compliance rate is higher than expected for a first-time regulation of these units, which took effect just the previous year.

Overcoming Limitations

The State's ongoing hiring freeze kept the Board from adding inspectors to keep pace with the growing number and types of diesel emission sources coming under regulation. The Board nonetheless maximized its enforcement visibility and effectiveness through more strategic scheduling of inspections and by enlisting the help of local agencies with police authority.

In pursuing noncompliant refrigerated trucks, for example, enforcement staff concentrated inspections in agricultural areas at harvest when this truck traffic peaks. To keep better watch on the port traffic in Oakland and San Francisco, the Board arranged for the Bay Area Air Quality Management District to help conduct inspections of diesel cargo trucks.

Compliance Training

The Enforcement Division's compliance training section significantly expanded its outreach to businesses with diesel equipment and vehicles by introducing and expanding community college classes on several mobile source regulations and required retrofits, such as the Selective Catalytic Reduction system for certain heavy-duty diesel vehicles. The section held 253 classes, and directly reached 6831 participants at regulation-specific classes and workshops. Within the National Program (outside of CA) the section held 61 classes with 1436.

2010 Enforcement Highlights 2010

- A Board investigation led to the successfully prosecution of the State's first criminal case on illegal sales of uncertified vehicles. The San Bernardino County District Attorney's Office won felony convictions against the owners of Goldenvale Inc. of Ontario for profiting from the sale of dirt bikes, ATVs and other vehicles from China that were falsely certified as meeting California's tough emissions standards. The defendants served jail time and were ordered to pay restitution to those who bought the illegal vehicles.
- Enforcement staff saw a marked increase in the illegal sale and installation of old, substandard catalytic converters. Staff attributed the escalation to the rise in prices of precious metals used in the devices.

2011 Action Items

- Pursuant to Senate Bill 1402, the Board published a draft penalty policy that takes certain circumstances into account when assessing penalties. The draft policy is being vetted in public workshops. Enforcement staff is continuing outreach and education on installation of exhaust filters, a retrofit for older heavyduty trucks that will be required on a phased-in scheduled, starting in 2012.
- Staff also is starting enforcement of the SmartWay truck greenhouse gas programs that require certain fuel-saving features such as aerodynamic skirts on the sides of trailers and low-rolling resistance tires.
- Staff continues working with other federal, state and local agencies and environmental justice community groups to improve air quality in heavily polluted areas.
- Staff aims to increase the compliance rate on the drayage truck rule by 10
 percent at the rail yards, and increase pressure on the non-compliant motor
 carriers by developing cases against the major ones

INTRODUCTION

ARB coordinates California's efforts to reach and maintain the health-based federal and state air quality standards, and to protect the public from exposure to TACs. Since its inception, ARB has been charged with overseeing the efforts of the local air districts in controlling air pollution caused by stationary sources.

ARB is also mandated to address the serious problems caused by mobile sources – cars, motorcycles, trucks and buses, off-road vehicles and equipment, and the fuels that power them – major sources of air pollution in the most populous parts of the state.

ARB is also responsible for controlling emissions statewide from smaller but more numerous sources of air pollution. These include consumer products, other types of mobile sources like lawn and garden equipment and utility engines, and, especially, any sources of toxic air pollutants.

To carry out these responsibilities, ARB has undertaken a multifaceted program of planning, regulation development, implementation, compliance assistance and training, and enforcement. This is a complex process that weaves together air quality research, modeling and assessment and the development and adoption of regulations through a process that allows for public input and program implementation through active outreach to regulators and regulated industries through training and compliance assistance.

The final component, enforcement, ensures that these efforts do achieve the anticipated emissions reductions and guarantees a level playing field for all participants. This report focuses on ARB's enforcement efforts, both direct enforcement and oversight of

air district enforcement programs, and voluntary compliance through education and compliance assistance materials.

Violations of California's air quality laws and regulations span a wide spectrum that extends from nominal breaches of the state's statutes or regulations to deliberate criminal actions. While varying degrees of pollution are created by way of these violations, what remains constant in each is the unfair economic disadvantage suffered by those members of the affected industries that do comply. To address these varying degrees of noncompliance and their effects on the state's public and environmental health and economic welfare, the ED has adopted as its mission statement:

"The Enforcement Division seeks to protect public health and provide safe, clean air to all Californians by reducing emissions of air contaminants through the fair, consistent and comprehensive enforcement of statutory and regulatory requirements, and by providing training and compliance assistance."

The report that follows includes a discussion of the enforcement programs currently administered by ARB, as well as some summary statistics relating to inspections, investigations, and activities in each of the programs. More detailed information relating to case status, local air district enforcement activities and other relevant information is included in the appendices. Please also note that it is ARB's practice to keep confidential the names of entities involved in pending enforcement actions, and that this convention will be observed in any pending case summary information. Specific case settlement summaries can be viewed at ARB's Enforcement Program web site located at: http://www.arb.ca.gov/enf/casesett/casesett.htm.

For more information on the ARB, ED or its programs, please contact James R. Ryden, Chief, at (916) 322-7061 or iryden@arb.ca.gov. For questions or comments relating to this report, please contact the Chief Editor, Michelle Shultz Wood, at (626) 459-4338, or email at mshultz@arb.ca.gov.

Questions relating to specific program areas may be directed to the appropriate section manager or branch chief listed on the Contacts List in Appendix G. Please refer to ED's web page as well, located at: http://www.arb.ca.gov/enf/enf.htm.

GENERAL ENFORCEMENT PROGRAMS

The ED, through its three branches and an unaligned section, is responsible for a variety of enforcement activities:

• The Mobile Source Enforcement Branch (MSEB) enforces programs to reduce gaseous (including GHGs), particulate, and visible exhaust emissions from HDD and gasoline-powered commercial trucks and buses, passenger vehicles and other light-duty on-road vehicles, off-highway vehicles, off-road engines like lawn and garden equipment, and aftermarket parts for on and off-road vehicles.

- The Stationary Source Enforcement Branch (SSEB) investigates and develops
 cases related to motor vehicle fuels and consumer products, provides oversight and
 assistance to local air district enforcement programs, conducts a number of major
 inspection programs, and provides investigative and surveillance services to assist
 in the development of air quality, toxic exposure, and multi-media cases.
- The Training and Compliance Assistance Branch provides training and informative materials to ARB staff, air districts, and regulated industry personnel for improving enforcement and promoting compliance.
- The **Greenhouse Gas Enforcement Section** (GHGES) remains organizationally independent of a branch and provides an enforcement perspective and specific language to the ARB divisions involved in rule development in furtherance of the AB 32 climate change effort.

Integral to the success of the enforcement program is ED's close working relationship with ARB's Office of Legal Affairs (OLA). Division staff develops the cases, many of which are settled directly between the Division and the violators, who come into compliance and pay appropriate civil penalties. For cases that cannot be handled through this informal process, OLA attorneys are brought in to work with enforcement staff to negotiate settlements, or to prepare cases for referral for civil litigation or criminal prosecution to the California State Attorney General's Office (AG), local DA, or the United States Attorney's Office.

Regulation and Legislation Coordination

ED staff continues to be involved with rule development and proposed legislation. Coordination between the rule writers, the legislative staff, and the enforcement staff is critical in ensuring that new regulations and statutes are enforceable at both the state and local level.

Legislation

Senate Bill 1402, Dutton (Chapter 413), 2010, requires the ARB to provide air pollution violators with written information on how ARB determines their penalties, which may include an estimate of the excess air emissions their violations caused as practicable. The bill requires ARB to publish a written penalty policy and prepare an annual report to the Governor and Legislature summarizing the motor vehicle pollution administrative penalties imposed by ARB. Pursuant to SB 1402, starting in 2011 all Settlement Agreements will be made available to the public on the ARB's website http://www.arb.ca.gov/enf/casesett/casesett.htm. ED also incorporated SB 1402 compliance statements in all case settlement agreements as required by SB 1402.

Environmental Justice

The ARB is committed to making the achievement of EJ an integral part of its activities. State law defines EJ as the fair treatment of people of all races, cultures, and incomes

with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.

The Board's "Environmental Justice Policies and Actions" have established a framework for incorporating EJ into ARB's programs consistent with the directives of state law. These policies apply to all communities in California, but recognize that EJ issues have been raised more in the context of low-income and minority communities. These policies are intended to promote the fair treatment of all Californians and cover the full spectrum of ARB activities. Underlying these policies is a recognition that ARB needs to engage community members in a meaningful way as the Boards' activities are carried out. People should have the best information possible about the air they breathe and what is being done to reduce unhealthful air pollution in their communities. Finally, ARB recognizes the obligation the Board has to work closely with all stakeholders, communities, environmental and public health organizations, industry, business owners, other agencies, and all other interested parties to successfully implement these policies.

Over the last year, ED has increased its coordinated effort with federal, state and local enforcement agencies such as U.S. EPA, the Department of Toxic Substances Control, the California Water Resource Control Board, local air districts, local law enforcement, city leaders and local community groups throughout the state, especially in areas that have been identified as EJ areas. Staff has worked with environmental collaborative groups in the cities of Maywood, Oakland, Pacoima, Riverside, San Bernardino, and Wilmington. In 2010, in these communities and others, identified and reported environmental violations were resolved and ongoing projects continue to improve the quality of life for the people living in these communities. This very important effort will continue and expand to include other communities during the next year.

MOBILE SOURCE ENFORCEMENT PROGRAMS

Program Overview

California has long been the world leader in combating air pollution emitted from motor vehicles and other mobile sources. Because of the state's severe air quality problems, California is the only state authorized under the Federal Clean Air Act to set its own mobile source emissions and fuels standards. ARB has used this authority to establish an aggressive program to reduce emissions from many sources, ranging from on and off-road diesel engines, passenger cars, and on and off-road motorcycles to jet skis, lawn mowers, and chain saws.

The Board's Mobile Source Enforcement Program is structured to ensure that on and off-road vehicles and engines meet California's standards from the design phase through production, from the point of sale through the vehicle's or engine's useful life, and finally when they are retired from the fleet.

ARB has direct enforcement authority over all regulated mobile sources in California; including passenger vehicles and light duty pickups, on and off-road diesel powered

vehicles and equipment, off-highway recreational vehicles (OHRVs), off-road diesel and gasoline powered equipment and small off-road engines (SOREs). It is illegal to sell or offer to sell into California new mobile sources unless they have been certified by ARB as meeting California emissions standards. Manufacturers are required to apply for ARB certification annually.

<u>Highlights</u>

Bay Area Air Quality Management District Inspection Memorandum of Understanding

In 2010, ARB entered into a MOU with the BAAQMD where under the MOU the BAAQMD conducts inspections of diesel engines and vehicles at the ports and other EJ areas in its' nine county jurisdiction. This program was implemented in 2010 and is working well to better protect these areas through increased enforcement resources.

Mobile Source Enforcement Branch Reaches out to Stakeholders

Over the past year, MSEB staff attended over 100 meetings and conferences hosted by governmental agencies such as the USEPA, Bureau of Automotive Repair, CHP, CADMV, and organizations such as the California Trucking Association and American Trucking Association where attendees were provided with enforcement program overviews and how to comply with ARB regulations. Outreach is so important to ARB's mission in coordination with enforcement. It allows the regulated community to better understand their responsibilities and requirements under ARB's laws and regulations and allows staff to work with stakeholders to prevent violations.

Mobile Source Enforcement Section

The Mobile Source Enforcement Section is responsible for ensuring all regulated mobile sources, on and off-road, comply with ARB certification requirements. ARB's enforcement program vigorously enforces these laws through inspections and investigations that can result in corrective actions and substantial civil and/or criminal penalties.

For on-road sources, the primary focus of enforcement is to ensure that all new vehicles sold, offered for sale, or used in the state are certified for sale in California. Under California's regulations, a new vehicle (defined as a vehicle that has fewer than 7,500 odometer miles) not certified to California's standards cannot be sold within or imported into the state by a California resident or business. If such a vehicle visits a Smog Check station, the owner is issued a Certificate of Noncompliance (CNC), a copy of the CNC is sent to ARB. When a violation has occurred, a Notice of Violation (NOV) is issued. The NOV requires that the vehicle(s) be removed from the state, and payment of a civil penalty of up to \$5,000 per vehicle, as authorized under H&SC §43151 et seq.

Another area of focus for enforcement resources has been in the off-road categories. This includes off-road motorcycles and all-terrain vehicles commonly referred to as OHRVs; SOREs such as lawn and garden equipment, scooters; large spark ignited (LSI) engines which include fork lifts, sweepers, quads, and generators; and compression ignition diesel engines over 175 brake horsepower (bhp), which include generators and construction equipment.

Enforcement statistics for this program are found in Appendix C. Further details regarding the mobile source enforcement programs are discussed later in this report, or visit the ED's web page at http://www.arb.ca.gov/enf/enf.htm.

Highlights

Aftermarket Catalyst Cases

Based on regulations as of January 1, 2009 aftermarket catalysts sold in California required more stringent performance and durability standards and an ARB Executive Order. Older style catalysts are not legal for sale or installation in California. The cost of newer, more effective catalysts is higher; some shops sell the older illegal catalysts creating unfair business climates for shops installing legal parts. To help mitigate this situation, staff focused enforcement on catalyst manufacturers, distributors, and large retailers.

Illegal Import Market

Staff continues efforts to reduce incidences of illegally imported products (e.g. on and off-road motorcycles, ATVs, personal watercraft, lawn and garden equipment, etc.) coming into California through major shipping ports. Staff works with U.S. EPA, U.S. Immigration and Customs Enforcement, U.S. Coast Guard, and international governmental agencies especially China, to ensure imported products fully comply with California environmental regulations. Staff continues to pursue administrative, civil, and criminal action against violators.

In 2010, ARB successfully referred to the San Bernardino District Attorney's Office, the first criminal case based on illegally imported uncertified on and off-road vehicles. The defendants served jail time and were ordered to pay restitution to all victims.

Additionally, in 2010, the ARB continued to run confirmatory and in-use testing on selected import and domestic products using their own small engine test cell to ensure production vehicles and engines continue to meet certification and durability requirements.

Large Spark-Ignition Regulation

On January 1, 2010, emission standards and test procedures for off-road LSI engine powered equipment became more stringent. There are more than 90,000 off-road LSI

engines in California. Many of these engines have no emission controls and some remain in operator fleets for decades. Just one uncontrolled engine can emit as much hydrocarbon (HC) and nitrogen oxide (NOx) in three eight-hour shifts as a new car certified to California's cleanest emission standard does over its entire lifetime.

The HC and NOx combine in the atmosphere to form ground level ozone, which can damage the respiratory tract and worsen asthma symptoms. The LSI regulation will reduce HC+NOx emissions by approximately six tons per day, helping California to meet federally imposed clean air standards. If these standards are not met, the federal government could impose economic sanctions on California; for example, federal highway funding could be withheld.

Manufacturers of 25 hp or greater (greater than 19 kilowatts) off-road LSI engines must comply with the new engine standards and test procedures and manufacturers of retrofit emission control systems intended for use on LSI engines must comply with the verification procedures. Individual persons, businesses, and government agencies that own or operate LSI engine powered fleets in California are subject to the fleet requirements. Out-of-state companies doing business in California are also subject to the fleet requirements.

The regulation establishes more stringent combined HC and NOx emission certification standards for engine manufacturers. The regulation also establishes verification procedures for manufacturers of retrofit emission control systems. Engine and retrofit emission control system manufacturers will likely employ advanced automotive-style emission control technologies including electronic fuel/air controllers, three-way catalysts, and oxygen sensors to meet the certification and verification standards, respectively.

Off-Highway Recreational Vehicles and Small Off-Road Engines

OHRVs (off-road motorcycles, ATVs) and SOREs (lawn mowers, trimmers, generators, and scooters) continue to receive enforcement attention. Staff worked cooperatively with industry to educate and assist industry's awareness and compliance with ARB laws and regulations.

Staff continues to work with CADMV and the California Department of Parks and Recreation to ensure registration and enforcement in riding areas throughout California and reduce smog-forming emissions by approximately 200 tons per day via aggressive enforcement of regulations. This cooperative effort ensures ARB will achieve the anticipated reductions.

Tire Inflation Regulation

On September 1, 2010, the ARB's Tire Pressure Regulation took effect. The purpose of this regulation is to reduce GHG emissions from vehicles operating with under inflated tires by inflating them to the recommended tire pressure rating. The regulation applies

to vehicles with a gross vehicle weight rating (GVWR) of 10,000 pounds (lbs) or less. Automotive service providers must meet the regulation's following requirements of checking and inflating each vehicle's tires to the recommended tire pressure rating, with air or nitrogen, as appropriate, at the time of performing any automotive maintenance or repair service.

Heavy-Duty Diesel Enforcement

In 1998, ARB identified diesel exhaust as a TAC. As a result, ARB developed the ATCMs, a series of programs intended to reduce diesel emissions of particulates and NOx. These programs require commercial HDD fleets to replace or repower (i.e. install new engines) their vehicles and equipment or the exhaust systems with diesel particulate filters, and alter driver habits that create unnecessary diesel emissions from idling.

Certain segments of all diesel fleets are now required to be equipped with these retrofits, including transit buses, solid waste collection vehicles (SWCV), Public Agencies and Utilities (PAU) vehicles, CHE, drayage trucks, as well as TRU (trailers equipped with diesel-powered cooling systems). Starting in 2012, retrofits will be required on a phase-in schedule for on-road diesel-powered vehicles which are covered under the Truck and Bus Regulation (On Road HDD Vehicles greater than 14,000 GVWR). By January 1, 2023, all affected vehicles under this program must have a 2010 model year (MY) engine or equivalent installed.

Diesel powered off-road vehicles will be required to lower their particulate matter (PM) emissions once the U.S. EPA grants ARB the waiver to enforce the in-use emission standards set by ARB's regulation.

ARB, in cooperation with the CHP, inspects HDD trucks and buses for excessive smoke emissions and tampering of emission control systems. Every HDD vehicle traveling in California, including those registered in other states and foreign countries (i.e. Mexico or Canada), is subject to inspection and testing.

Although HDD vehicles comprise only two percent of California's on-road fleet, they produce about one-third of the NOx and approximately two-thirds of the PM emissions attributed to motor vehicles. The exhaust emissions from these vehicles are of special concern, particularly in populated areas, because of the toxic nature of the sooty particles found in diesel exhaust. ARB also inspects HDD gasoline-powered vehicles for emission control systems tampering. Tampered gasoline engines contribute an inordinate amount of HCs, NOx, and carbon monoxide to total vehicle emissions. Owners of tampered gasoline and diesel vehicles are cited. The citation must be cleared by repairing the engine, having the engine inspected by an authorized Smog Check Station or ARB inspector, submitting repair receipts, and paying an assessed penalty. Vehicles with citations that are not cleared in a timely manner may be subject to impound by CHP.

In addition, California Vehicle Code (VC) Section 4755 authorizes CADMV to refuse the registration, renewal or transfer of registration, at ARB request, for vehicles with violations not cleared in a timely manner. The bill was signed by the Governor and became effective January 1, 2008.

Engine idling of school buses, commercial vehicles and off-road vehicles is now prohibited for longer than five minutes. This is intended to reduce public exposure, especially that of children, to harmful diesel particulates.

ARB has been authorized to adopt rules to address global warming by reducing the gaseous emissions (methane, carbon dioxide, etc.) that trap heat in the earth's atmosphere, as outlined in the Board's December 2008 Scoping Plan. Two initial efforts include designing new trucks and trailers, and retrofitting in-use trucks and trailers, with equipment that enhances aerodynamics to reduce air drag and increase fuel economy. These strategies are commonly referred to as "Smart Way Technologies". Other measures include controls on vehicle tire designs (to reduce rolling resistance) and air pressure, engine efficiency and economy, and the introduction of low-Carbon fuels. Some of these rules became effective January 1, 2010.

Highlights

California-Mexico Border Programs

Currently, there are designated commercial zones around the ports of entry at Otay Mesa, Calexico, and Tecate in which Mexican-domiciled trucks may transport and deliver freight to transfer stations in California. American carriers will load product at these stations and deliver it to final destinations. To mitigate excessive PM and NOx emissions from Mexican-domiciled vehicles, ARB maintains HDVIP inspection sites at the Otay Mesa, Calexico, and Tecate border crossings. ARB also conducts random roadside inspections near and around these border crossings to assure compliance from the trucking companies. Mexican commercial vehicles are inspected for engine certification, emissions and tampering when they travel through these inspection sites.

California Council on Diesel Education and Technology

Fleets, firms, and individuals that perform smoke opacity testing related to ARB's HDVIP (13 California Code of Regulations (CCR) 2180-2189) and Periodic Smoke Inspection Program (PSIP) (13 CCR 2190-2194) need a clear understanding of the programs' regulations and must be able to correctly administer the Society of Automotive Engineers (SAE) J1667 opacity test. To this end, in 1992 ARB created the CCDET. It is a partnership among ARB, the diesel trucking industry, and five California community colleges. The College of Alameda, San Joaquin Delta College, Santa Ana College, Los Angeles Trade Technology College, and Palomar College offer a low-cost, one-day class in the proper application of SAE J1667. The CCDET colleges held 141 of these classes in 2010.

ARB policy requires that certification through CCDET be renewed every four years (see

ARB Advisory 340 at http://www.arb.ca.gov/enf/advs/advs340.pdf) The CCDET program is currently adding modules to cover other ARB diesel regulatory programs, such as retrofits to idling controls on diesel engine emission control systems.

CCDET's new class - Diesel Exhaust After-Treatment Maintenance training covers the following:

- Background on why diesel particulate filters are necessary;
- How the technology filters PM and how regeneration strategies such as passive and active systems operate;
- Explores how filters might fail as well as preventative maintenance practices to avoid break downs;
- An overview of selective catalytic reduction systems used on HDD engines.

The one day training also includes hands-on shop exercises designed to reinforce maintenance procedures employed to keep after-treatment technology and the engines they are installed on working at peak performance. Monies received by the CCDET colleges are used to purchase equipment for the hands-on testing portion of diesel after-treatment devices.

SEP	Number of Cases	Amount
CCDET/Peralta Community College District 1	141	\$336,672

¹ CCDET was created to train diesel fleet mechanics on the proper conduct of ARB's HDVIP SAE J1667 test protocol, HDVIP/PSIP program record keeping requirements, and after-treatment and engine maintenance requirements. The Peralta Community College District administers the program and distributes the SEP monies in equal shares to participating CCDET community colleges. The cost for each CCDET class is \$175.

<u>Carl Moyer Program and Proposition 1B Goods Movement Emission Reduction</u> <u>Program Compliance Checks</u>

The Carl Moyer Program provides incentive grants to reduce emissions from HDD engines. The incentive grants offset the cost of replacing older, high-polluting engines with newer engines certified to more stringent emission standards.

Proposition 1B provides funding to cut air pollution and health risks by upgrading diesel equipment that is used to move freight in California.

Before these funds are released, ED staff performs compliance checks on the vehicle's registered owner and the vehicle's identification number to determine if there are any outstanding violations within the various enforcement programs. If an outstanding violation is found, the vehicle owner is required to provide proof of compliance and pay all civil penalties before the funds are released. This program ensures that the ARB

does not award money to violators.

Compliance Outreach and Education

The ARB's ED routinely issues citations for violations ranging from minor violations, such as smoking HDD vehicles to major violations, such as illegal engines. When a case against a violator is settled by the ARB, the terms of the settlement extend beyond simply punishing the violators by forcing them to pay fines. In all cases, ARB makes an effort to assist the violators in achieving compliance by educating them. Enforcement staff encourages the violators to work directly with ARB program staff in order to achieve a greater understanding of the regulatory programs.

Drayage Truck Regulation

The enforcement of the drayage truck rule was a high priority in 2010. Both the registration requirements and the first in-use compliance phase were enforced in the field through 3,094 inspections resulting in 356 violations with a compliance rate of 80 percent and through developing 16 new cases against motor carriers who dispatch non-compliant trucks to ports or rail yards in California. ARB enforcement quickly learned to focus efforts at the rail yards rather than the ports because it is there where a significantly higher rate of non-compliance was found.

Fleet Rule for Public Agencies and Utilities

The fleet rule for public agencies and utility fleets is ARB's effort to reduce both criteria pollutant emissions and exposure to toxic diesel exhaust from diesel powered vehicles. The regulation affects both municipalities and utilities.

PAU engines were required to meet a fleet average starting in January 2008 and the last date is December 31, 2018. This includes certification requirements for the fleets and includes meeting fleet fuel strategy requirements. Operators of all PAU vehicles are required to meet fleet-wide PM reductions and lower NOx fleet averages. This can be achieved through the use of verified diesel emission control strategies (VDECS), i.e. by installing certified particulate filters, by replacing older engines with ones that meet the 2008 engine exhaust emission standards, or by using alternative fuels. Annual reporting is also required from all PAUs by December 31st of each year.

Fleet Rules for Transit Agencies

In February 2000, the ARB adopted the Fleet Rule for Transit Agencies and more stringent exhaust emission standards for new UB engines and vehicles. The Fleet Rule for Transit Agencies is ARB's effort to reduce both criteria pollutant emissions and exposure to TAC from UBs and TFVs operated by and for public transit agencies. The regulation affects both public transit operators and HDD engine manufacturers.

New UBs operated in California are required to have engines that meet the more stringent California UB engine exhaust emission standard through the 2006 MY. Starting with the 2007 MY, the standard aligned with the California HDD engine exhaust emission standard. A transit agency must report every January 31st, starting in 2003 through 2016, the UBs owned, operated, or under contract to the transit agency as of January 1 of that year.

Transit fleet operators that own TFVs are required to reduce public exposure to diesel PM and NOx emissions. TFVs are any on-road vehicles operated by a public transit agency, less than 35' in length and 33,000 GVWR, but greater than 8,500 GVWR, powered by HDD engines fueled by diesel or alternative fuel; including service vehicles, tow trucks, dial-a-ride buses, paratransit buses, charter buses, and "commuter service" buses operated only during peak commute hours with 10 or fewer stops per day. Gasoline-powered TFVs are exempt.

An UB is a passenger carrying vehicle owned or operated by a public transit agency, powered by a heavy HDD engine, or of a type normally powered by a heavy HDD engine, intended primarily for intra-city operation. A bus normally powered by a heavy HDD engine is usually 35 feet or longer, and/or greater than 33,000 lbs GVWR.

Transit operators are required to choose a fuel path: diesel or alternative fuel. The fuel path choice affects UB purchases and dictates emission reduction deadlines. During 2010, total penalties for the Transit Fleet Rule were divided between UBs and TFVs. There was \$1,875 in penalties collected to settle UB violations and \$1,250 in penalties collected from 2 TFV cases settled.

Idling Programs

California has two regulations aimed at curbing the length of time diesel vehicles are allowed to idle their engines. The Commercial Vehicle Idling regulation applies to HDD vehicles greater than 10,000 lbs. and prohibits these vehicles from idling for more than five minutes. The School Bus Idling regulation focuses on school buses and other vehicles that visit school zones, including HDD and alternatively fueled vehicles.

The school bus idling regulation requires that engines in these vehicles shut down immediately upon arriving at a school, and after starting up; the vehicle must leave the school within 30 seconds. Exceptions apply to both regulations, and each carries a \$300 penalty that is the responsibility of the driver of the vehicle in violation. There are numerous alternatives to idling a vehicle's main engine such as auxiliary power systems, battery systems and truck stop electrification. A list of alternatives and information about the regulation can be found at http://www.arb.ca.gov/msprog/truck-idling.htm. Complaints about idling vehicles from the general public may be submitted to http://www.arb.ca.gov/enf/complaints/complaints.htm.

AB 233 was enacted in 2007, requiring ARB to review existing enforcement needs, increase the penalty for commercial vehicle idling, enable registration holds to be placed

on California vehicles with outstanding ARB citations, place "No Idling" signs throughout the State in places where trucks frequently idle, and train air pollution control districts and local law enforcement on the commercial vehicle idling regulation. In 2010, "No Idling" signs were approved by Cal Trans' board and plans for placing them throughout the state are underway, the commercial vehicle idling penalty increased from \$100 to \$300, two air districts are actively enforcing commercial vehicle idling, and registration holds are routinely placed on vehicles with outstanding citations. These measures have achieved enhanced enforcement reducing toxic diesel emissions.

Periodic Smoke Inspection Program

The PSIP was authorized by SB 2330 of 1990 (HS&C section 43701). This program requires fleet operators with two or more heavy duty diesel powered vehicles over 6,000 pounds GVWR to conduct annual smoke emissions inspections using the SAE J1667 test procedure. This test is designed to be diagnostic of engine maintenance issues. It alerts fleet operators of vehicles that are emitting above normal levels so that they can be repaired to be brought back to manufacturer specifications.

When ARB performs fleet audits under the PSIP, fleet vehicle records are inspected to confirm that valid testing of the vehicles has been annually performed. As part of a PSIP audit, ARB conducts comprehensive multi-program audits (e.g. DTR, ECLs, PAU, TRU, SWCV, etc.) which include inspecting the compliance reports submitted to ARB regarding diesel exhaust retrofits, plus inspecting each vehicle for the proper installation of these exhaust retrofits, engine emissions certification labels, and other program labeling requirements.

When violations are found, a case is developed against the fleet. The developed case includes the violations, assessed penalties, and a list of additional requirements such as attending CCDET classes, re-flashing engine computers, and agreeing to comply to avert future violations. Over 99 percent of these cases are settled through mutual settlement and cases that remain unsettled are referred to the Office of the Attorney General or a local District Attorney's Office for prosecution. In 2010, ARB closed 181 PSIP cases for a total of \$857,080 in penalties. See Appendix C, Table C-16.

Solid Waste Collection Vehicle Program

California's SWCV regulation became effective in 2004. The SWCV regulation reduces cancer-causing PM and smog-forming NOx emissions from these trucks.

The rule applies to all SWCVs of 14,000 lbs or more that run on diesel fuel, have engines in MYs from 1960 through 2006, and collect solid waste for a fee. Each MY from 2004 through 2010, waste hauling and waste recycling companies are required to retrofit exhaust systems on more of their trucks by installing diesel particulate filters or diesel oxidation catalysts. The ARB must verify these devices for performance prior to installation.

A phase-in was scheduled from 2004 through 2010 to retrofit entire fleets. By December 31, 2007, SWCV fleets were required to reduce particulate emissions from all of their trucks equipped with 1988-2002 MY engines. Fleets with 15 or more vehicles were required to bring into compliance all vehicles with 1960-1987 MY engines. Fleets with 14 or fewer vehicles had until December 31, 2010 to retrofit 100 percent of vehicles with 1960-1987 MY engines. Fifty percent of vehicles with 2003-2006 MY engines were required to be brought into compliance by December 31, 2009. The other half of these engines were brought into compliance by the end of 2010.

The objective was for fleets to have diesel emissions from all of their SWCVs at or below 0.01grams of PM per bhp hour level by 2010. Enforcement of this program is being conducted with HDVIP and PSIP. During 2010, 20 SWCV fleet cases were closed for \$52,720. See Appendix C, Tables C-13 and C-16 for other statistics regarding this program.

Tractor - Trailer Greenhouse Gas/SmartWay Regulation

The SmartWay regulation became effective in January of 2010 and is a phased-in GHG regulation. The SmartWay regulation was developed to reduce GHG emissions produced by HDD tractors by making them more fuel efficient. Fuel efficiency will be improved by requiring the use of aerodynamic tractors and trailers that are also equipped with low rolling resistance tires. This regulation, over time, will also save money and reduce the dependence on foreign oil.

The Tractor-Trailer GHG Regulation applies to 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and all HDD tractors that pull them on California highways. Any person residing in California that sells an affected vehicle or trailer must provide a disclosure notice to the buyer of such vehicle or trailer.

Tractors

Beginning January 1st, 2010 - MY 2011: Sleeper-cab tractors that pull affected trailers must be SmartWay certified; Day-Cabs that pull affected trailers must use SmartWay verified low rolling resistance tires; All 2010 and older MY tractors that pull affected trailers must use SmartWay verified low rolling resistance tires.

Trailers

Beginning January 1st, 2010 - 2011 and newer MY 53-foot or longer box-type trailers must, be either SmartWay certified or retrofitted with SmartWay verified technologies.

Beginning January 1, 2013 - 2010 and older MY 53-foot or longer box-type trailers (with the exception of certain refrigerated-van trailers) must meet the same aerodynamic device requirements as the 2011 and newer MY trailers.

Fleet Options

July 1, 2011 – Fleets with 21 or more trailers can report to take advantage of a second phase-in timeline.

July 1, 2012 – Fleets with less than 21 trailers must report to take advantage of an optional phase-in timeline.

No enforcement action has been taken to date other than site visits to dealerships to ensure proper disclosure on tractors and trailers sold. This was done for outreach and education purposes.

Transport Refrigeration Units Regulation

Enforcement of the TRU rule was a main enforcement focus of the Off-Road Group - Heavy-Duty Diesel Enforcement Section in 2010. This was accomplished through 6,119 field inspections resulting in 2,318 violations with a compliance rate of 62 percent as well as through developing 102 new cases and settling 19 cases against non-complying companies. Specifically, field inspections were conducted in agricultural areas at the time when the local crops were being harvested and refrigerated truck traffic was at a peak to maximize enforcement visibility and effectiveness.

This regulation requires California based TRUs to be registered with the ARB and all TRUs operating in California to comply with applicable in-use particulate-matter, emission standards. In 2010, all 2002 MY and older TRU engines that were inspected were cited if they were not retrofitted or repowered.

Truck and Bus Regulation

The Truck and Bus regulation became effective in January of 2010 and is a phased-in regulation. The Truck and Bus regulation was developed to significantly reduce PM and NOx emissions from existing diesel vehicles operating in California. This regulation applies to nearly all diesel-fueled trucks and buses with a GVWR greater than 14,000 lbs that are privately or federally owned and for the privately and publicly owned school buses. This regulation basically affects the remaining HDD vehicles not covered under other regulations.

Enforcement will begin in 2012 for HDD powered vehicles with a GVWR greater than 26,000 lbs. Lighter trucks and buses with a GVWR of 14,001 to 26,000 GVWR do not have compliance requirements until 2015. Starting January 1st, 2015, these trucks with engines that are 20 years or older will need to be replaced with newer trucks. Starting January 1st, 2020, all remaining lighter trucks will need to be replaced so they all have 2010 MY engines or equivalent emissions by 2023. No reporting is required.

Heavier trucks and buses with a GVWR greater than 26,000 lbs have two primary ways to comply. Fleets can meet with the compliance schedule by engine MY or can use a

phase-in option that is more flexible.

The regulation has special provisions that delay some or all of the compliance requirements, but fleets must report to take advantage of them. By March 31st, 2011, fleets must report to qualify for lower use and specialty agricultural truck exemptions until 2017 or 2023 and must report hour meter reading for sweepers with auxiliary Tier 0 engines.

No enforcement action has been taken to date other than site visits to dealerships to ensure proper disclosure on tractors and trailers sold. This was done for outreach and education purposes.

STATIONARY SOURCE ENFORCEMENT PROGRAMS

The Board's Stationary Source Enforcement Programs conduct oversight and enforcement activities in conjunction with the 35 local air districts. Stationary sources include "point" or fixed sources such as petroleum refineries and factories, and "area" sources which individually emit small quantities of pollutants but collectively emit significant emissions, such as consumer products and residential chimneys.

ARB's stationary source enforcement initiatives include the following programs: fuels enforcement, consumer products enforcement, general stationary source enforcement, and strategic environmental investigations and enforcement. Further details regarding the stationary enforcement programs are discussed in this report, or may be found at http://www.arb.ca.gov/enf/enf.htm.

Fuels Enforcement Program

The fuels enforcement program regulates the composition of motor vehicle fuels and ensures compliance with motor vehicle fuels regulations, including California reformulated gasoline regulations, diesel fuel regulations, and cargo tank vapor recovery regulations.

The enforcement of the fuels program includes field investigations; inspection and certification of cargo tank vapor recovery on gasoline cargo tank trucks, evaluation of alternative compliance data, investigation into violations for the development of fuels cases, and other programs listed in the highlights below.

Fuels enforcement also provides outreach and support to clarify complex aspects of the regulations in the form of training seminars, individual company meetings, web pages, and ongoing telephone support to the regulated industry and the public.

Highlights

Field Investigations

Inspections of motor vehicle fuels are conducted year-round at refineries, import vessels, distribution and storage facilities, service stations, and bulk purchaser/consumer facilities. Fuels enforcement inspectors obtain samples of the gasoline and diesel fuel and transport them to ED's mobile fuels laboratory for analysis to determine whether they comply with the specifications of Phase 3 California Reformulated Gasoline (CaRFG3) regulations and California Diesel Fuel regulations.

In 2010, fuels enforcement staff collected 2,244 samples of gasoline and 435 samples of diesel fuel for a total of 2,679 samples. See Appendix D for data regarding fuels inspections. Further information is at the ARB fuels enforcement web page at http://www.arb.ca.gov/enf/fuels/fuels.htm

Mobile Fuels Laboratory

Use of the mobile fuels laboratory increases sampling capability and provides quicker turnaround time for sample analysis. The lab contains all the analysis instruments and support equipment necessary to test for the parameters of gasoline and diesel fuel regulated by ARB. After fuels samples are collected by inspectors and transferred to the lab, ARB chemists conduct the testing in accordance with approved American Society for Testing and Materials test methods. The results are evaluated and when a violation is discovered, an NOV is issued and a case is developed. In 2010, Fuels enforcement staff conducted 17,460 analyses on gasoline and diesel fuel. See Appendix D, Table D-4 for detailed fuels analysis data.

Phase 3 California Reformulated Gasoline

Changes to the CaRFG3 limits were implemented to give flexibility to producers who may use a Predictive Model for their final gasoline blend. A California model for California Reformulated Gasoline Blendstocks for Oxygenate Blending (CARBOB) allows producers to project the final parameters of the gasoline after all components are blended.

In 2010, ARB inspectors enforced the Phase 3 regulations by performing over 16,000 analyses on samples of California gasoline collected during fuels inspections. See Appendix D for detailed information.

Alternative Compliance Options and Self-Reporting

The Reformulated Gasoline and Diesel regulations offer alternative compliance options for refiners and importers of California fuel to meet the motor vehicle fuels standards. These alternative options include: when a company elects to use an alternative compliance option such as predictive model limits, designated alternative limits, or

certified diesel fuel formulations, the company is required to notify ARB and provide data.

Fuels enforcement staff monitors and evaluates data submitted by companies to ensure accurate reporting and compliance with company protocols, as well as provide essential information. Staff randomly sample and test the fuel to confirm the accuracy of the reports. In 2010, staff received and evaluated 2670 predictive models from producers and 74 from importers of California gasoline.

Fuels Distributor Certification Program

The Fuels Distributor Certification Program provides a list of legally certified distributors to motor vehicle fuels retailers. It also provides the ARB with a means by which to check the records of companies who do not comply or cooperate with requests for data, and in some cases, companies which have been involved in criminal activity. To be placed on the list of certified distributors, a company must submit an application to ARB which includes its principal place of business and the location of its records.

In 2010, staff certified 270 distributors of motor vehicle fuel in the program. Fuels enforcement staff issued its annual list of certified distributors to gasoline and diesel fuel retailers and made it available to the public on the ARB website. This program is used in conjunction with special investigation and routine inspection activities. For more information, see http://www.arb.ca.gov/enf/fuels/distcert.htm.

Oxygenate Blender Certification Program

The Oxygenate Blender Certification Program was created to ensure that gasoline blend stock, known as CARBOB, complies with the standards for California gasoline. Any oxygenate blender must register with the ARB at least 20 days before blending oxygenates with CARBOB. To obtain certification, an oxygen blender is required to provide the facility name and the physical location of records, contact name and telephone number for each blending facility.

In 2010, staff certified 60 oxygenate blending facilities. Fuels enforcement staff posted its annual list of certified blenders at http://www.arb.ca.gov/enf/fuels/oxyblend.htm.

Red-Dyed Diesel Fuel Enforcement

The Board of Equalization (BOE) has contracted with ARB to conduct field inspections to prevent the use of illegal non-taxed diesel fuel. The exempt fuel is dyed red so that inspectors are able to distinguish it from the non-exempt fuel.

The ARB inspectors obtain samples of fuel that is suspected of being illegal, and ARB laboratory staff analyzes the samples for the presence of the red dye. ARB fuels enforcement inspectors also conduct special investigations of companies suspected of illegally using red-dyed diesel fuel.

In 2010, staff conducted 11,855 red-dyed diesel fuel inspections and found ten violations. These inspections are conducted as part of the HDVIP program. For more detailed information, please see Appendix D, Table D-6.

Cargo Tank Vapor Recovery Program

The Cargo Tank Vapor Recovery Program (CTVRP) is responsible for the enforcement of California H&SC Section 41962(g), which requires that any tank vehicle transporting gasoline have a vapor recovery system certified by the ARB installed and maintained in compliance with the requirements for certification. Vapor recovery systems on cargo tanks capture the gasoline vapors produced during the transportation and delivery of gasoline.

Cargo tank program staff conducts statewide random inspections of cargo tanks at terminals and loading racks. When a leak is discovered, the cargo tank owner or operator is issued an NOV and must refrain from reloading gasoline until the cargo tank is brought back into compliance. If a cargo tank is found without a current decal or certification, or if the cargo tank is not maintained in accordance with ARB emission standards, it is in violation and the owner may be subject to penalties of \$500 or more, depending on the company's compliance history. Inspectors also conduct random inspections of ARB certified testers to ensure that leak tests are being conducted properly.

CTVRP certification staff also administers the annual certification compliance test program. An ARB certified copy of the application and an official decal which must be displayed by the cargo tank operator are issued after certification. The tanks are currently certified through a new web-based system: the system, which includes the thousands of cargo tanks that are ARB certified every year, is maintained in this program. In 2010, staff certified over 5,500 cargo tanks. Please see Appendices A and D, Table D-3 for further information regarding inspection and certification results from 2010. For more information about this program, please visit http://www.arb.ca.gov/enf/cargotanks/cargotanks.htm.

Case Development

Case development staff conducts investigations into violations of fuels regulations. Staff immediately notifies the violating entity to ensure that the non-compliant fuel is removed from distribution and then begins the investigation which includes obtaining and evaluating field data and other company records to determine the date of onset, cause, and extent of the violation(s). When a violation has occurred, staff will issue an NOV to the company and will initiate settlement negotiations. Most of the fuel specification cases are settled administratively through negotiation; cases that cannot be settled in this manner are referred for civil or criminal litigation with case development staff assisting the prosecution.

In 2010, case development staff settled or closed 20 fuels cases and collected \$90,400 in penalties. See Appendices A, Table A-1, and B for an overview of case dispositions and summaries of the significant cases resolved in 2010.

Consumer Products Enforcement

Consumer products such as deodorants, hair sprays, cleaning solvents, spray paints and insecticides are examples of common everyday products that are made with ozone-forming volatile organic compounds (VOCs). Manufacturers self-designate the categories for their products. Although each consumer product contains only a small amount of VOCs, Californians use over half a billion of these products every year, which cumulatively contributes to the formation of ground level ozone, which is a major part of California's smog problem. ARB regulates the amount of VOCs permissible in approximately 129 categories of consumer products in order to reduce smog and public exposure to hazards associated with smog. In addition to their caseloads regarding VOCs and the chemical content of products, Consumer Product Enforcement Section (CPES) investigators are increasingly responsible for the enforcement of other product regulations adopted to reduce emissions into the air, including portable fuel containers, out-board marine tanks, and indoor air cleaners.

CPES staff travels throughout California conducting inspections and collecting consumer product samples for laboratory analysis, as well as purchasing samples online and through mail order outlets. CPES staff logs all samples into a dedicated sample tracking database, then transfers the acquired products under legal chain-of-custody to ARB's Monitoring and Laboratory Division (MLD) for testing of VOC content or the presence of toxic compounds prohibited under California regulations. MLD has developed specific testing methods to determine product compliance with California regulations.

After receipt of laboratory analysis or performance testing, CPES staff determines if there have been violations of the Consumer Products Regulations. If a violation is determined, staff either works with the manufacturers or retailers to reach a mutual settlement agreement, or refers the case to the OLA. In 2010, CPES staff settled 72 consumer products cases and 2 portable fuel container cases. Penalties collected were \$2,948,005 for consumer products and \$93,000 for portable fuel container cases.

Highlights

Portable Outboard Marine Tanks Regulation

Starting in 2010, new regulations limiting the permeation and diurnal emissions from the tanks, caps, hoses, hose fittings, and primer bulb assemblies used to store and supply fuel to outboard marine engines became effective. Similar requirements for marine primer bulbs and fuel tanks, took effect on January 1, 2011. CPES staff work closely with the MLD to evaluate new products in order to implement the regulations, and maintains frequent contact with industry stakeholders in support of their efforts to

achieve compliance.

California Certified Air Cleaning Devices

New requirements adopted to limit the ozone emitted from indoor air cleaning devices became effective in 2010. All manufacturers who sell to California residents or businesses were required to notify their distributors, retailers, and sellers about this regulation, to provide a copy of the regulation to them and to provide documentation of the notification to ARB. Enforcement action will be taken initially against manufacturers that ARB has not received documentation or notification from, as well as, against ozone generator companies that are not complying with the regulation.

Hair Care Products

CPES staff observed many hair care products claiming to be both a styling product, as well as a finishing product. These products can only fall under the hairspray category (55 percent VOC limit) if they meet the criteria for finishing products otherwise they must comply with the hair styling product category (6 percent VOC limit). Staff will be looking closely at these two categories and have advised manufacturers to review the labels of their products.

Personal Fragrance

In 2010, CPES staff settled several cases involving body sprays subject to either the antiperspirant deodorants or personal fragrance products categories. Some deodorant body spray products were labeled an antiperspirant deodorant, thus making the products in violation with the VOC limits. Additional body spray manufacturers imitated these labels and also produced products that were out of compliance. In addition, personal fragrance body spray products were discovered that failed to meet the limits of the category. Often these products were manufactured overseas and the importers did not verify the VOC content of the products prior to selling them in California.

"Special Purpose" Products Making General Purpose Claims

2010 saw an increase in the number of products CPES encountered that were ostensibly labeled for an unregulated special purpose, but were labeled with additional claims that put the products into a regulated general purpose category. Several degreaser and lube-type products that were labeled for firearm or power tool lubrication and degreasing also included claims that made the products subject to general purpose cleaners, multipurpose lubricants, general purpose degreasers, and even carpet cleaners category limits. Enforcement actions were taken where warranted.

Multiple Air Freshener Cases

Air freshener cases are a significant amount of the CPES case load due to introductions of newer methods to deliver fragrances into the air. Reed diffusers, ceramic diffusers,

fragrance lamps, gel beads, and fragrance fans are just some of the creative methods that are being used. Air fresheners are imported as well as domestically manufactured and are sold everywhere; from low-end retail establishments to high-end boutiques.

Stationary Source Enforcement

The Stationary Source Enforcement Section (SSES) is responsible for overseeing several enforcement programs and activities established to ensure compliance with air pollution rules and regulations. The programs and activities that the section is responsible for are presented below. Please refer to Appendix E for additional statistics of these programs and activities.

Highlights

Complaint Hotline and the Online California EPA Environmental Complaint System

The Complaint Hotline - (800) 952-5588 – and the Online Cal/EPA Environmental Complaint system, provides a means for citizens to alert ARB of persistent odors, emissions from industry, vapor recovery equipment problems at gas stations, and smoking vehicles, as well as to get information regarding air pollution. Every call and online complaint received is recorded, assessed, and referred to the appropriate air district or agency, or is investigated by ARB. In 2010, staff responded to 933 complaints/questions from the Complaint Hotline, and 312 complaints were received and handled from the Online Cal/EPA Environmental Complaint System. – See Appendix E, Table E-1.

Variances

The SSES reviews all District Hearing Board variance orders for compliance with H&SC requirements and sends a letter requiring corrective action to the appropriate air district and District Hearing Board when the board variance order does not comply with the mandated requirements. SSES maintains a database to monitor all activity related to Board orders. In addition, ARB staff support district staff and Hearing Boards by providing training and workshops to educate in the hearing board process. In 2010, staff addressed 78 Hearing Board issues and reviewed 496 variances and abatement orders - See Appendix E, Table E-2.

Air Facility System

The Air Facility System (AFS) is the U.S. EPA's permit and compliance tracking database for Title V sources, and other significant stationary sources. SSES staff oversees the collection, input, and quality assurance of the compliance and permitting data entered into U.S. EPA's AFS database for 27 of the 35 air districts. In addition, staff assists the U.S. EPA in training district personnel to effectively use the AFS database. In 2010, staff entered 75 Full Compliance Evaluation reports and 60 High Priority Violation reports. See Appendix E, Tables E-3 and E-4.

Continuous Emission Monitoring Program

Any stationary source that an air district requires to install and operate a continuous emission monitor (CEM) is also required by H&SC section 42706 to report the violations of emission limits recorded by the CEM to the air district, and the air district, in turn, must report them to ARB. SSES collects, stores, analyzes and reports this information. In 2010, staff received and processed 132 reports. See Appendix E, Table E-5.

Rule Review

ARB works cooperatively with local air districts to ensure that they adopt regulations that achieve the maximum air pollution reduction through the use of the most efficient and cost effective control technology. The Rule Review Program staff reviews the rules for clarity and enforceability, and ensures that the rule contains definitions of all key terms and phrases, the appropriate test methods, control efficiencies, recordkeeping, and averaging periods for verifying compliance of any limits and/or exemptions contained in the rule.

Thorough review of the rules from the draft to the adoption stages has proven vital in reducing the need for amending subsequent adopted rules, and nearly eliminated the need for ARB to identify rule deficiencies at public hearings. In 2010, ED staff reviewed 174 rules - See Appendix E, Table E-6.

Complaint Investigation

The SSES conducts special investigations of stationary source complaints referred to ARB by state citizens, air districts, ARB's OLA and Executive Office, and by other agencies. In addition, staff conducts compliance inspections to assist other ED sections with case development and special projects. In 2010, staff completed six special projects, received 132 CEM reports and sent 222 reports to U.S. EPA - See Appendix E, Table E-7.

Strategic Environmental Investigations and Enforcement

The Strategic Environmental Investigations and Enforcement Section (SEIES) conducts special and joint investigations of "cross media" environmental cases. Cross media cases involve multiple areas of environmental regulation governing air, water, soil, toxic waste, regular waste, or pesticides. SEIES investigations may also include coordination with enforcement jurisdictions that fall outside the environmental field. The Section works under a MOU with Cal/EPA to provide the investigative services necessary to fulfill Cal/EPA's statutory enforcement responsibilities.

SEIES is also tasked with providing enforcement assistance to local air districts and other environmental agencies. This assistance includes facility inspections, complex investigations, surveillance technology, and case preparation. SEIES staff also actively participates in a number of environmental task forces throughout the state.

In 1998, the California Legislature identified diesel exhaust as a TAC. In October 2000, the ARB adopted a DRRP. Subsequently, a number of new regulations have been adopted. Starting in 2006, SEIES staff has shared responsibility with MSEB to implement certain new rules at rail yards, ports, and marinas. These new regulations are collectively known as the Goods Movement Regulations.

Another recently adopted rule is the ATCM to Reduce Formaldehyde Emissions from Composite Wood Products. SEIES staff has been actively implementing this regulation during 2010.

In 2010, SEIES successfully concluded cases valued at \$120,950 in penalties and mitigation costs. This does not include significant penalties collected by local air districts or US EPA. Many cases generated during 2010 remain in development. See Appendix E, Table E-8.

<u>Highlights</u>

Goods Movement Inspections

Enforcement of Goods Movement Regulations is a major, growing responsibility for SEIES. The purpose of these regulations is to reduce public exposure to health risks associated with diesel PM. Inspection efforts include CHE, commercial harbor craft, marina fuel docks, rail yards, OGV, and TRUs.

The purpose of the CHE regulation is to reduce pollutants from diesel powered mobile cargo handling equipment that operates at ports and intermodal rail yards. Examples of this type of equipment include yard trucks, rubber tire gantries, side picks, and forklifts.

The commercial harbor craft inspection program began in 2009. Harbor craft include tugboats, crew boats, and excursion (tour) vessels. These vessels are evaluated for compliance with emission and recordkeeping standards. The marina fuel dock inspection program began in 2007, after the regulations governing ARB on-road diesel fuel were expanded to cover harbor craft. SEIES staff collects samples of marine diesel fuel and review records at fueling docks located on both coastal and inland waterways.

Ocean-going vessels are inspected at the Ports of Los Angeles, Long Beach, San Pedro, Oakland, Richmond, Stockton, Sacramento, Port Hueneme, Benicia, and San Diego. Staff board vessels and obtain samples of low sulfur marine distillate fuels for laboratory analysis. Staff also reviews bunkering receipts and fuel switching logs to verify compliance with requirements that apply within 24 nautical miles of the California baseline. Compliance with certain incinerator requirements is also verified.

Rail yards are inspected twice each year. The first is in the spring and the second is in the fall. This involves 32 covered and designated rail yards identified in the ARB/Railroad Statewide Agreement. To better assure statewide compliance,

enforcement activity includes additional inspections outside the covered and designated rail yards. SEIES staff evaluates locomotives for compliance with idling and visible emission standards. Staff also sample locomotive fuel at some rail yards to enforce the sulfur fuel standard. The overall compliance rate exceeds 99 percent.

TRUs are refrigeration systems used for commercial transportation that are powered by a small integral diesel engine. Highway vehicles with TRUs are handled by MSEB personnel. SEIES is responsible for inspecting units at ports and rail yards.

Composite Wood Air Toxic Control Measure Inspections

The ATCM to reduce formaldehyde emissions from composite wood products was effective in 2009. The regulation targets composite wood panels that are typically manufactured using urea formaldehyde resins and glues, specifically hardwood plywood, medium density fiberboard, and particle board. Any finished goods produced with regulated composite wood panels also fall under the scope of the ATCM. SEIES staff performs facility inspections, prepare samples for laboratory testing, conduct presentations for industry groups, and respond to inquiries from the regulated community and the public. In 2011, as part of a reorganization of ED, this inspection program is moving to the Stationary Source Enforcement Program.

Notable Upcoming Strategic Environmental Investigations and Enforcement Section Activities in 2011

In 2011, SEIES will continue to ramp up new inspection and enforcement programs. This includes the OGV main and auxiliary engine, and auxiliary boiler low-sulfur fuel regulation, shore power requirements, CHE, harbor craft, TRU, drayage truck, and composite wood products programs.

GREENHOUSE GAS ENFORCEMENT SECTION

The GHGES was formed in December 2007, as a result of the California Global Warming Solutions Act of 2006 (AB 32), which mandates that ARB monitor compliance with and enforce all adopted regulations.

The primary mission of GHGES is to ensure maximum emission reductions through effective enforcement of AB 32 regulations utilizing a four-pronged approach: regulation development, implementation support, enforcement, and development of a case tracking database. These four core functions are summarized below.

1) Regulation Development

• Collaborate with regulation writers from other ARB Divisions to strengthen enforceability of new GHG-related regulations.

- Conduct in-depth regulation analysis resulting in written input that improves and harmonizes regulatory language.
- Provide estimates on resources needed to enforce new regulations.

2) Regulation Implementation Support

- Ensure continuity between regulatory development, implementation and enforcement by participating in ARB workshops and training sessions.
- Advise on and produce documents related to enforcement and compliance processes. These processes include public advisories and workshops, guidance documents, compliance monitoring plans, inspections, audits, and complaint procedures.

3) Regulation Enforcement

 Develop enforcement strategies and options with ARB program and legal staff to shape effective enforcement plans, inspection protocols, and penalty assessment.

4) Case Tracking Database Development

 Develop a division-wide modular case tracking database that will interface with other ARB divisions and the public. This database will aid GHGES in measuring enforcement effectiveness.

Highlights

Regulatory Support

In 2010, GHGES collaborated on the following regulations by engaging in one or more of the four core functions:

- Mandatory GHG Emissions Reporting
- Cap and Trade
- Renewable Electricity Standard
- Landfill Methane Control
- Low Carbon Fuel Standard
- Sulfur Hexafluoride Reduction in Non-Electricity Applications

- Sulfur Hexafluoride in Semiconductor Applications
- Sulfur Hexafluoride in the Electricity Sector
- Reduction of HydrofluoroCarbon Emissions from Do-it-Yourself Motor Vehicle Air Conditioning Servicing
- Mandatory Commercial Recycling
- Energy Efficiency and Co-Benefits Audits
- High Global Warming Potential GHG Refrigerant Management
- Under-Inflated Tires

Outreach, Training and Regulatory Support Activities

- Training GHGES participated in various training programs including ARB's board
 administration and regulation coordination unit regulatory training and air district
 hearing board training. At the board administration training, attended by ARB
 regulation writers, GHGES presented language and other considerations necessary
 for development of enforceable regulations. At the air district hearing board training,
 GHGES provided instruction on the Health and Safety Code and administrative
 hearing requirements for granting variances, thus ensuring consistent statewide
 implementation.
- Earthquake disaster outreach After a magnitude 7.2 earthquake in Imperial County, GHGES staff met with building owners and facility operators to explain how to perform asbestos cleanup procedures that comply with the National Emissions Standard for Hazardous Air Pollutants (NESHAP).
- Western Climate Initiative Throughout 2010, GHGES staff continued to participate
 in Western Climate Initiative Committees pertaining to emissions reporting, market
 oversight and offsets. Western Climate Initiative is a collaboration of seven U.S.
 governors and four Canadian Premiers and was created to identify, evaluate, and
 implement collective and cooperative ways to reduce GHGs in the region, focusing
 on a market-based cap-and-trade system.
- Inter-divisional staff exchange In support of the GHGES mission to support
 regulation development, a GHGES staff member, selected due to his extensive
 knowledge about the California Environmental Quality Act, worked for more than six
 months with the Office of Climate Change in development of the Functional
 Equivalent Document for California's cap-and-trade program. The document serves
 as the environmental document for the Initial Statement of Reasons for Proposed

Rulemaking required by the California Administrative Procedure Act and addresses the potential environmental impacts of California's cap-and-trade regulation and program implementation.

TRAINING AND COMPLIANCE ASSISTANCE PROGRAM

Traditionally, ARB has been charged with overseeing the efforts of local air pollution control and air quality management districts in controlling air pollution caused by stationary sources. The goals of ARB's outreach and compliance assistance efforts are to ensure that members of the public and the regulated industries are aware of regulations, understand how to comply, and have sufficient information to meet its requirements. The undertaking of the Compliance Training Section (CTS) has been to train local air pollution control district staff, state and federal personnel and the regulated industry. The assignment of the Compliance Assistance Section (CAS) has been to provide a variety of outreach publications as well as provide Visible Emissions Evaluation (VEE) certification and training services to these same clients.

Typical outreach activities include: maintaining web pages, outreach via list-serves on regulatory developments, publication and distribution of brochures and fact sheets that include overviews of regulatory requirements and compliance dates, articles published in industry journals, presentations to public groups and industry associations, and staff response to inquiries from the public and the regulated community.

CTS courses provide current, practical, and technologically up-to-date information for both new and experienced environmental professionals working throughout California. As ARB is on the leading edge of air quality controls, the rest of the world looks to ARB for leadership regarding environmental issues. To help fulfill this role, similar training is offered throughout the country via the EPA funded National Training Program. Entry-level courses cover history of air pollution, laws and regulations, and enforcement aspects of air pollution. The advanced level courses cover the analysis of industrial processes, theory and application of emission controls and emissions evaluation procedures pertaining to stationary, diesel and GHGs regulations.

The CAS develops publications to provide complementary resources for outreach and education of air compliance professionals. The section develops and distributes a variety of practical, rule-specific publications and web-based information geared to assist regulated businesses in complying with these regulations. This information is aimed at a diverse audience, from process operators to air quality specialists, from small businesses to the interested public. Publications include outreach flyers and pamphlets to increase awareness of new air quality regulations, handbooks that assist regulated businesses in complying with these regulations and reference manuals that provide the comprehensive technical, regulatory, and inspection information to government and industry environmental professionals. The CAS also provides VEE training and certification services throughout the state.

Compliance Assistance

In general, businesses and other regulated entities make an effort to comply with air quality regulations but sometimes need assistance in their efforts. Enforcement agencies also need general and in-depth information about a variety of sources, relevant regulations, and inspections. The CAS serves both the regulated community and air enforcement agencies by providing appropriate technical publications, online materials, and self-inspection guides, and by conducting VEE training and certification.

The publications arm of the section is called the Compliance Assistance Program (CAP). To create these publications, CAP staff works with ARB staff throughout the agency, government agencies, private industries, and the local air pollution control districts. CAP staff collaborates closely with CTS staff to develop these materials. Technical manuals are the primary references used in a number of training courses and provide in-depth, source-specific information for inspectors and facility environmental specialists. Handbooks and pamphlets explain source-specific regulatory and compliance programs in everyday terms. They are brief, colorful, and easy to read, with helpful inspection checklists, flowcharts, diagrams, and illustrations.

The two components of the VEE program are the Fundamentals of Enforcement (FOE) training course and the VEE Certification program. FOE is a basic overview of air pollution and enforcement of air pollution regulations emphasizing evaluation of visible emissions. The classroom portion of the FOE course is a prerequisite to becoming VEE-certified in accordance with U.S. EPA Reference Method 9.

VEE certification/recertification is conducted in the field for both new and returning students. Certification is valid for six months and is required for most district enforcement staff and many industry staff. VEE program staff schedule recertification sessions on a six-month rotation throughout the state during the year as either standalone sessions or in conjunction with FOE.

Highlights

CAP Publications

- The CAP library currently has 40 handbooks and pamphlets in print and/or on-line (including some in Spanish and Korean) and 22 technical manuals on CD or on-line.
- In 2010, the program distributed just over 4,990 copies of publications, an approximately 40 percent decrease from the previous year. This decrease has been a trend for several years as many more people view publications on-line. The distribution of publications was as follows: approximately 477 Technical Manuals (including interactive and archival CDs), 4,151 handbooks, and 363 pamphlets. Most of the older manuals are still used for the National Training Program courses on a case-by-case basis and were factored into the year-end statistics for the CAP. The top five CDs and handbooks distributed and the top five website inquiries are shown in Appendix F, Tables F-4 and F-5. Rankings for hard copy distribution are

based on both California and national programs.

• Webpage views for CAP publications were up just slightly from 2009. The 217,204 views were distributed as follows: 59,978 on Technical Manuals, 148,585 on Handbooks, and 8,641 on Pamphlets. (The number of webpage views is not a precise number, because a certain percentage of web views are from "robot" search engines.) CAP publications can be found on the webpage: http://www.arb.ca.gov/cap/cap.htm.

New and Revised Publications Activities

In 2010, CAP staff:

- Published a new Stationary Source Controls Devices technical manual. The manual describes 13 categories of emission control technologies for stationary sources along with a description of emissions and their health effects. It combines and updates all or part of five older style hardcopy manuals. There is a discussion of federal, state, and local regulatory requirements and a detailed description of suggested inspection procedures applicable to stationary sources in California. The manual is available on CD or on the ARB website in an interactive web-page format. The manual includes a glossary of commonly used air pollution control device and control technology definitions, acronyms, and a gallery of movies and animations.
- Published and extensively updated the Automotive Refinishing handbook. This
 publication was updated to reflect changes in coating technology and ARB's
 Automotive Refinishing Suggested Control Measure. The handbook describes how
 automotive refinishing shops contribute to air pollution; how to calculate VOCs
 generated from automotive refinishing; how to reduce VOCs and save money;
 inspection points for automotive refinishing shops; and informational resources
 available to shops.
- Updated the *In-Station Diagnostics* job aid booklet. This job aid was developed to
 aid gas station owners and operators on how to operate the in-station diagnostics
 equipment, understand the different in-station diagnostics equipment alarms,
 generate reports, and conduct self-inspection of in-station diagnostics equipment.
 The booklet is provided to attendees at Enhanced Vapor Recovery Classes and
 upon request from gas station owners and operators.
- Updated the Enhanced Vapor Recovery Self-Inspection Calendar (for 2011). This
 calendar was updated to reflect 2011 dates and to show new equipment certified by
 Executive Order. The calendar provides check-off lists so that owners and operators
 of gas stations can inspect their vapor recovery equipment daily. The calendar also
 contains an excellent vapor recovery glossary and air district contact information.
- Updated the Wood Burning handbook with new information about district rules.
 During 2010, staff received requests for over 2,000 handbooks. Since the handbook need to be reprinted to fill these orders, staff took the opportunity to update the handbook with some of the new wood burning air district rules and to update air

district telephone numbers.

- Created a pamphlet for the composite wood enforcement program called What Retailers Need to Know. CAS staff has been working with Enforcement and Stationary Source Divisions to develop outreach publications for the Composite Wood ATCM. Staff completed a brochure to assist retailers of hardwood plywood, particleboard, medium density fiberboard, and finished goods with their compliance efforts.
- Developed several Flash animations to be used in online publications. These
 animations include: illustrations of health effects (respiration, the body's response to
 air pollution), principles of operation (vapor recovery, adsorber, venturi scrubber,
 RSCR), industrial processes (steam power plant operation), and formation of air
 pollutants (PM, ozone, and TOG).
- Developed an online friendly template for ARB interactive technical manuals that has
 navigation links for the learner to find information quickly. This template also
 includes much more interactivity with an interactive glossary, labeled graphics and
 improved flash animation.

On-Line Training

CAP staff began and will continue their role as contract manager for a multi-year contract with the Foundation for Community Colleges to develop an extensive introductory online "Air Quality Training Program". CAP staff worked with a contractor and CTS staff to begin converting a 4-day classroom course into an 11 module online course.

Fundamentals of Enforcement Program

CAS staff taught five FOE Courses (Course #100) to 135 government agency and private sector personnel.

VEE Certification Program

Thirty four VEE day and 5 night certification/recertification sessions (Courses #100.1 and #100.2) were completed in 2010. Out of 1,954 participants, 1,250 successfully certified or recertified in 2010, a pass rate of 64 percent. (Note: The 1,954 participant statistic is included in totals for the 100-Series in CTS)

Compliance Training

In 2010, CTS increased training offerings and took on additional duties within the ED. CTS increased the compliance training activities to a much higher level in order to meet increasing requests from the CAPCOA districts, state and federal agencies and the regulated communities. CTS also took on various enforcement outreach activities and expanded and revised the compliance training curriculum. CTS provide a valuable

service to ED, other divisions within the ARB, Cal/EPA, and U.S. EPA. The continuous growth of the Compliance Training Program over the years reflects its value. ARB has received countless favorable comments for the excellent work performed by CTS staff and CTS's accomplishments continue to be utilized to meet Cal/EPA's program commitments.

CTS continues to emphasize program enhancement through the development of new courses and continual updating of existing courses. The expectation provides high quality training while responding to the changing needs of California agencies and industries by ensuring that its instructors are continuously updated on the emerging issues in the air quality field, and kept up to date by attending training themselves. Over the years, ARB has trained thousands of people from industry, academia, government agencies, other organizations, and members of the public on how to comply with ARB requirements. ARB training is, and continues to be, a model for other states, the nation and other countries.

The courses scheduled for the upcoming 2011 year reflect the specific needs of most local agencies in California. In addition, many special training programs are requested by other agencies and industries annually, and are provided by CTS as resources allow. In this manner, CTS has gained the support and respect of many California agencies as well as many leaders of the regulated community, by providing compliance training and regulatory support to their staff.

	Total Students Taught in CA	6,783
January 1,	Total Courses Taught in CA	250
2010	Total Students Taught in the National Program (outside CA)	1,435
to	Total Courses Taught in the National Program (outside CA)	61
December 31, 2010	Webcast Capable Courses	26
	Webcast Students	611
	Average Webcast Students per Course	22
	Total Courses Total Students	337 8829

Compliance Training Highlights

The Uniform Air Quality Training Program is a series of 14 courses providing an introduction to air pollution control and enforcement. The program is intended for new, entry-level stationary source inspectors, regulatory agency staff, and environmental specialists in business and government. Federal EPA staff, local air district staff, representatives from regulated industry, employees of municipalities and counties, navy, marine corps, air force, and other military personnel, L.A. County Dept. of Water

and Power, and utility districts made up the bulk of the attendees of these trainings. CTS is currently developing an on-line module of this Uniform Air Quality Training Program.

A total of 5 sessions were offered to 95 students comprising of air district inspectors and permit writers, as well as industry participants, along with military personnel from the Air Force and Navy and U.S. EPA.

200 Series

The 200 series courses are designed for the semi-experienced air quality professional. They contain a higher level of technical information offering first-hand application of topics addressed in the classroom study portion of the class by including field visits to regulated commercial and industrial sites. These field trips afford the students the opportunity to interact with the regulated community and ask questions that are more detailed or extremely technical in nature. A representative sample of the 200 series courses is listed below.

Course 267: In-Station Diagnostics:

This course presented specific information regarding the use of in-station diagnostics as an enforcement tool at Gasoline Dispensing Facilities. These systems are required to be installed under the provisions of enhanced vapor recovery which was adopted by the Board in 2000. In-station diagnostics equipment is a continuous monitoring system for gasoline dispensing facilities which monitors the vapor collection system, vapor containment and itself. The in-station diagnostics system notifies the station of possible problems with a series of warning and failure alarms. If the problem is serious enough, the system has the ability to shut down the station, preventing the sale of gasoline. A total of 8 outreach sessions were offered to 109 station operators and district inspectors.

Course 297 – Permitting Under New Source Review and Course 298 – Overview of the Title V Permitting Program

These courses present and discuss New Source Review (NSR) and Title V Permitting Program. NSR was promulgated with the 1977, Clean Air Act Amendments, and addresses the air quality problems in attainment and non-attainment areas of the nation due to air pollution from industrial and commercial processes, while still allowing economic growth. NSR is the overriding consideration for almost any air quality permitting action for stationary sources in the state. The Title V Permitting Program course presents and discusses the applicability, requirements, and how implementation of the Title V program is carried out in California.

A total of 11 sessions were offered to 264 students comprising of air district inspectors and permit writers, as well as owner/operators from South Coast, San Diego, Bay Area, Santa Barbara, North Coast, Sacramento, Kern, Imperial, Antelope Valley, Mojave, L.A. County and City, Port of Oakland, L.A. Dept. of Water and Power, along with military

personnel from the Air Force and Navy and U.S. EPA.

300/400 Series

The 300 and 400 series courses are comprised of workshops, seminars, and symposiums that address current, and sometimes controversial, environmental issues such as cross media training, legal issues, case development and variance/hearing board requirements. This series of training was designed for experienced environmental professionals.

500 Series

The 500 Series courses are focused primarily on Mobile Source Emissions. Over the past couple of years, there have been numerous mobile source regulations introduced, therefore, demand for training and knowledge in this arena, specifically diesel regulation outreach, is at an all-time high. The demand for this training is apparent from the numerous classes required throughout 2010. Several new and revamped mobile source training and outreach courses are in development stages for 2011 to keep up with this growing demand. A representative sample of the 500 series courses is listed below.

Course 502: Portable Equipment Registration Program

This course discusses the Portable Equipment Registration Program (PERP) regulations in depth and is designed for both regulators and the public. Focus is on eligibility requirements, operating conditions, and record keeping for both engines and equipment units. The state ATCM for portable engines, along with enforcement for both PERP and the ATCM is also covered.

A total of 12 outreach sessions were offered to 412 participants that were affected by the aforementioned rule.

Course 511: Diesel Exhaust After-treatment Device Training

Course 511 provides students information on oxidation catalyst, flow-through filter, and wall-flow filter technology used to reduce engine-out PM emissions as well as lean NOx catalyst, NOx absorber and selective catalytic reduction systems to minimize NOx emissions from HDD engines. Training includes modules on the retrofitting process, engine and after-treatment device maintenance and compliance strategies.

A total of 23 outreach sessions were offered to 591 participants affected by the rules governing the Diesel Risk Reduction Plan. This course was delivered to, fleet operators, managers, dispatchers, service personnel, consultants and ARB/air district staff throughout California and serves to achieve compliance from fleets affected by regulations such as those applying to PAU fleets, UB and transit vehicles, SWCV fleets, off-road equipment, drayage trucks, and on-road truck and bus fleets.

Course 512: Diesel Vehicle Regulation Overview Outreach

Outreach Course 512 consists of 8 modules covering HDD engine exhaust emissions health and environmental effects and ARB Enforcement programs such as HDVIP, PSIP, commercial vehicle and school bus idling, low NOx software re-flash, motor vehicle fuels enforcement; VDECS, the Statewide Truck and Bus rule, GHG Reduction, Drayage, TRU, and Off-road rules. Modules include who and what the rules apply to, compliance options, compliance dates, and contact information as well as question and answer periods.

A total of 21 outreach sessions were offered to fleet owners affected by these regulations. Participants totaled 514, and fleet owners/operators, managers, dispatchers, service personnel and consultants from up and down the state along with ARB staff attended.

National Program

The National Air Compliance Training Delivery Project, with the assistance of ARB, delivered 61 training classes nationwide (outside of California) to 1435 students during 2010. Principal funding support for the program comes from the U.S. EPA grants that are administered by the National Council on Aging and are coordinated, managed, and directed by the CTS.

The National Air Compliance Training Delivery Project consists of air pollution control training classes contained in three series. The 100 Series is a basic introductory group of 15 courses presented over a 4-day period. The 200 Series consists of 27 advanced classes. A set of three or four classes is given within a week and each class lasts for one day with the exception of "Petroleum Refining," which is a 2-day course. The 300 Series contains classes of special interest to many air pollution professionals. This series includes Permit Practices and Procedures I and II, Principles of Environmental Compliance and Enforcement, and Environmental Case Development and Resolution. Depending on the subject, these classes are two to three days in length and are presented in a lecture/workshop format.

Regional consortia sponsored most classes in ARB 17. These included the Northeast States for Coordinated Air Use Management NESCAUM, the Mid-Atlantic Regional Air Management Association, the Southeastern Local Air Pollution Control Agencies and the Southeastern States Air Resources Managers, the Central States Air Resource Agencies, and the Western States Air Resources Council. State agencies and/or local agencies also sponsored several classes.

ENFORCEMENT DIVISION ACTION ITEMS FOR 2011

General Enforcement:

Continue working with other federal, state and local agencies and EJ community

groups to improve air quality in the areas of California most affected by air pollution in support of ARB's Environmental Justice Action Plan.

- Ensure a vigorous response to complaints that allege a breach of environmental law and determine if a violation has occurred.
- Comply with SB 1402 reporting and transparency requirements. Develop and implement an ARB Enforcement Penalty Policy and continue working with stakeholders.
- Continue to ensure that all enforcement operations are conducted in a responsible manner, resulting in a level playing field for the regulated industries.
- Continue exchanging information with U.S. EPA regarding shared enforcement actions and violators. This helps both agencies use their resources to the fullest and achieve the best success in enforcement and compliance.

Mobile Source Enforcement:

- Work toward obtaining Clean Air Act 208 section authority through the USEPA to enhance enforcement authority and access to manufacturer data and records.
- Work with Mobile Source Operations Division (MSOD) and MLD to ensure new certified production products meet CA emissions requirements through confirmatory testing and initiating enforcement actions as needed.

Heavy-Duty Diesel Vehicle Enforcement:

- For 2011, drayage truck rule enforcement will be a top priority followed by TRU enforcement. Specifically, the compliance rate will be increased by 10 percent at the rail yards and increase the pressure on the non-compliant motor carriers by developing cases against major carriers.
- Maintain an enforcement presence for the off-road rule registration, idling and notification requirements
- Develop cases involving VDECS violations as they are referred to us.
- Implement enforcement of the statewide truck and bus and SmartWay truck and trailer greenhouse gas programs.
- Utilize the California Vehicle Code authority to reduce the incidence of delinquent violations by removing vehicles from service via the CHP and placing registration holds via CADMV and increasing the use of small claims court to assist in the collection process.

Fuels Enforcement:

• Increase the number of import inspections by 50 percent and increase the number of cargo tank test audits by 50 percent.

Consumer Products Enforcement:

 Focus on improving efficiency in selecting non-compliant consumer products, portable fuel containers, and indoor air cleaners for testing.

Stationary Source Enforcement:

- Increase investigations and enforcement of the Perchlorethylene ATCM.
- Step up the oversight of the air districts variance programs.

Strategic Environmental Investigation and Enforcement:

 Expand enforcement programs governing ocean-going vessels, harbor craft, cargo handling equipment, ship and railcar based TRUs, and railroads.

Greenhouse Gas Enforcement:

- Fine tune ARB's enforcement priorities for AB 32 GHG-related regulations so that enforcement activities achieve the greatest emission reductions possible. Work with local air districts on processes for shared responsibility of certain AB 32 regulations.
- Continue to expand staff expertise in new and changing aspects of enforcement (e.g., computer forensics and evidence gathering) in order to best respond to emerging enforcement challenges presented by AB 32 regulations.

Compliance Assistance:

- Complete a comprehensive update of the Stationary Reciprocating Engines technical manual to include new control technologies and ATCMs.
- Complete a comprehensive update of the *Automotive Refinishing* technical manual to include new NESHAP rules.
- Complete a comprehensive update of the Industrial Boilers technical manual with additional sections on biomass boilers.
- Conduct seven scheduled FOE courses and at least 30 day and 6 night VEE certification sessions.

 Develop publications and resources for an on-road diesel communication and outreach campaign focusing on small business trucking operations. This initiative will take place as a strategic partnership with ED Training, Mobile Source Control Division (MSCD), MSOD, Stationary Source Division (SSD), the Ombusdsman, and Public Information Office (PIO).

Compliance Training:

New Course Development:

- How to Comply with New and Existing Diesel Regulations for industry.
 Bridge the gap between implementation compliance and enforcement (maintenance) compliance. Goal: Compliance before enforcement for Industry.
- <u>Cal Trans Maintenance Vehicle and Employee Training</u> for Cal Tran's field personnel and vehicle and equipment maintenance staff. The course will include diesel and PERP/Fugitive Dust regulations.
- <u>Diesel Exhaust After-treatment (Diesel Particulate Filter) Maintenance</u> for CAPCOA and industry. This will be conducted in partnership with CCDET and lead to a higher compliance rate. Lack of diesel particulate filter maintenance is one of the biggest contributors to current ED enforcement cases.
- <u>GHG Refrigerant Management Program</u> for CAPCOA and Industry. Conducted in partnership with the Research Division.

Appendix A 2010 Enforcement Program - Enforcement Action Summary

Table A-1 - Closed Enforcement Actions

Program ¹	Cases/Citations Closed	Penalties ²
Mobile Sources ³	3,517	\$9,517,967
Fuels	7	\$90,400
Consumer Products	72	\$2,948,005
Portable Fuel Containers	2	\$93,000
Cargo Tanks ⁴	32	\$16,000
Stationary Source/Other	19	\$112,750
Railroad MOU ⁴	52	\$9,200
TOTAL CASES	3,701	\$12,787,322

Many of these enforcement actions are joint ED/MSCD/MSOD/SSD/OLA investigations and settlements. Enforcement actions include citations and NOVs as well as investigative cases closed through mutual settlement or litigation.

⁴Citation and NOV cases.

Table A-2 - 2010 Case Dispositions

Category	# Cases	Penalties
Civil Cases Pending ¹	16	N/A
Criminal Cases Pending	0	0
Civil Cases Closed ²	23	\$2,887,409
Criminal Cases Closed		\$1,200,000
Administrative Cases Closed	3,677	\$8,699,823
Total Cases Closed	3,701	\$12,787,232

Civil cases pending: pending litigation or settlement with the attorney general or various district and city attorneys statewide.

Civil or Criminal Cases are cases that are referred to the Attorney General's Office, local District Attorney or City Attorney's Office, or the U.S. Attorney's Office and are filed in Superior Court or U.S. District Court.

Administrative Cases are cases settled in-house via informal staff/violator settlements, the Mutual Settlement Program, or through an administrative hearing in front of an ARB Administrative Law Judge (this applies to HDD Vehicle Inspection Program cases only), or, through an administrative hearing in a State Office of Administrative Hearings Administrative Law Judge.

Investigative Costs are monies received for ARB investigative costs for cases that are referred to a DA/CA.

Supplemental Environmental Projects (SEPs) are programs under which case settlement monies are used for environmental research, education or technology projects (e.g. research on the effects of new gasoline additives, lawn mower exchange programs

to promote the use of electric lawn mowers, etc.) Settlement Agreements are formal signed agreements between the ARB and the violator for major cases settled under the Mutual Settlement Program.

In negotiation settlements, the ED is often represented by ARB OLA.

² Includes supplemental environmental projects, early compliance costs, etc.

³ Includes cases, citations and NOVs - see table C-17.

² Civil cases closed: See Table A-3 on next page.

Table A-3 - 2010 Civil Cases Closed

Case Name	Prosecuting Agency	Date Closed	Settlement Amount
Pro's Choice ¹	California District Attorneys Association Circuit Prosecutor and Attorney General	March 2010	\$475,000
American Consumer Products ²	Attorney General	May 2010	\$75,000
Exotica Fresheners	ARBSmall Claims Court	Dec 2010	\$2,499
New Star Technology	District Attorney - San Bernardino	November 2010	\$235,000
Cummins Inc.	U.S. Department of Justice/USEPA/ARB	February 2010	\$2,100,000
TOTAL = 23 cases			\$2,887,499

¹Pro's Choice was a compilation of 15 individual cases.

Table A-4 - 2010 Criminal Case Closed

Case Name	Prosecuting Agency	Date Closed	Settlement Amount
	San Bernardino	}	
Goldenvale	District Attorney	April 2010	\$1,200,000 ¹

Paid in restitution to the victims and overseen by the San Bernardino District Attorney's office.

Table A-5 - 2009 Supplemental Environmental Projects

SEP	Number of Cases	Amount
CCDET/Peralta Community College District ¹	. 141	\$336,672

¹ CCDET was created to train diesel fleet mechanics on the proper conduct of ARB's HDVIP SAE J1667 test protocol and HDVIP/PSIP program record keeping requirements. The Peralta Community College District administers the program and distributes the SEP monies in equal shares to participating CCDET community colleges.

²American Consumer Products was a compilation of 5 individual cases.

Appendix B SIGNIFICANT CASE SETTLEMENTS

In most enforcement actions, ARB is able to reach mutual settlement agreements with air quality violators. These settlements generally include a monetary penalty, a corrective action, and in some cases, funds for an SEP that provides additional emission reduction incentive programs and public education projects.

Apart from funds earmarked for SEPs, all penalties submitted to ARB are deposited into the APCF, the Vehicle Inspection and Repair Fund, or the Diesel Emissions Reduction Fund, which serve as funding sources to mitigate air pollution throughout California.

The following is a summary of the significant cases settled for \$10,000 or more in 2010, including mobile sources, consumer products, fuels, and stationary sources cases. See the complete list of cases settled during 2010 at http://www.arb.ca.gov/enf/casesett/casesett2009.htm.

Mobile Source Cases

Adonis Transport - In February 2010, Adonis Transport paid \$10,500 in penalties for violating air quality regulations. An investigation by the ARB showed that Adonis Transport failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards, and to properly affix emission control labels the engines of their fleet vehicles. The case highlight can be found here.

Agco Corporation – In June 2010, AGCO Corporation paid \$77,000 to the California Air Pollution Fund for violation of H&SC sections 43151, and 43152. AGCO Corporation introduced and sold into commerce uncertified engines without an ARB executive order. The case highlight can be found here.

Aqua Pool and Spa - In December 2010, Aqua Pool and Spa agreed to pay \$24,000 in penalties for failing to self-inspect their diesel trucks to assure the trucks met state smoke emission standards, and to properly affix emission control labels the engines of their fleet vehicles as they related to the PSIP and Emission Control Label Program (ECLP). The case highlight can be found here.

Baxman Gravel Company, Inc. - In August 2010, Baxman Gravel Company, Inc. paid \$17,500 in penalties for violating air quality regulations. An investigation by the ARB showed that Baxman Gravel Company, Inc. failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found here.

Biagi Bros Trucking – In February, 2010, Biagi Bros. Trucking paid ARB \$14,400 in penalties for emissions violations during 2008 and 2009. An investigation by ARB showed Biagi Bros., based in Napa, California, failed to properly inspect their diesel-powered vehicles for excess emissions. The case highlight can be found here.

Bragg Investment Companies – In February 2010, Bragg Investment Companies paid \$31,500 in penalties for emissions violations during 2008. An ARB investigation showed Bragg Investment Companies, based in Long Beach, California, failed to properly inspect their diesel-powered vehicles for excess emissions. The case highlight can be found <a href="https://example.com/here/beach-powered-po

Carpentaria Motor Transport, Inc. - In April 2010, Carpentaria Motor Transport, Inc. paid \$11,500 in penalties. An investigation by the ARB showed that Carpentaria Motor Transport, Inc. failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found https://example.com/here/.

Clean Harbors Environmental Services - In April 2010, Clean Harbors Environmental Services paid \$55,500 in penalties for violating air quality regulations. An investigation by the ARB showed that Clean Harbors Environmental Services failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found https://example.com/here/beta/fight-self-inspect trucks to assure the trucks met state smoke emission standards.

Cummins Inc. - In March 2010, Cummins paid penalties in the amount of \$2.1 million in total to ARB, the USEPA, and the Department of Justice for violations of the Clean Air Act. An investigation by the agencies showed that Cummins Inc. had shipped diesel engines without exhaust after-treatment devices resulting in engines identified as having the incorrect after-treatment device installed. Cummins agreed to recall the non-conforming engines and install the correct after-treatment device. \$420,000 of the penalty amount went to the Air Pollution Control Fund. The case highlight can be found here.

Cummins Emission Solutions and Johnson Matthey Inc. – In August 2010, Cummins Emission Solutions and Johnson Matthey Inc. paid \$110,000 in penalties for violating Title13, CCR sections 2706 (j) and (q) of the Verification Procedure and VC section 27156 by installing incorrect labels on Johnson Matthey Inc. VDECS devices. Cummins Emission Solutions and Johnson Matthey Inc. also spent approximately \$132,000 in remediation by replacing all the incorrect labels with correct ones. The case highlight can be found https://example.com/here/buttons/matthey-inc. also spent approximately

Cummins West Inc. – In March 2010, Cummins West Inc. paid \$24,000 in penalties for violating California VC Section 27156 and Title 13 CCR sections 2706 (a) and (q) of the Verification Procedure by installing non-VDECS devices in California. Cummins West Inc. also agreed to corrective actions requiring replacement of non-VDECS with current VDECS. The case highlight can be found here">https://example.com/html/>here.

Diestel Turkey Ranch - In May 2010, Diestel Turkey Ranch, Sonora, CA paid \$10,500 in penalties for violating air quality regulations. An investigation by the ARB showed that Diestel Turkey Ranch failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found <a href="https://example.com/here.

the Attorney General for the State of California settled with Eastern Manufacturing, Inc. in the Los Angeles County Superior Court for \$2,000,000 for offering for sale and selling uncertified catalytic converters. The case highlight can be found <a href="https://example.com/here-example.com/her

Eaton Drilling Company, Inc. - In July, 2010, Eaton Drilling Company, Inc. paid \$20,000 in penalties for violating air quality regulations. An investigation by the ARB showed that Eaton Drilling Company, Inc., failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found here.

Fresh Express - In June 2010, Fresh Express paid \$37,425 in penalties for violating the TRU rule by failing to submit a report of the TRU activity at their facility by the required deadline. The case highlight can be found <u>here</u>.

Fresh Link Logistics, Inc. - In July 2010, Fresh Link Logistics Inc. paid \$14,400 in penalties for violating the PSIP by not smoke testing their fleet of diesel vehicles. The case highlight can be found <u>here</u>.

Gasparian, Inc. - In October 2010, Gasparian, Inc. paid \$10,000 in penalties for violating air quality regulations. An investigation by the ARB showed that Gasparian, Inc. failed to properly self-inspect their diesel trucks to insure the trucks met state smoke emission standards. Gasparian, Inc. also failed to comply with the SWCV rule by neglecting to install legally required emission-reduction devices by applicable compliance dates. The case highlight can be found https://example.com/here/bases/

Godoy Logistics LLC – In July 2010, Godoy Logistics LLC paid \$12,750 in penalties for violating the PSIP by not smoke testing diesel vehicles in its fleet and the TRU rule by not registering its TRUs with the ARB Equipment Registration (ARBER) system and not upgrading its TRU engines to meet the TRU in-use performance standards. The case highlight can be found https://example.com

Golden State Foods - In August 2010, Golden State Foods paid \$18,000 in penalties for violating the TRU rule by submitting incorrect data in the ARBER system. The case highlight can be found here.

Golden State Lumber Inc. – In February 2010, Golden State Lumber, Inc. paid \$20,000 in penalties for violating air quality regulations by failing to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards, as they related to the PSIP. The case highlight can be found here.

Goldenvale Inc. – In April 2010, ARB along with the San Bernardino County Office of the District Attorney settled with Goldenvale Inc. for \$1,200,000 in restitution for the sale of uncertified OHRVs and on-road vehicles in California. The president and vice president were charged criminally, served jail time, and ordered to pay restitution. The case highlight can be found <a href="https://example.com/here-new-main-road-new-main-ro

Green Valley Transportation Corporation - In July 2010, Green Valley Transportation Corporation paid \$10,125 in penalties for violating air quality regulations. An investigation by the ARB showed that Green Valley Transportation Corp. failed to properly self-inspect their diesel trucks to insure the trucks met state smoke emission standards. The case highlight can be found <a href="https://example.com/here-new-maintain-regular-regul

Hendrick Automotive Group – In July 2010, Hendrick Automotive Group paid \$12,500 to the APCF for violation of H&SC sections 43151 through 43153. Hendrick Automotive Group marketed and assisted in the sale of modified engines without receiving an ARB Executive Order. The case highlight can be found here.

International Surfacing Systems - In May 2010, International Surfacing Systems, Modesto, California paid \$16,875 in penalties for violating air quality regulations. An investigation by the ARB showed that International Surfacing System failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found <a href="https://example.com/here/beta/fig/

Ironman Parts and Service - In February 2010, Ironman Parts and Services paid \$15,000 in penalties for failing to comply with the VDECS regulation by installing non-verified VDECS devices on truck engines. The case highlight can be found here.

ISE Corporation – In June 2010, ISE Corporation paid \$50,000 to the APCF for violation of H&SC sections 43154 and 43212. ISE Corporation introduced and sold into commerce uncertified engines without an ARB Executive Order. The case highlight can be found here.

Napa County Transportation and Planning Agency - In June 2010, NCTPA paid \$12,000 in penalties for violating the PSIP by not smoke testing their diesel fleet and the Fleet Rule for Transit Agencies – TFV Requirements, Title 13 CCR section 2032.2 (b)(1) for PM reductions. The case highlight can be found <a href="https://example.com/here/beauty-section-new-market

Nor-Cal Produce Inc. - In February 2010, Nor-Cal Produce Inc. paid \$32,550 in penalties for violating the TRU rule by failing to submit a one-time report for their TRUs at their facility. The case highlight can be found <u>here</u>.

NST, Inc. Yuan Cheng – In November 2010, NST, Inc. Yuan Cheng paid \$250,000 in penalties for violation of H&SC section 43151, VC section 4463 as well as Business and Professions Code section 17500. NST, Inc. Yuan Cheng imported and offered for sale non-certified new motor vehicles into commerce. The case highlight can be found here-new-motor-certified new motor vehicles into commerce. The case highlight can be found here-new-motor-certified new motor vehicles into commerce. The case highlight can be found here-new-motor-certified new motor vehicles into commerce.

Odwalla Inc. - In September 2010, Odwalla Inc. paid \$20,625 in penalties for violating the PSIP by not smoke testing their fleet of diesel vehicles. The case highlight can be found <u>here</u>.

O'Reilly Auto Parts – In August 2010, O'Reilly Auto Parts paid \$125,000 to the California Air Pollution Fund. O'Reilly Auto Parts sold catalytic converters no longer

legal for sale due to a regulation change in January 1, 2009. The case highlight can be found here.

Paragon Industries - In December 2010, Paragon Industries paid \$22,125 in penalties for violating air quality regulations. An investigation by the ARB showed that Paragon Industries failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards, and to properly affix emission control labels on the engines of their fleet vehicles. The case highlight can be found <a href="https://example.com/here-new-maintain-engines-new-m

Pep Boys, Inc. – In April 2010, Pep Boys, Inc. paid \$170,000 to the California Air Pollution Fund for violation of H&SC 43150 through 43156. Pep Boys, Inc. sold several small all-terrain vehicles and 49-state only generators before issuance of an ARB Executive Order. The case highlight can be found https://executive.com/here/beta-boys/

Petersen-Dean Inc. - In December 2010, Petersen-Dean Inc. paid \$11,250 in penalties for violating air quality regulations by failing to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards as they related to the PSIP. The case highlight can be found <u>here</u>.

Randy's Trucking, Inc - In June 2010, Randy's Trucking, Inc. paid \$28,000 in penalties for violating air quality regulations. An investigation by the ARB showed that Randy's Trucking, Inc. failed to properly self-inspect their diesel trucks to assure the vehicles met state smoke emission standards. The case highlight can be found here.

Rapid Harvest Company – In February 2010, Rapid Harvest Company paid \$16,500 for diesel emissions violations. An ARB investigation showed Rapid Harvest, based in Salinas, California, failed to properly inspect their diesel vehicles in 2005. The case highlight can be found here.

RDO Equipment Co. - In January 2010, RDO Equipment Co. (RDO) paid \$15,000 in penalties. An investigation by the ARB showed that RDO failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found here.

Renick Cadillac/Suburu – In September 2010, Renick Cadillac/Suburu paid \$15,000 to the California Air Pollution Fund for violation of H&SC section 43150 through 43153. Renick Cadillac/Subaru sold Tomcar utility vehicles and certified them for on-road use that violates the above H&SC sections. The case highlight can be found <a href="https://example.com/here/beta-fight-sections-be-found-bere/be-fight-sections-be-found-be-fight-sections-be-found-be-fight-sections-be-found-be-fight-sections-be-fi

Rim of the World Unified School District - In May 2010, Rim of the World Unified School District paid \$25,875 in penalties for violating air quality regulations. An investigation by the ARB showed that Rim of the World Unified School District failed to properly self-inspect their diesel buses to assure the vehicles met state smoke emission standards. The case highlight can be found here.

Robin America, Inc. – In August 2010, Robin America, Inc. paid \$204,000 to the California Air Pollution Fund for violations of H&SC. Robin America, Inc. introduced into commerce and sold generators without the required exhaust catalysts system. The case highlight can be found <a href="https://example.com/here/beta-base-state-s

Rosendin Electric, Inc. - In March 2010, Rosendin Electric, Inc. paid \$19,125 in penalties for violating air quality regulations. An investigation by the ARB showed that Rosendin Electric, Inc. failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards, and to properly affix emission control labels the engines of their fleet vehicles. The case highlight can be found <a href="https://example.com/here/new-march-ne

San Jose Tallow Company - In June 2010, San Jose Tallow Company paid \$24,000 in penalties for violations as they related to the PSIP. The case highlight can be found here.

SFO Shuttle Bus Company - In October 2010, SFO Shuttle Bus Company paid \$14,500 in penalties for violating air quality regulations. An investigation by the ARB showed that SFO Shuttle Bus Company failed to properly self-inspect their diesel vehicles to assure the vehicles met state smoke emission standards. The case highlight can be found here.

Smart Refrigerated Transport, Inc. – In March 2010, SMART Refrigerated Transport, Inc. paid \$23,000 in penalties for violating air quality regulations. An investigation by the ARB showed that SMART Refrigerated Transport, Inc., failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found here.

Starving Students Inc. - In February 2010, Starving Students Inc. paid \$10,000 in penalties for violating the PSIP by failing to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found here.

Stidham Trucking, Inc. - In April 2010, Stidham Trucking, Inc. paid \$25,500 in penalties for violating air quality regulations. An investigation by the ARB showed that Stidham Trucking, Inc., failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found here.

Superior Grocers Inc. - In April 2010, Superior Grocers Inc. paid \$15,300 penalties for violating the TRU rule by failing to provide accurate registration information in ARBER system. The case highlight can be found https://example.com/here/.

Tiffany Coachworks – In April 2010, January 2007, Tiffany Coachworks paid a penalty of \$50,000 for failing to certify their modified limousines in violation of Health and Safety Code Sections 43150 through 43156, and Vehicle Code Section 27156. The case highlight can be found <a href="https://example.com/here/beta/fig/health/penal

Tom Bengard Ranch - In August 2010, Tom Bengard Ranch, Salinas, CA paid \$16,800 in penalties for violating air quality regulations. An investigation by the ARB showed that Tom Bengard Ranch, failed to properly self-inspect their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found here.

US Air Conditioning Distributors LLC - In January 2010, US Air Conditioning Distributors paid \$19,500 in penalties. An investigation by the ARB showed that US Air Conditioning Distributors failed to properly self-inspect some of their diesel trucks to assure the trucks met state smoke emission standards. The case highlight can be found here.

Valley Fruit and Produce Co. - In November 2010, Valley Fruit and Produce Co. paid \$18,750 in penalties for violating the TRU rule by not upgrading its TRU engines to meet the TRU in-use performance standards. The case highlight can be found here">html/>here.

Walker Mowers – In August 2010, Walker Mowers paid \$14,500 to the California Air Pollution Fund under the penalty provision of H&SC 43016. Walker Mowers self reported that they had sold lawn mowers not legal for sale in California. The case highlight can be found https://example.com/here.

Consumer Products Cases

American Consumer Products LLC – In May 2010, American Consumer Products LLC (ACP) paid \$275,000 in penalties for having sold toilet/urinal care product containing para-dichlorobenzene at a large discount retail chain without notifying the chain of the sell-through period and for continuing to sell the products after the ban on selling the products became effective. In addition, the ACP imported hairspray from China that greatly exceeded the VOC limit of 55 percent for hairspray and contained large quantities of methanol which is a poison and an inhalation hazard. The company also imported non-compliant toilet/urinal care products, hair gel, hair mousse, and reed diffuser type air fresheners. The case highlight can be found here.

A.P. Deauville – In December 2010, A.P. Deauville paid \$50,000 in penalties for having supplied Power Stick Deodorant Body Spray product that contained VOCs in excess of the 75 percent limit for Personal Fragrance Products to California. The product was reformulated. The case highlight can be found <u>here</u>.

Armstrong World Industries – In October 2010, Armstrong World Industries, Inc. paid \$228,000 in penalties for selling non-compliant Bruce Hardwood and Laminate Floor Cleaner into California that exceeded the 4 percent by weight VOC limit for non-aerosol

wood cleaner. The case highlight can be found here.

Avon Products – In September 2010, AVON Products, Inc. paid \$12,300 in penalties for selling non-compliant Snowman Reed Diffusers which were subject to the 18 percent VOC limit and for failing to display a date code on these products. The case highlight can be found here.

Blitz USA - In May 2010, Blitz USA paid \$90,000 in penalties for the sale of non-compliant portable fuel containers. The new owners of Blitz USA self-reported that they had manufactured non-compliant Blitz USA *Pull-N-Pour* portable fuel containers that displayed a date of manufacture that had been altered by employees back in 2001. The case highlight can be found here.

BP Lubricants – In August 2010, BP Lubricants, USA Company paid \$40,000 in penalties for sales of its Castrol Metal Parts Cleaner aerosol product as an "engine degreaser" that did not meet the 35 percent VOC limit. The product had already been discontinued from production for other reasons. The case highlight can be found here.

Carroll Company – In February 2010, Carroll Company paid \$11,000 in penalties for selling non-compliant Pro Pride Green Cleaner subject to the 4 percent by weight VOC limit for non-aerosol general purpose cleaners. The case highlight can be found here.

Home Depot – In July 2010, Home Depot paid \$27,000 in penalties for having sold or supplied windshield washer fluid products that exceeded the one percent VOC limit set under Consumer Products Regulation for their product category. The case highlight can be found here.

Lowe's HIW, INC – In May 2010, Lowe's HIW Inc. paid \$20,000 in penalties for having sold or supplied 1050 containers of windshield washer fluids that exceeded the one percent VOC limit set under Consumer Products Regulation for automotive windshield washer fluids sold in non-type A areas of California. The case highlight can be found here.

Olympic Mountain – In September 2010, Olympic Mountain Products paid \$15,000 in penalties for selling fragrance diffusers into California that contained concentrations of VOCs exceeding the 18 percent limit set under Consumer Products Regulations for their product category. The case highlight can be found here.

Packaging Service Company – In August 2010, Packaging Service Company, Inc. paid \$13,000 for failing to certify four brands of "charcoal lighter materials". The company had been previously cited for not including other brands on their certifications. The case highlight can be found <u>here</u>.

Parfums de Coeur – In April 2010, Parfums de Coeur paid \$36,500 in penalties for supplying into California 98,644 four ounce units and 36,786 one ounce units of noncompliant Bod Man Deodorant Body Spray that exceeded the zero percent by weight

VOC limits in the Antiperspirants and Deodorants regulation. The case highlight can be found here.

Paslode – In September 2010, Paslode Construction Service and Parts Division, a subsidiary of Illinois Tool Works, Inc., paid \$70,000 in penalties for having supplied Paslode Degreaser Cleaner product that contained VOCs in excess of the 50 percent limit for General Purpose Degreasers to California. The product was reformulated and relabeled. The case highlight can be found here.

Premier Brands – In December 2010, Premier Brands paid \$55,000 in penalties for selling non-compliant Blade Deodorant Body Spray in various fragrances into California that exceeded the zero percent by weight VOC limits in the Antiperspirants and Deodorants regulation. The case highlight can be found here.

Pro's Choice – In March 2010, a Final Judgment and Permanent Injunction was issued by the Stanislaus County Superior Court in <u>People of the State of California v. Pro's Choice Beauty Care</u>. The litigation involved violations of the California Consumer Products regulations with 15 separate NOV issued to seven defendants involving diverted non-compliant hair care products. Pro's Choice obtained hair care products that were manufactured for sale in hair salons and resold the products to "mass market" retailers including Rite Aid, Ralphs, Long's, Walgreens, K-Mart, and Target, all of whom were defendants in this action. The defendants paid a total of \$1,250,000 in penalties, attorney's fees and costs to resolve this case. ARB received \$475,000 as part of the civil penalties and will be monitoring sales of hair care products by the defendants to ensure compliance with the terms of the Permanent Injunction. The case highlight can be found here.

Remington Arms Company – In May 2010, Remington Arms Company paid \$40,000 in penalties for selling mislabeled Rem Oil gun lubricant product as a "multi-purpose lubricant" which did not meet the 50 percent by weight VOC limit. Remington Arms Company re-labeled their Rem Oil gun lubricant product to reflect its restricted use for firearms. The case highlight can be found here.

Royal Oak – In October 2010, Royal Oak Enterprises, LLC paid \$12,000 in penalties for selling several uncertified "Charcoal Lighter Material" products. These products were manufactured by Royal Oak Enterprises, LLC, which failed to obtain an Executive Order from ARB prior to the products being offered for sale into California. The case highlight can be found here.

Sears Holdings – In August 2010, Sears Holdings Management Corporation paid \$28,000 in penalties for violations of the charcoal lighter material requirements in the Consumer Products Regulations. Sears Holdings Management Corporation imported approximately 12,568 bags of the BBQ Pro Instant Light Charcoal (8-lb. bag) product from China that were not certified. The case highlight can be found here.

Seymour Manufacturing – In September 2010, Seymour Manufacturing Company paid \$16,000 in penalties for "Charcoal Lighter Material" violations in four Notices of Violation. Seymour failed to update the Executive Order to include brands it manufactured prior to the products being offered for sale into California. The case highlight can be found https://example.com/here/.

Unilever/Conopco – In January 2010, Unilever/Conopco paid \$1.3 million in penalties for selling non-compliant Axe Deodorant Body Spray that exceeded the zero percent by weight VOC limits in the Antiperspirants and Deodorants regulation. After Unilever/Conopco was made aware of the violation, it took steps to correct the violation, mitigate the impacts, and ultimately reduce the emissions from this product. The case highlight can be found <a href="https://example.com/highlight-node-new-million-new-millio

Vectra Enterprises, Inc. – In June 2010, Vectra Enterprises, Inc. paid a penalty of \$11, 250 for selling non-compliant Vectra Spray in California that exceeded the VOC limit for footwear or leather care products (all other forms) and did not display the date of manufacture. The case highlight can be found html

Wurth USA – In October 2010, Wurth USA paid \$232,256 in penalties for having supplied Wurth saBesto HHS 2000 lubricant product that exceeded the 50 percent VOC limit for general purpose lubricants to California. During the course of the investigation Wurth disclosed an additional 42 consumer products that did not meet ARB's VOC limits and prohibitions on the use of chlorinated TAC. The case highlight can be found here.

Fuels Cases

BP/Carson – In September 2010, BP/Carson paid \$19,000 in penalties for having shipped gasoline in violation of California reformulated gasoline regulations. On September 9, 2007, while shipping premium grade CARBOB from the refinery, BP added approximately 2,400 barrels of alkylate to the tender. BP shipped approximately 12 loads of uncertified fuel to 12 California service stations. The case highlight can be found here.

BP/Thrifty Service Station – In September 2010, BP/Thrifty paid \$32,000 in penalties for having sold/supplied gasoline in violation of California reformulated gasoline regulations. On June 14, 2007, an analysis of the premium grade gasoline revealed a Reid vapor pressure of 7.60 pounds per square inch (psi) and 7.57 psi both of which exceeded the State standard. The case highlight can be found https://example.com/here/bases/ba

Paramount – In September 2010, Paramount Refinery paid \$25,000 in penalties for having produced gasoline in violation of California reformulated gasoline regulations. In August 2008, Paramount refinery produced gasoline with 5.80 psi which exceeded the limit specified in its Predictive Model. In September 2008, Paramount produced gasoline with a Reid vapor pressure result of 5.77 psi which again exceeded the PM limit specified. The case highlight can be found <a href="https://example.com/here/bases/base

Strategic Environmental Investigations Cases

Jumbo Shipping, Kahn Scheepvaart B.V. – In October 2010, Jumbo Shipping, Kahn Scheepvaart B.V. paid \$55,500 in penalties to the California Air Pollution Control Fund for violating air quality regulations. The Jumbo Shipping, Kahn Scheepvaart B.V. vessel, *Daniella*, failed to properly switchover its main engines from Heavy Fuel Oil over to Low-Sulfur Distillate Fuel before entering into regulated California waters. The case highlight can be found <a href="https://example.com/here/be-new-main-engines-nice-new-main-engines

Parsec Inc. – In May 2010, Parsec Incorporated paid \$21,750 in penalties for violating regulations governing cargo handling equipment by importing vehicles that did not meet emission standards. The settlement included \$16,312.50 paid to the California Air Pollution Control Fund and \$5,437.50 paid to the Peralta Community College District for distribution to participating CCDET colleges. The case highlight can be found here/beta/407/60/

Appendix C Mobile Source Enforcement Program and Inspection Activities - 2010

Table C-1 - Administrative Hearings¹

Cases	6
Pending	3
Closed ²	5
Settled	3

Table C-2 - Carl Moyer Program and Proposition 1B Goods Movement **Emission Reduction Program - Compliance Checks**

Carl Moyer Compliance Checks ¹	2010
Registered Owners/VINs Processed	638
Outstanding Violations	9

Proposition 1B Compliance Checks*	2010
Registered Owners/VINs Processed	3,792
Outstanding Violations	247

¹Checks include querying numerous databases: HEVI, SWCV, ECLP, CVI, and SBI.

Table C-3 - Certificate of Non-Compliance (49-State Vehicle) Program

Certificates Received	699
Certificates Reviewed	110
Cases Opened	12
Cases Closed ¹	48
Penalties Collected	\$54,450

Includes cases from previous year.

¹HDVIP/ECLP Program ²includes cases from previous year

Table C-4 - Commercial Idling Enforcement and Complaint Program

6,456
887
14%
763
\$196,237
50
50
17
34%

Table C-5 - Emission Control Label Enforcement¹

Inspections	13,274
Violations	825
Non-Compliance Rate	6%
Violations Closed	739
Penalties Collected	\$190,399

Includes citations from previous years.

Table C-6 - Environmental Justice Inspections¹

Inspection days	335
Inspections	10,012
Violations	2,171
Non-Compliance Rate	22%

The data reflects multiple programs. Inspections are conducted major supply ports in Los Angeles, Oakland, San Bernardino and other EJ Areas within California.

Table C-7 - Heavy-Duty Diesel Vehicle Inspection Program

Inspections	14,784
Violations	111
Non Compliance Rate	1%
Appeals Received/Closed ¹	6/6
Violations Closed ¹	152
Penalties Collected	\$28,700

¹Includes violations pending from previous years.

Table C-8 - Heavy-Duty Diesel Delinquent Violations/Collections

Trucks Held under VC 27159 by CHP ¹	41
Judgments Obtained under H&SC 44011.6	134
CADMV VC 4755 Registration Holds ²	646
Delinquent Violations Closed	573
Delinquent Penalties Collected	\$231,895

¹ If an HDVIP citation is in delinquent status and the vehicle is encountered during a roadside inspection, under VC 27159, CHP can hold the truck until payment is received.
² For all programs.

Table C-9 - Drayage Truck Program: Inspections and Notices of Violation

Inspections	3,094
Violations	356
Non-Compliance Rate	12%
Violations Closed	90
Penalties Collected	\$66,150

<u>Table C-10 - In-Use Off-Road Diesel Vehicle Program: Inspections and Notices</u> of Violation

Inspections	76
Violations	17
Non-Compliance Rate ¹	22%
Violations Closed	10
Penalties Collected	\$4,800

¹ Limited sample size – not statistically representative of fleet's overall compliance rate.

Table C-11 - Public Agency Utility Enforcement

Inspections	7
Violations	2
Non-Compliance Rate	29%
Violations Closed	2
Penalties Collected	\$900

¹ Limited sample size – not statistically representative of fleet's overall compliance rate.

Table C-12 - Smoking Vehicle Complaint Program

Notices Sent	674
Responses Received	171
Response Rate ¹	25%

¹ Responses are considered any repair receipts, smog checks, phone calls and written follow-ups, as well as junked or unidentified vehicle notices received by ARB staff.

Table C-13 - Solid Waste Collection Vehicle Program

Inspections	91
Violations	9
Non-Compliance Rate ¹	10%
Violations Closed	24
Penalties Collected	\$1,200

¹Limited sample size – not statistically representative of fleet's overall compliance rate.

Table C-14 - TRU Program - Truck/Trailers: Inspections and Notices of Violation

Inspections	6,119
Violations	2,318
Non-Compliance Rate	38%
Violations Closed	789
Penalties Collected	\$733,993

Table C-15 - TRU Program - TRU Gensets: Inspections and Notices of Violation

Inspections	2,105
Violations	5
Non-Compliance Rate	0.24%
Violations Closed	3
Penalties Collected	\$3,000

<u>Table C-16 - Diesel Fleet Closed Cases Summary: Combined HDDES On-Road,</u> <u>Off-Road and Goods Movement Programs</u>

Type of Case	Total Cases SETTLED	Total Cases CLOSED (NFA, Compliant, Settled)	Total Penalties Collected ¹
Drayage Truck	0	2	\$0
Emission Control Label ²	0	0	\$1,250
Off-Road Diesel Vehicle	1	7	\$5,850
Periodic Smoke Inspection Program	89	181	\$857,080
Public Agency/Utility ³	0	0	\$0
Solid Waste Collection Vehicle	10	20	\$52,720
Transit Fleet Vehicle	2	3	\$1,250
Transport Refrigeration Unit	19	26	\$228,275
Urban Bus	1	1	\$1,875
Verified Diesel Emission Control System	3	8	\$152,000
TOTAL	125	248	\$1,300,300

¹The amounts shown in *"Total Penalties Collected"* are calculated according to the penalties collected per Enforcement Program (*"Type of Case"*) and do not correlate directly with the number of cases settled (*"Total Cases Settled"*). Some cases are combined with others, but counted as only 1 case with penalty amounts applied to several different Enforcement Programs.

<u>Example:</u> An enforcement case is pursued and settled primarily as SWCV; therefore, it is counted as 1 'SWCV' case in the "*Total Cases Settled*", yet it has penalties that are applied to several different enforcement programs (SWCV, PSIP, ECLP, and VDECS). In this example you would see one settled case (SWCV) and Penalties collected under four different "Types of Case" (SWCV, PSIP, ECLP and VDECS). This is the reason why you may see penalty amounts listed for a "Type of Case" but show no 'Closed' cases for that venue.

²These penalties reflect ECLP violations found in other cases like PSIP, SWCV, etc.

³No cases closed in 2010 but numerous cases are under development.

Table C-17 - 2010 Mobile Source Enforcement Actions

I. 2010 Mobile Source Enforcement Totals: Compilation of II & III

Enforcement Actions Closed	Penalties
3,517	\$9,517,967

II. General Mobile Source Programs

Mobile Source Programs	Cases Closed	Penalties
Aftermarket Parts	6	\$2,134,500
Cars and Motorcycles ¹ 1	19	\$526,327
Certificates of Non-Compliance	48	\$54,450
Compression Ignition (diesel)	2	\$2,177,000
Large Spark Ignited	3	\$15,000
Off-highway Recreational Vehicle	24	\$1,451,268
Small Off-Road Engine	16	\$398,348
Tampering (Used Cars)	6	\$3,500
Total	124	\$6,760,393

Motorcycles account for 2 of these 19 cases and \$7,777 of the \$526,327.

III. In-Use Diesel Programs

A. Diesel Fleet Programs (see Table C-16)	Cases Closed	Penalties
5 (1) (1	248	\$1,300,300
B. Diesel Field Inspections	Citations and Violations Closed	Penalties.
Commercial Vehicle Idling	763	\$196,237
Drayage	90	\$66,150
Emission Control Label	739	\$190,399
Heavy-Duty Vehicle Inspection Program	152	\$28,700
Delinguent Citation Collections	573	\$231,895
In-Use Off-Road	10	\$4,800
Public Agency/Utility	2	\$900
Solid Waste Collection Vehicle	24	\$1,200
Transport Refrigeration Unit	792	\$736,993
Total	3,145	\$1,457,274
TOTAL A & B above	3,393	\$2,757,574

Many of these enforcement actions are joint ED/MSCD/MSOD/SSD/OLA enforcement actions.

Appendix D Fuels and Consumer Products Enforcement Inspection Activities – 2010

Table D-1 - Consumer Products Inspections and Samples

Samples Obtained	2,256
Lab Results Received	2,297
Alleged Violations	778
Violations	45

Table D-2 - Portable Fuel Containers and Spouts

Samples Obtained	51
Alleged Violations	21
Violations	4

Table D-3 - Cargo Tank Vapor Recovery Certification

Cargo Tanks Inspected	1,141
Cargo Tanks Tested	540
Cargo Tanks Certified	5,519
Pressure Violations (nitrogen test)	96
Uncertified Equipment Violations	4
Liquid Leak Violations	2
Annual Tests Observed	67

Table D-4 - Motor Fuel Inspection Summary

Samples	2,679
Analyses	17,460
Reid vapor pressure	1,895
Lead	7
Sulfur (gasoline and diesel fuel)	2,065
Oxygen	1,704
MTBE, Ethanol	1,710
Benzene	1,835
Total aromatics	1,835
Olefin	1,848
Distillation, T50	1,754
Distillation, T90	1,754
Aromatic HC (diesel fuel)	479
PAH (diesel fuel)	479
Nitrogen (diesel fuel)	123

Table D-5 - Gallons Represented in Sampling

Gasoline	1,629,806,875
Diesel	379,404,311

Table D-6 - BOE Dyed Diesel Program¹

Inspections	11,855
Violations	10

¹ARB works under a reimbursable services contract for the Board of Equalization for this program and conducts these inspections concurrent with HDVIP roadside inspections.

Appendix E Stationary Source Enforcement and Air District Oversight Activity – 2010

Table E-1 - Hotline Complaint Activities

933
148
77
28
63
613
152
312

Table E-2 - Variance Activity

Variances Reviewed	496
Notices Reviewed	370
Variances Questioned	67
Variances Returned	0
Issues Addressed	78
Workshops Conducted	1.

Table E-3 - Air Facility System Compliance Data

Reports Received and Reviewed	75
Reports Entered	54
Issues Addressed	224
Reports Sent to Air Districts	170

Table E-4 - Air Facility System High Priority Violators

Reports Received	60
Reports Entered	36
Issues Addressed	331
Reports Sent to Districts	233

Table E-5 - Continuous Emissions Monitoring Program Activity

Reports Received and Entered	547
NOx	173
SO ₂	18
H₂S	33
CO	159
Opacity	100
CO2	3
NH3	7
РМ	3

Table E-6 - Air District Rule Review

Rules Received	182
Rules Reviewed	174
Rules with Formal Comments	2

Table E-7 - Complaint Investigations and U.S. EPA CEM Reporting

Investigations/Inspections	0
Requests for Assistance	3
Special Projects completed	6
Hotline Complaint Follow-up Investigations	4
CEM 105 Grant Reports Received from Sources	140
CEM 105 Reports sent to U. S. EPA	222

Table E-8a: SEIES 2010 Cases and Investigations

TYPE OF ACTIVITY	TOTAL
Total SEIES Settlement Amounts ¹	\$120,950
Continuing Investigations	6
New Investigations	15
SEIES Cases Closed	17
Cases Referred for Investigation	18
Cases Referred for Prosecution	13
Continuing Prosecution	16
Case Settlement/Prosecution	8
Investigative Assistance to Local Air District	1
Continuing Surveillance	6
New Surveillance	13
Surveillance Closed	10
Task Force Meetings Attended	47
Special Projects	4

Table E-8b: SEIES 2010 Inspection Summary

INSPECTION PROGRAM ¹	TOTAL
Stationary Source Inspections (non-PERP)	5
Portable Equipment Inspections	66
Railroad Locomotive Inspections	2,694
Rail Facilities Inspected (twice yearly)	32
Other Railroad Inspections	13
Railroad Violations	24
Railroad Notice to Complies Issued	28
Ocean-going Vessel Fuel Inspections	313
Ocean-going Vessel Violations	18
Harbor Craft Inspections	210
Fuel Dock/Marina Fuel Inspections	29
Cargo Handling Equipment Inspections	328
Cargo Handling Equipment Violations	2
Asbestos Inspections	84
Asbestos Complaint Investigations	5_
Asbestos Violations	8
Composite Wood Inspections	218

¹ Information about Drayage Truck and TRU inspections conducted by SEIES are included with those reported by the Mobile Source Program

Appendix F Compliance Training and Assistance Programs - 2010

Table F-1 - All Programs and Attendance

Classes and Programs	Number of Courses	Total Students
Uniform Air Quality Training Program		
100 Series (California) (4 days)	5	95
Air Academy (Online)		156
100 Series Courses	45	2,308
200 Series (California)	. 84	1,242
300/400 Series (California)	23	963
400 Series (Staff Development Training)	6	228
500 Series (California)	87	1,791
California Totals	250	6,783
National Program	61	1,435
Webcast	26	611
Overall Totals	337	8,829

Table F-2 - 500 Series Courses

Course #	<u>Title</u>	<u>Participants</u>
501	Stationary Diesel ATCM	68
502	Portable Equipment ATCM	412
504	In-Use Off-Road	27
507	Transport Refrigeration Units	5
511	Diesel Exhaust After-treatment Devices	598
512	Diesel Vehicle Regulation Overview	570
513	Drayage Truck ATCM	36
515	Maintenance Worker Reg. Overview	26
516	Diesel Exhaust After-treat. Maintenance	49
	Total	1,791

Table F-3 - California Attendance Totals (In-State Training)

	Students Taught in CA	6,783
January 1, 2010	Courses	250
December 31, 2010	Webcast Capable Courses	26
	Webcast Students	611
	Average Webcast Students per Course	22

Table F-4 - Top Five Hardcopy Materials Distributed 2010

Rank	Technical Manual CDs	Handbooks	Pamphlets
1	Fugitive Dust Control	Wood Burning	Asbestos-Containing Rock and Soil: Homeowner Enhanced Vapor Recovery Program HDD Vehicle Inspection Program Training and Compliance Assistance Program
2	Chrome Plating and Anodizing Operations	Vapor Recovery Calendars	California Council on Diesel Education and Technology TRUs ATCM #2
3	Asbestos Demolition and Renovation	In-Station Diagnostics Booklet	Cleaners and Degreasers Used in Automotive Repair
4	Vapor Recovery	Agricultural Burning (English)	Composite Wood Products ATCM Periodic Self Inspection Program
5	Compilation CD- Technical Manuals (pdf) California version	Forest Management Burning	Stationary Internal Combustion Engines

Table F-5 - Top Five Webpage Views Total 2010

Rank	Technical Manuals (pdf or interactive	Handbooks	Pamphlets
1	Continuous Emission Monitors	Wood Burning	Enhanced Vapor Recovery Program
2	Stationary Source Control Devices	Automotive Refinishing (English)	Asbestos-Containing Rock and Soil: Homeowner
3	Ambient Air Monitoring	Fugitive Dust Control	Training and Compliance Assistance Program
4	Gas Turbines	Visible Emissions Evaluation	Stationary Internal Combustion Engines
5	Boilers	Chrome Plating and Anodizing Operations	Commercial HDD Vehicle Idling Emission Reduction Program

Appendix G Enforcement Division Contacts and Other Information

http://www.arb.ca.gov/enf/enf.htm

Division Contacts:		
Chief, Enforcement Division	James R. Ryden	(916) 324-7346
Division Secretary	Barbara Gregson	(916) 322-6033
Enforcement Database Coordinator	Reggie Guanlao	(916) 445-2815
	Cindy Stover	(916) 322-0988
	Richelle Bishop	(916) 323-1696
Division Administrative Coordinator	Elizabeth Walker	(916) 322-2659
Division FAX (Sacramento - HD Diesel Program)	-	(916) 322-8274
Division FAX (Sacramento - General Enforcement)	-	(916) 445-5745
Division FAX (El Monte - HD Diesel Program)		(626) 450-6170
Division FAX (El Monte - MS Enforcement Program)	-	(626) 350-6431
Mobile Source Enforcement Contacts:		
Chief, Mobile Source Enforcement Branch	Paul E. Jacobs	(916) 322-7061
Environmental Justice and Enforcement Division Special Projects	Michelle Shultz Wood	(626) 459-4338
Manager, Mobile Source Enforcement Section	Gregory Binder	(626) 575-6843
Motorcycle Enforcement	Kerry Albert	(916) 323-2946
Marine and Personal Watercraft Enforcement	Erin Blanton	(916) 323-8420
OHRV, SORE, Aftermarket Parts Enforcement	Lisa Zarubick	(626) 350-6403
Hybrid, Diesel, Aftermarket Parts Enforcement	Martina Diaz	(626) 350-6576
Catalytic Converters, Aftermarket Parts Enforcement	Tony Zeng	(626) 350-6505
Manager, HDD Enforcement Section - Off-Road Programs	Manfred Ochsner	(626) 350-6532
Drayage Truck Enforcement North	Eric Bissinger	(916) 445-7602
Drayage Truck Enforcement South	Xiangyi Li	(626) 350-6506
TRU Enforcement South	Aldo Chaney	(626) 350-6577
TRU Enforcement North	Brad Penick	(916) 445-0799
VDECS Enforcement	Chris Patno	(626) 450-6173
VDECS Enforcement	Tajinder Gill	(626) 459-4304
Off-Road Construction Equipment	Eric Brown	(916) 323-0166
TRU Enforcement Statewide	Eusene (Claire) Kim Yi	(626) 350-6421
Manager, HDD Enforcement Section – On-Road Programs	Les Simonson	(916) 322-6905

Periodic Smoke Inspection Program	Dave Gray	(916) 327-9473
Transit Fleets/Urban Bus Fleets	Ann Stacy	(916) 324-7658
Solid Waste Collection Vehicles	Steve Binning	(916) 323-0724
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