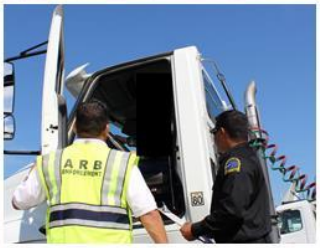

2015 ANNUAL ENFORCEMENT REPORT

June 2016

California Environmental Protection Agency
Air Resources Board

To learn more about ARB Enforcement Programs, please visit http://www.arb.ca.gov/enf/enf.htm.

To register an air quality complaint for follow-up by Enforcement Division staff, please visit http://www.arb.ca.gov/enf/complaints/complaints.htm.

2015 Enforcement Annual Report

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Executive Summary

The California Air Resources Board (ARB) and California's 35 local air pollution control and air quality management districts have adopted a comprehensive regulatory program designed to meet State and federal ambient air quality standards, protect the public from exposure to toxic air contaminants, and reduce the emissions of greenhouse gases. ARB's Enforcement Division works to ensure compliance with these regulations, and supports local air districts in their efforts to ensure industry compliance with their stationary source programs. ARB's enforcement program is designed to help ensure that industry complies with regulatory requirements, in order to promote a fair and level playing field for companies operating in California, and to ensure that emissions reductions that were envisioned when ARB's rules were adopted are achieved.

The Enforcement Division is responsible for enforcing most of ARB's regulatory programs, with an emphasis on enforcing rules related to diesel and goods movement, vehicle, engine, and parts certification, fuels, consumer products, and stationary sources. Due to the extensive efforts ARB has taken over the past 15 years to regulate sources of diesel emissions, over 40 percent of the Division's staff resources are currently dedicated to enforcing diesel regulations that apply to heavy-duty trucks, off-road equipment, ships, and other sources. In addition to enforcing rules related to traditional air quality and toxics emissions, the Division is also expanding its role in enforcing ARB's greenhouse gas rules, including landfill methane gas, refrigerant management, sulfur hexafluoride, and the low carbon fuel standard. Other ARB greenhouse gas programs, such as Cap-and-Trade and Mandatory Greenhouse Gas Reporting, are currently enforced through the ARB Legal Office in coordination with program staff.

The Enforcement Division provides support to the 35 local air districts which enforce stationary source air pollution control programs, including the permitting of stationary sources. The Enforcement Division coordinates enforcement efforts with local air districts, providing assistance and support when necessary to help resolve district enforcement cases. These support efforts include a comprehensive training program for air district staff and others. In 2015, the Division trained more than 6,000 students in 169 individual classes covering 31 different subjects such as continuous emissions monitoring, health risk assessment, stationary source emissions control, and visible emissions certification. In addition, the Enforcement Division operates the Portable Equipment Registration Program, which allows portable equipment, that may otherwise require several individual local permits, to operate in multiple local air district jurisdictions under a single statewide registration.

In carrying out its duties, the staff of the Enforcement Division works with truck fleets, port operators, retail businesses, and manufacturers to educate and assist with compliance and, ultimately, to take enforcement action if necessary. The Division works closely with ARB's Legal Office. The vast majority of cases are resolved without litigation which maximizes staff efficiency and minimizes cost. The Division also works with businesses to develop and implement compliance plans and assess penalties for noncompliance. Penalties remove any economic benefit the violator may have gained from noncompliance and can serve as a deterrent by showing others that failing to comply with ARB rules can be costly.

In 2015, the Enforcement Division conducted more than 32,000 inspections of vehicles, fuel tanks, and equipment and wrote more than 4,400 citations resulting in more than $3.3 million in fines for noncompliance. Sixty-four percent of the diesel inspections conducted in 2015 by the Division focused on sources in or adjacent to disadvantaged communities. The Division closed

more than 400 investigations, and negotiated more than $10 million in assessed penalties. ARB also collected nearly $21 million in three judgments from enforcement-related litigation.

The Enforcement Division program continues to evolve. The Division is focused on achieving industry-wide compliance and is implementing new methods to assess compliance rates in every program the Division enforces. The Division is becoming more efficient by using vehicle registration, compliance, and safety data to identify and investigate noncompliant emissions sources, particularly in disadvantaged communities, and is addressing new challenges, including noncompliance in certification applications for diesel-powered automobile manufacturers including Volkswagen. The Enforcement Division is updating the Portable Equipment Registration Program and associated Air Toxic Control Measure to ensure emissions reductions, is updating its Supplemental Environmental Project policy, and is establishing a new supplemental environmental project to support disadvantaged communities to meet new legal requirements established by California Assembly Bill 1071 (AB 1071).

The Enforcement Division has 136 scientists, engineers, field staff, and support staff, and 42 part-time technicians who support enforcement programs. These 178 staff function as field inspectors, case investigators, compliance trainers, case managers, and support staff to ensure that California's air quality and climate regulations are effectively enforced and achieve the emission reductions the Board envisioned.

This report provides a summary of Enforcement Division activities for 2015, and describes enforcement efforts in key areas including in-use diesel rules, vehicle/engine/parts certification, district support programs, and greenhouse gas programs. The report highlights key program achievements and provides a look forward to Division activities in 2016 and beyond, describing how these activities support ARB's broader regulatory programs and mission.

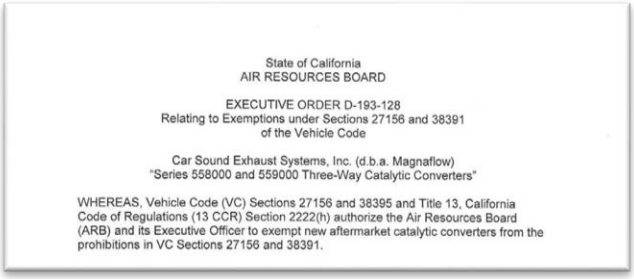
Overview of Enforcement Programs

ARB coordinates California's efforts to achieve and maintain health-based federal and State air quality standards, protect the public from exposure to toxic air contaminants, and address climate change. Since its inception, ARB has been charged with overseeing and supporting the efforts of the local air districts in controlling air pollution caused by stationary sources. ARB Enforcement Division staff works closely with local air district enforcement staff.

To carry out its responsibilities, ARB has undertaken a multifaceted program of planning, regulation development and implementation, compliance assistance and training, and enforcement. The final two components, compliance assistance and enforcement, help ensure that anticipated emissions reductions are achieved and that a level playing field is provided for all regulated entities.

The Enforcement Division is responsible for enforcing the Board's regulations, and is evolving to better ensure compliance in enforced programs. Areas of focus include:

- **Certification Requirements**: Vehicles and engines sold in California are required to be certified to model year emission standards and remain durable so that deterioration over time does not cause emissions to exceed those standards. All manufacturers must apply for and receive an Executive Order from ARB prior to introducing vehicles and engines into commerce in California. This ARB certification is in addition to the U.S. Environmental Protection Agency (U.S. EPA) certification program through which vehicle and engine manufacturers must apply for and receive a Certificate of Conformity prior to introducing their vehicles and engines into commerce in the United States. When manufacturers fail to certify or fail to meet certification requirements, ARB's Enforcement Division enforces violations of ARB's certification program and California air pollution control laws.


State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-193-128
Relating to Exemptions under Sections 27156 and 38391
of the Vehicle Code

Car Sound Exhaust Systems, Inc. (d.b.a. Magnaflow)
"Series 558000 and 559000 Three-Way Catalytic Converters"

WHEREAS, Vehicle Code (VC) Sections 27156 and 38395 and Title 13, California Code of Regulations (13 CCR) Section 2222(h) authorize the Air Resources Board (ARB) and its Executive Officer to exempt new aftermarket catalytic converters from the prohibitions in VC Sections 27156 and 38391.

- **Mobile Source In-Use Emissions Control Regulations**: Over the past 15 years ARB has adopted far-reaching diesel regulations that apply to tens of thousands of vehicle and fleet owners that operate on freeways, at ports and rail yards. Most of these vehicles operate in disadvantaged communities. These rules focus on reducing emissions and exposure to toxic diesel pollutants which adversely impact public health, particularly in communities located near freight hubs (e.g., ports, rail yards, distribution centers). The rules set best available control technology and/or fleet average requirements for diesel equipment in nearly all applications in California, including public fleets (adopted 2005), utility fleets (adopted 2005), drayage truck fleets (adopted 2007), all other trucks operating in California (adopted 2008), commercial harbor craft (adopted 2007), ocean-going vessel shore power requirements

(adopted 2008), cargo handling equipment (2005), fuels requirements (adopted 2006), portable equipment (adopted 2004), and off-road equipment (adopted 2008). Enforcement Division staff identify noncompliance, work with fleets to bring them into compliance, and assess penalties.

- **Fuels:** ARB regulates motor vehicle fuels, including California reformulated gasoline (CaRFG) and diesel fuel. Enforcement activities focus on sampling gasoline and diesel fuel products from a cross-section of industry locations, including refineries, import vessels, distribution and storage facilities, bulk purchaser/consumer facilities, and retail service stations to ensure compliance. The collected samples are representative of about 15 percent of the gasoline and diesel sold in California on an annual basis. Within California, there are two main import centers (Los Angeles/Long Beach and the Bay Area), 13 production centers (refineries), 100 distribution nodes (terminals and bulk plants), and about 10,000 retail gasoline stations. The Enforcement Division's fuels staff also enforces the cargo tank vapor recovery program by testing and visually inspecting cargo tanks at terminals. Going forward, Enforcement Division staff is expanding the enforcement of the Low Carbon Fuel Standard (LCFS) and Alternative Diesel Fuel Regulation.

- **Stationary and Industrial Sources:** ARB has a long history of supporting California's air districts with challenging and more technical enforcement cases relating to stationary sources. Enforcement Division staff provides training to air districts, stationary source operators, and the public on how to comply with stationary source regulations, with a focus on statewide and national regulations. The Enforcement Division staff enforces the Asbestos National Emissions Standard for Hazardous Air Pollutants in those air districts that do not do so directly. With the passage of AB 32, the California Global Warming Solutions Act of 2006, the Enforcement Division has a much more direct enforcement role, enforcing regulations adopted by the Board to reduce greenhouse gas emissions. ARB relies on partnerships with local air districts to enforce these regulations. California's air districts are uniquely suited to conduct and resolve violations of statewide greenhouse gas control regulations, such as the landfill methane control regulation, at facilities within their jurisdictions.

- **Consumer Products:** To achieve air quality standards and reduce the public's exposure to toxic air contaminants, ARB regulates emissions from a variety of common everyday items including chemically formulated consumer products, composite wood, and indoor air cleaning devices. ARB regulates the amount of volatile organic compounds, ozone, and toxic air contaminants permissible in these products. ARB's consumer products program encompasses more than 25,000 chemically formulated products including aerosol paints, adhesives, antiperspirants and deodorants, cleaning and degreasing products, polishes, personal and beauty care products, lawn and garden products, lubricants, disinfectants, sanitizers, automotive specialty products, paint thinners, and solvents. To evaluate compliance with the regulations, consumer products are purchased by Enforcement Division staff at retail stores

throughout the State and analyzed by ARB's laboratory. Noncompliant products are the foundation of the enforcement actions taken. Forty-six cases were settled in 2015, resulting in $2,375,655 dollars in penalties.

The Enforcement Division's goal is to ensure full compliance with every ARB regulation. The Division uses many different tools to work towards this goal including:

- **Addressing Complaints**: Air quality complaints from the public are routed to the Enforcement Division through dedicated complaint pathways such as email, phone lines, and directly from the California Environmental Protection Agency (CalEPA). Based on the nature of a complaint, the Enforcement Division routes the complaint to the appropriate local, State, or federal agency for follow-up and potential investigation. Complaints may include concerns from disadvantaged communities, stationary sources, mobile sources, idling or smoking vehicles, and odors. All complaints are tracked for resolution. More details are available in Appendix C.

- **Training:** The Enforcement Division's training programs provide enforcement support to California's air districts. The training program offers uniform stationary source air quality training to air district enforcement and engineering staff. Additionally, the Enforcement Division staff operates the Visible Emissions Evaluation (VEE) training and certification program, which provides certified observers with the skills necessary to determine whether stationary sources are in violation of opacity limits. There are more than 40,000 facilities in California that have opacity limits as a permit condition and these limits are enforced by VEE-certified personnel. In 2015, the training program enrolled a total of 6,482 students, of which 3,945 were in air quality courses, and 2,537 were in VEE training and certification courses. More details are available in Appendix F.

VEE-certified observers test their smoke-reading skills against a known plume generated by the VEE smoke trailer, shown here.

- **Compliance Assistance:** Ensuring that businesses know how to comply with ARB regulations is an important component of the enforcement process. From participation in industry-sponsored panel discussions to case-by-case discussions with businesses found in violation, Enforcement Division staff integrates compliance assistance into every interaction with the regulated community.

- **Field Inspections:** Enforcement Division field staff inspects pollution sources directly for compliance. Staff inspects heavy-duty trucks and buses on the roadside, light-duty fleets like taxis at airports, and diesel equipment at ports and rail yards. Staff also inspects fuels at import, transfer, and fuel dispensing locations throughout California, and consumer products in the retail and wholesale marketplace. These inspections are conducted randomly or can focus on areas

where noncompliance is more prevalent. When a violation is identified in the field, a citation is issued. Field inspections are important both for direct identification of noncompliance and to show a public presence as a deterrent for noncompliance. More details are available in Appendix B.

- **Investigations:** The Enforcement Division investigates companies suspected of violating an ARB rule. The use of a variety of data sources such as registration and program compliance databases, complaints, citations, and other sources help identify businesses that may be operating in violation of California law. Once an investigation has been conducted and violations have been identified, staff alerts the violator of findings, begins the process to ensure the business returns to compliance, and settles the violations for penalties through a mutual settlement process[1].

- **Penalties:** The Enforcement Division assesses penalties based on the following factors outlined in Health and Safety Code sections 42403, 43024, and 43031:
    - Extent of harm to public health, safety and welfare caused by the violation;
    - Nature and persistence of the violation, including the magnitude of the excess emissions;
    - Compliance history of the company, including the frequency of past violations;
    - Preventive efforts taken by the company, including the record of maintenance and any program to ensure compliance;
    - Innovative nature and the magnitude of the effort required to comply, and the accuracy, reproducibility, and repeatability of the available test methods;
    - Efforts of the company to attain, or provide for, compliance;
    - Cooperation of the company during the course of the investigation and any action taken by the company, including the nature, extent, and time of response of any action taken to mitigate the violation; and
    - The financial burden to the company.

  While most regulated entities make an effort to follow the requirements of ARB's regulations, penalties are an important feature of the program both to deter future noncompliance and to remove any profit from noncompliance. The Enforcement Division staff adheres closely to ARB's Penalty Policy, which is available at http://www.arb.ca.gov/enf/sb1402/policy.pdf.

- **Legal Process:** Enforcement Division staff resolves the majority of enforcement cases through mutual settlement. When a settlement cannot be reached, the case is referred to the Attorney General for civil litigation or to a District Attorney if criminal prosecution is warranted.

- **Media:** Use of the media is a powerful tool for conveying key messages about the importance of complying with ARB's regulations. The goal is to show the value of ARB's regulations for protecting public health and to explain that noncompliance has consequences. ARB's Public Information Office issues press statements when major cases are settled. These often gain media interest and are a way to show

[1] Information on ARB's approach to mutual settlements is published in ARB's enforcement penalty policy, which Enforcement Division presented to the Board in 2011. A copy of the presentation can be downloaded at: http://www.arb.ca.gov/board/books/2011/111711/11-9-5pres.pdf.

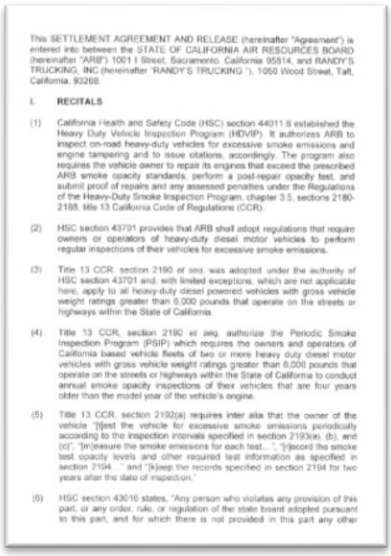
residents and industry that ARB is enforcing its regulations. Enforcement Division staff also holds media events periodically to highlight enforcement efforts.

- **Outreach to Disadvantaged Communities:** All of our programs benefit disadvantaged communities, particularly diesel programs. However, in 2015 the Division expanded its outreach to disadvantaged communities, assigning six Enforcement Division staff to locations throughout the State including the Bay Area, Los Angeles region, Imperial Valley, San Diego, Sacramento, and the San Joaquin Valley. These staff attend meetings to understand community concerns and coordinate enforcement efforts to address those concerns.

- **Program Evaluation:** In addition to traditional enforcement efforts, the Division is evaluating ways to improve the enforceability of current and future regulations. In 2015 Division staff initiated a project to evaluate the implementation and enforcement of selected regulations to better understand how to improve enforceability through the regulatory process.

Enforcement Process Overview

The Enforcement Division's efforts frequently begin with observations of violations through field inspections, which can then progress into more in-depth investigations to ensure compliance. Penalties assessed for violations discovered through the investigative process are generally resolved through mutual settlement, and the investigation ultimately results in compliance. For example, the Division includes a team of field representatives who inspect vehicles on the roadside to ensure compliance with ARB's diesel regulations. Citations are issued for any vehicle found to be noncompliant. In order to clear a citation, the vehicle owner must pay a penalty and show proof that the violation has been corrected. Additionally, a full fleet investigation may ensue if the vehicle cited is part of a larger fleet that is identified through the new "Smart Audit" approach as most likely to be out of compliance. Through the investigative process, staff works with the fleet owner to obtain information about the fleet and a determination is made as to whether the entire fleet is compliant with ARB's diesel regulations. If it is discovered that the fleet is not compliant, the fleet owner is notified of the violations and associated penalties, and is given an opportunity to respond and provide any additional information. Most cases are resolved through mutual settlement. When a settlement cannot be reached, cases are generally referred for litigation. All cases result in the investigated fleet being brought into compliance.



This SETTLEMENT AGREEMENT AND RELEASE (hereinafter "Agreement") is entered into between the STATE OF CALIFORNIA AIR RESOURCES BOARD (hereinafter "ARB") 1001 I Street, Sacramento, California 95814, and RANDY'S TRUCKING, INC (hereinafter "RANDY'S TRUCKING "), 1050 Wood Street, Taft, California, 93268.

I. **RECITALS**

(1) California Health and Safety Code (HSC) section 44011.6 established the Heavy Duty Vehicle Inspection Program (HDVIP). It authorizes ARB to inspect on-road heavy-duty vehicles for excessive smoke emissions and engine tampering and to issue citations, accordingly. The program also requires the vehicle owner to repair its engines that exceed the prescribed ARB smoke opacity standards, perform a post-repair opacity test, and submit proof of repairs and any assessed penalties under the Regulations of the Heavy-Duty Smoke Inspection Program, chapter 3.5, sections 2180-2188, title 13 California Code of Regulations (CCR).

(2) HSC section 43701 provides that ARB shall adopt regulations that require owners or operators of heavy-duty diesel motor vehicles to perform regular inspections of their vehicles for excessive smoke emissions.

(3) Title 13 CCR, section 2190 et seq. was adopted under the authority of HSC section 43701 and, with limited exceptions, which are not applicable here, apply to all heavy-duty diesel powered vehicles with gross vehicle weight ratings greater than 6,000 pounds that operate on the streets or highways within the State of California.

(4) Title 13 CCR, section 2190 et seq. authorize the Periodic Smoke Inspection Program (PSIP) which requires the owners and operators of California based vehicle fleets of two or more heavy duty diesel motor vehicles with gross vehicle weight ratings greater than 6,000 pounds that operate on the streets or highways within the State of California to conduct annual smoke opacity inspections of their vehicles that are four years older than the model year of the vehicle's engine.

(5) Title 13 CCR, section 2192(a) requires inter alia that the owner of the vehicle "[t]est the vehicle for excessive smoke emissions periodically according to the inspection intervals specified in section 2193(a), (b), and (c)", "[m]easure the smoke emissions for each test....", "[r]ecord the smoke test opacity levels and other required test information as specified in section 2194 ... and "[k]eep the records specified in section 2194 for two years after the date of inspection."

(6) HSC section 43016 states, "Any person who violates any provision of this part, or any order, rule, or regulation of the state board adopted pursuant to this part, and for which there is not provided in this part any other

In 2015, the Enforcement Division conducted more than 32,000 inspections of vehicles, fuel tanks, and equipment and wrote more than 4,400 citations resulting in more than $3.3 million in fines for noncompliance. Sixty-four percent of the diesel inspections conducted in 2015 by the Division focused on sources in disadvantaged communities. The Division closed more than 400 investigations, and negotiated more than $10 million in penalties. ARB was also awarded nearly $21 million in three judgments from enforcement-related litigation. More details are provided in Appendix A.

Supplemental Environmental Projects

State law allows violators to pay part of a penalty to support supplemental environmental projects (SEP). SEPs are environmentally beneficial projects that a violator agrees to undertake or support as part of a settlement. ARB currently has three SEPs into which violators may choose to pay up to 25 percent of their penalty. These include:

California Council on Diesel Education and Technology SEP. This SEP, established in 1992, supports training programs for diesel mechanics at six community colleges statewide, and funds training programs for violators. These programs are focused on smoke inspection and diesel fleet maintenance. In 2015, the Enforcement Division generated over $456,400 in funding from 107 settled diesel cases; this funding was distributed to support 79 CCDET classes and Diesel Technology Programs at the six member colleges for training and equipment. The CCDET colleges are located in or near disadvantaged communities and support students pursuing careers in diesel technology operations, maintenance and repair. The funding from this SEP provides a direct benefit to students and the community through hands-on education. Moreover, ensuring mechanics are properly trained is critical for ensuring the long-term performance of, and minimizing emissions from, diesel vehicles.

Foundation for California Community Colleges Small Engine Maintenance & Repair Courses SEP. This SEP, established in 2015, funds a training program to enhance and improve small off-road engine maintenance and repair courses, with corresponding emission reduction benefit and emission education, for small off-road engines such as power lawn mowers, trimmers, leaf blowers, weed whackers, chainsaws, generators, small gas-powered scooters, and numerous other products. Over 100 student technicians are trained each year. Funding provides student scholarships, curriculum enhancements, and the purchase of new technology related to the diagnosis and repair of small engines. In 2015, the Enforcement Division generated $30,000 in funding from one settled case, which will be utilized through this SEP to directly mitigate impacts from the same environmental sector.

School Bus and Diesel Emission Reduction SEP. This SEP, established in 2011, provides funding for school districts and non-profit organizations to clean up their diesel vehicles and equipment. In 2015, the Enforcement Division generated over $1,147,500 in funding from 31 settled cases. In partnership with the San Joaquin Valley Air Pollution Control District, this SEP will contribute to over 300 retrofits for school buses statewide, which will reduce school children's exposure to both cancer-causing and smog-forming pollutants. A solicitation is scheduled for projects later this year.

Summary

California has made significant progress in improving air quality through existing State and local air district control programs. Twenty-five years ago the entire South Coast region violated the current 8-hour ozone standard of 75 parts per billion. Today, concentrations have declined 45 percent, and 40 percent of the population lives in communities that meet the standard. Nonetheless, the South Coast still has the highest ozone levels in the nation while the San Joaquin Valley has the greatest challenge with ambient particulate matter. Statewide, about 12 million Californians live in communities that exceed the federal ozone and particulate standards. The health and economic impacts of exposure to elevated levels of ozone and

particulate in California are considerable; meeting air quality standards will pay substantial dividends in terms of reduced costs associated with emergency room visits and hospitalization, lost work and school days, and most critically, premature mortality.

Enforcement is a critical component of ARB's effort to realize those achievements. This 2015 Annual Report provides key highlights of the Enforcement Division's work in 2015, in areas including diesel enforcement, vehicle and aftermarket parts enforcement, district support programs, and greenhouse gas program enforcement. The report closes with a focus on work in 2016 and beyond.

For More Information

Enforcement Division program statistics for 2015 are provided in Appendices A through I. All settled cases may be viewed on ARB's website at http://www.arb.ca.gov/enf/casesett/casesett.htm.

Questions relating to specific programs may be directed to the appropriate Enforcement Division contact shown on the Enforcement Program contact list available on ARB's website at http://www.arb.ca.gov/enf/contacts.htm.

Diesel Programs

ARB's diesel regulations protect public health by reducing exposure to toxic diesel particulate matter (PM) emissions from diesel-powered engines through state-of-the-art technology requirements and emission standards. These engines are used in a wide array of vehicles and equipment ranging from trucks and off-road equipment to ships, locomotives, and other sources. ARB's in-use diesel regulations require fleets to transition to use the cleanest equipment and fuels. The majority of fleets meet these requirements, and the Enforcement Division works to ensure those fleets that did not meet requirements are brought into compliance.

ARB's in-use diesel regulations focus on the vehicle or equipment owner, resulting in tens of thousands of regulated entities that operate on freeways, at ports and rail yards, and in disadvantaged communities all throughout California. Many of these regulated owners are not located in California. The majority of diesel vehicle and equipment owners are small businesses that have limited financial resources and are not familiar with newer diesel technologies. Regulatory requirements are complex with multiple compliance pathways, and can require significant financial investment. The Division's goal is to make sure every fleet meets regulatory requirements. The Enforcement Division uses two distinct enforcement methods for ensuring compliance with diesel regulations – field enforcement and fleet investigations.

Field Enforcement

Division staff enforce diesel regulations in the field. Enforcement Division inspectors working in conjunction with the California Highway Patrol inspect vehicles on the roadside to ensure compliance with ARB's diesel regulations. Citations are issued for any vehicle found to be noncompliant. Field activities also include targeted inspections of ocean-going vessels, cargo handling equipment, transportation refrigeration units, and other types of equipment operating at ports, warehouses, and distribution centers. The Division's goal is to conduct more than 50 percent of all diesel field inspections in disadvantaged communities. In 2015, the Division exceeded that goal, conducting 64 percent of field inspections in disadvantaged communities.

Table 1 is a summary of diesel field inspections by program area in 2015, which shows that out of 21,128 field inspections, 13,591 were conducted in disadvantaged communities. Overall, these inspections resulted in 4,419 citations and notices of violations being issued, with nearly $3.2 million in penalties assessed.

Table 1. Diesel Field Inspections by Program Area in 2015

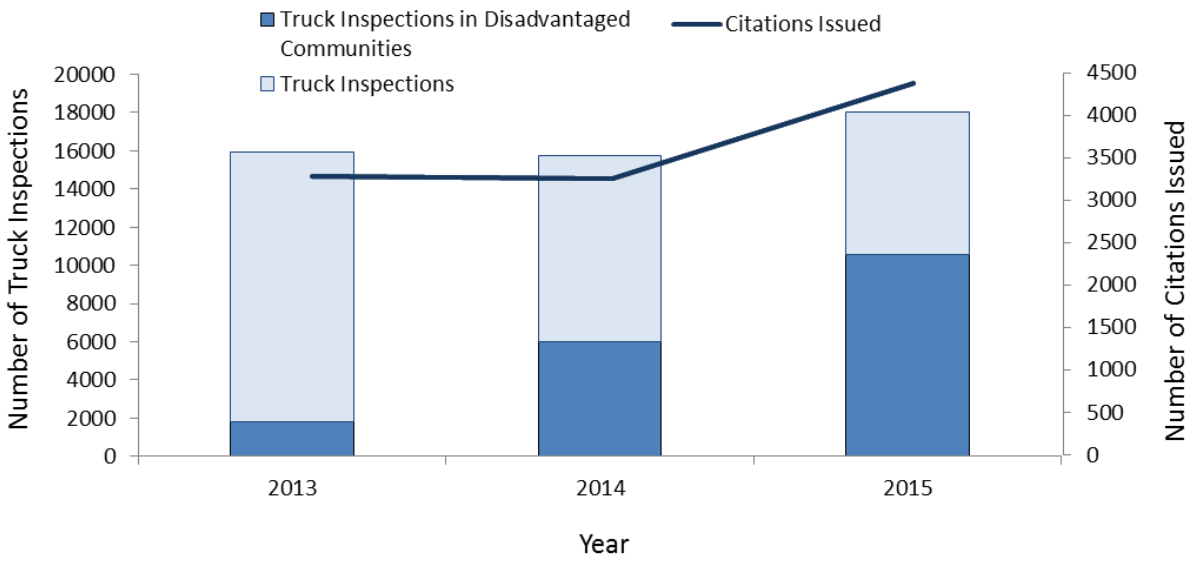
Inspection Type	Total Completed Inspections		Citations & Notice of Violations Issued	Penalties Assessed
	Overall / In Disadvantaged Communities	Percent In Disadvantaged Communities (%)	Overall / In Disadvantaged Communities	
Fuels	219 / 141	64.4%	5 / 5	$75,500
Locomotives[a]	1,863 / 1,863	100.0%	5 / 5	$2,000
Ocean-going Vessels	987 / 987	100.0%	28 / 28	$396,187
Harbor Craft	31 / 31	100.0%	0 / 0	$0
Cargo Handling Equipment	32 / 32	100.0%	0 / 0	$0
Diesel Trucks	17,996 / 10,537	58.6%	4,381 / 2,540	$2,699,580
Total	**21,128 / 13,591**	64.3%	**4,419 / 2,578**	**$3,173,267**

[a] The Memorandum of Understanding (MOU) to enforce locomotive idling restrictions has expired. Compliance rates were high due to provisions which allowed idling under several circumstances.

Over the last few years, truck inspections on the roadside have increased substantially in disadvantaged communities, as illustrated in the figure below. The figure also demonstrates that the number of citations issued has increased substantially each year, growing from 3,256 citations in 2014 to 4,381 citations in 2015.

This increase in citations issued is possibly due to lower compliance rates in disadvantaged communities, and also possibly due to the growing number of fleets having compliance requirements under the Truck and Bus Regulation each year, thereby increasing the overall number of noncompliant fleets operating in California.

Figure 1. Truck Roadside Inspections and Citations (2013-2015)



ARB held four media events focused on trucks during 2015. Each event included Enforcement Division field staff verifying that selected heavy-duty vehicles had proper emission control equipment and were in compliance with all diesel regulations. Reporters and camera crews observed the enforcement activity and interviewed Enforcement Division field inspectors. News stories highlighted ARB's enforcement program and public health benefits of the regulations. Events were held in Stockton and the Inland Empire to highlight air quality problems in those areas, as well as in Boyle Heights and Pacoima as part of CalEPA's broader Los Angeles Environmental Justice Initiative. Overall, these events resulted in approximately 14 media articles in print, internet, and television, including 5 articles in Spanish and 2 in Mandarin.

Investigations

In addition to field enforcement efforts, staff performs diesel investigations of fleets, and railroad and marine equipment to ensure full compliance with all applicable diesel regulations. Over the past several years, the Enforcement Division has opened approximately 350 cases per year on average. Overall, staff closed 315 diesel fleet investigations in 2015. As shown in Table 2, staff settled 226 cases; many fleets violated multiple regulations.

Table 2. Number of Diesel Investigations Settled in 2015

	Total Diesel Investigations Settled	**226**
Number of fleets with violations of each program	Periodic Smoke Inspection Program	94
	Engine Control Label Program	13
	Truck and Bus Regulation	129
	Solid Waste Collection Vehicle Regulation	4
	Drayage Truck Regulation	2
	Transportation Refrigeration Unit Regulation	24
	Verified Diesel Emissions Control System Regulation	6
	Diesel In-Use Off-road Regulation	4
	Cargo Handling Equipment Regulation	2
	Ocean-going Vessels Regulation	31
	Railroad MOU	5

The 226 settled cases resulted in a total of $4,568,232 in penalties assessed. Of those settled cases, diesel equipment cases had a median penalty amount of $7,700 and an average case length of 13 months. The following are eight example cases settled in 2015.

- **Palacios Mobile Service & Repair** (Bloomington, CA) is a diesel repair shop and an authorized verified diesel emission control strategy installer. Staff's investigation revealed that the company installed 17 diesel particulate filters in a non-verified configuration and reported them as verified diesel emission control strategies. The company was also not an authorized installer of verified diesel emission control strategy at the time of these installations. The case was settled for $9,400, of which $2,350 was directed to the California Council on Diesel Education and Technology (CCDET) supplemental environmental project (SEP).

- **Randy's Trucking Inc.** (Taft, CA) provides trucking services to various industries in the San Joaquin Valley and other areas of the State. Staff's investigation revealed that Randy's Trucking Inc. failed to meet the compliance requirements of the Truck and Bus Regulation for 42 vehicles, the Periodic Smoke Inspection Program requirements for 12 vehicles, and the emission control label requirements for 4 vehicles. The case was settled for $523,675, of which $130,920 was directed to the School Bus and Diesel Emission Reduction (School Bus) SEP.

- **Cascade Drilling** (Woodinville, WA) is a service company that specializes in drilling for various types of projects, including projects located within the State. Staff's investigation revealed that Cascade Drilling failed to meet the compliance requirements of the Truck and Bus Regulation for 60 vehicles. The case was settled for $233,625, of which $58,407 was directed to the CCDET SEP.

- **Professional Courier, Inc.** (Fresno, CA) operates a newspaper courier service. Staff's investigation revealed that Professional Courier failed to meet the compliance requirements of the Truck and Bus Regulation for 11 vehicles. The case was settled for $113,000, of which $28,251 was directed to the CCDET SEP.

- **A & S Metal Recycling** (Los Angeles, CA) provides metal recycling services in the Los Angeles area. Staff's investigation revealed that A & S Metal Recycling failed to meet the compliance requirements of the Truck and Bus Regulation for 22 vehicles, the Periodic Smoke Inspection Program requirements for 11 vehicles, and the Emission Control Label requirements for 2 vehicles. The case was settled for $99,450, of which $24,862 was directed to the School Bus SEP.

- **Environmental Logistics** (Bloomington, CA) provides management of hazardous waste. Staff's investigation revealed that Environmental Logistics failed to meet the compliance requirements of the Truck and Bus Regulation for 6 vehicles and the Periodic Smoke Inspection Program for 21 vehicles. The case was settled for $46,500, of which $11,625 was directed to the School Bus SEP.

- **China Navigation Management** (Port of Los Angeles) manages the vessel Chenan, which operated within Regulated California Waters (RCW) on noncompliant fuel. The vessel did not changeover to compliant low sulfur fuel and did not pay a noncompliance fee. These are violations of ARB's Regulation for Fuel Sulfur and Other Operational Requirements for Ocean-going Vessels within RCW. The case was settled for $129,500.

- **Ancon Marine** (Ports of San Diego, Port of Los Angeles, and Port of Long Beach) was inspected at its facilities located at the Port of San Diego and the Port of Los Angeles/Long Beach in July 2012, for compliance with the Cargo Handling Equipment (CHE) regulation. Violations were found and notices of violations were issued. Ancon Marine retrofit, retired, and/or replaced all the CHE in violation and is now fully compliant with the CHE regulation. The case was settled on January 13, 2015, for $52,500, of which $13,125 was directed to the School Bus SEP.

The remaining investigations were closed because the fleet or equipment was found to be compliant or non-responsive, as shown in Table 3. Table 3 also shows that 84 investigations, or 26 percent of all diesel fleet investigations, were closed by identifying the fleet was in compliance. Prior to 2015, diesel truck investigations were identified primarily through field inspections, tips, and complaints. This led to some cases being identified as compliant after investigation, which is inefficient. So in 2015, the Division developed a new "Smart Audit" approach for truck enforcement which shifts the workload from a complaint and referral driven process to a data driven process that helps focus enforcement efforts on noncompliant fleets.

Table 3. Diesel Investigations Closed Without Settlement

Investigations Closed Without Settlement		
Reason	**Description**	**Number of Investigations**
In Compliance	After investigation fleet determined to be compliant – no further action necessary.	84
Non-Responsive – Case Closed	Fleet owner fails to respond to Enforcement Division to prove compliance or resolve violations. Enforcement Division not able to place DMV registration hold on fleet because vehicles are registered out-of-state, vehicle has been sold, or broker does not own the vehicle. Further action is not feasible given level of noncompliance. Case closed.	5
	Total Investigations Without Settlement	**89**

The Smart Audit approach involves the merging of multiple data sources into one database. These sources include California and 49-state Department of Motor Vehicles (DMV) registration data, ARB compliance databases, citations and complaints, safety inspection databases, motor carrier permits, and any available data on high emitters. Vehicles are then grouped by fleet, and each fleet is evaluated using multiple audit indicators, given an audit score, and are prioritized for investigation. An example of this ranking is illustrated in Table 4; the results in the table reflect six real companies.

Table 4. Example of Smart Audit Rankings

Company Info	Total Trucks	Potential Noncompliant Trucks	Citations Issued	Audit Score	Rank
Company A	11404	2268	16	2348	1
Company B	2808	1346	0	1346	2
Company C	1821	1220	5	1245	3
Company D	1213	1037	0	1037	4
Company E	1013	903	0	913	5
Company F	818	767	0	767	6

With this new approach, staff now has the capability to identify every potentially noncompliant fleet operating in California. Enforcement Division staff is now selecting fleets from these lists for investigation. Results from these initial investigations will help to refine the system, and opens new opportunities for potential enforcement methods to more rapidly bring these fleets into compliance. The Smart Audit approach is modeled in part on methods developed in early 2014 to assess industry-wide compliance with the Truck and Bus Rule. In early 2014, ARB assessed the compliance rate for the Truck and Bus Rule by evaluating vehicle registration data from the California Department of Motor Vehicles, the International Registration Plan (IRP), and compliance data reported by fleets to ARB's Truck Registration, Upload, and Compliance Reporting System (TRUCRS) – the same data now used for the Smart Audit approach.

Based on January 2014 data, staff estimated 85 percent of trucks operating in California were in compliance with the rule. In January 2016, Enforcement Division staff re-initiated this process, using a similar methodology, and estimated that between 70 and 75 percent of all heavy-duty trucks (exceeding 26,000 pounds gross vehicle weight rating) that operate in California are in compliance with the regulation. Appendix I shows the method used for the calculation. While this estimate is still being refined, it does indicate a reduction in compliance rates between 2014 and 2016. This decrease in estimated compliance could be partly due to the continued phasing-in of the regulatory requirements.

To address this increase in noncompliance, Enforcement Division staff is taking several actions in 2016.

- All future diesel fleet investigations will be selected from high priority fleets identified through the new Smart Audit approach. This step is expected to reduce investigations of compliant fleets, and should significantly increase the number of trucks that the Division brings into compliance each year.

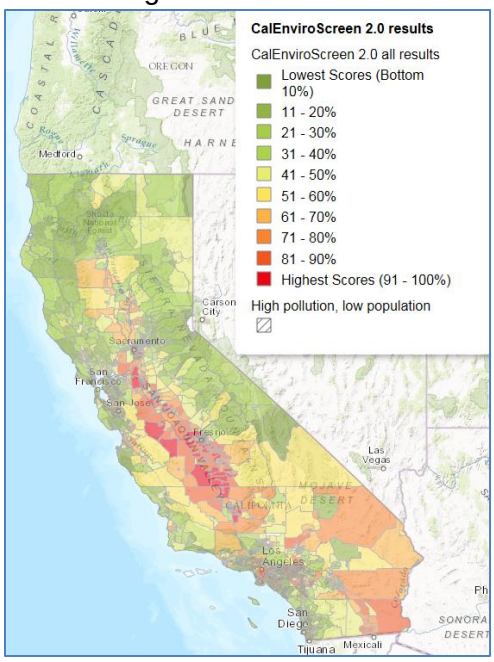
- Roadside citation data will be used to identify noncompliant brokers for investigation into violations of broker requirements in the Truck and Bus rule. The regulation requires brokers and motor carriers who hire and dispatch fleets to verify and maintain records of vehicle compliance prior to hiring the fleet. Staff review brokers' truck hiring practices to identify violations. Bringing noncompliant brokers into compliance will help force smaller fleets to comply with regulatory requirements. ARB has teamed with U.S. EPA Region 9 to enforce the motor carrier and broker provisions of the Truck and Bus Regulation for out-of-state companies.

- A streamlined process is being implemented for bringing cited small fleets into compliance.

All of Enforcement Division's programs support environmental justice efforts. Because of the significant impact that noncompliant diesel trucks and equipment can have in disadvantaged communities, in 2015 the Enforcement Division also established a new team consisting of six staff assigned to work directly with disadvantaged communities. Each team member is assigned a specific area of the State to represent the Enforcement Division in the San Francisco Bay Area, Los Angeles region, Imperial Valley, San Diego, greater Sacramento Area, and the San Joaquin Valley. Within these regions, the team members act as liaisons between the Enforcement Division and the communities, attending community meetings and working to better understand and solve community concerns related to air quality and environmental enforcement.

As part of an ongoing program to educate communities and the trucking industry about ARB's diesel idling regulation, the Enforcement Division's environmental justice team partners with communities and local government staff to install "No Idling" signs where diesel trucks idle near residents, schools, parks and other public places. Working with communities throughout the State, 155 signs were installed in 2015. Communities wishing to install a no-idle sign may follow the instructions located at http://www.arb.ca.gov/enf/arb_options_cities_mitigate_idling.pdf.

The Enforcement Division supports CalEPA's Environmental Justice initiatives. In 2015, the Enforcement Division participated in the Los Angeles Environmental Justice Initiative project that included focused multi-agency enforcement in Pacoima and Boyle Heights. Overall, ARB found that the consumer products, industrial refrigeration system registration program, and locomotive idling rules and regulations were being followed by the businesses in Boyle Heights and Pacoima. Roadside inspection locations in these communities were useful for identifying diesel truck noncompliance, and staff is looking for new roadside locations in other communities that, like Boyle Heights and Pacoima, have been identified by CalEnviroScreen as disadvantaged communities. CalEnviroScreen identifies areas of the State that are overly burdened by the cumulative impact of many pollution sources, including diesel particulate matter and other harmful emissions.



Finally, the Enforcement Division operates a telephone- and internet-based system for receiving smoking and idling vehicle complaints. All complaints received are screened and processed using the license plate information reported into the system. Enforcement Division staff identifies owners of the smoking vehicles and sends notices requesting that the vehicle be checked for proper engine operation. For complaints of excessive idling, Division staff sends information about ARB's idling limits to the registered vehicle owner. Where appropriate, complaints are referred to the air districts or to ARB for follow-up. In 2015, the Division responded to and closed 9,643 smoking vehicle complaints and 290 commercial and school bus idling complaints. More details are provided in Appendix C.

Vehicle, Engine, and Parts Certification Programs

Vehicles and engines sold in California are required to be certified to model year emissions standards and remain durable so that emissions remain low over the life of the vehicle. All emission critical parts offered for sale, sold, or installed on certified vehicles are required to be an original equipment manufacturer part, an aftermarket direct replacement part, or an add-on or modified part that has been examined by ARB and issued an aftermarket part Executive Order exempting that part from California's anti-tampering laws. In addition, ensuring that vehicle manufacturers follow correct certification test procedures and report accurate data is critical to ensuring that greenhouse gas emission reduction targets are met and that a fair and competitive marketplace is maintained.

The certification process relies on engine and vehicle manufacturers to submit certification applications to ARB that are accurate and complete. In September and November 2015, ARB informed Volkswagen, Audi, and Porsche that their certified 2009 through 2015 model year diesel passenger cars employed auxiliary emission control devices (AECD) that were not previously disclosed to ARB. Furthermore, these AECDs represented illegal defeat devices that used computer software to switch between different emission calibration maps depending on whether the car was undergoing certification testing or was driving normally on the road. These violations caused very high emissions of oxides of nitrogen (NOx) throughout the State and represent a serious breach of trust to customers who believed they were purchasing clean diesel vehicles. ARB is working with the U.S. Environmental Protection Agency, U.S. Department of Justice, the California Office of the Attorney General, Volkswagen, Audi, and Porsche to ensure that harm to the environment is mitigated, that customers are protected, and that the companies are held responsible for their illegal actions.

Several other manufacturers are under investigation. Enforcement Division staff will be working closely with other ARB staff across multiple Divisions to ensure any potential violations identified through investigations are handled expediently and effectively.

The Enforcement Division has long-standing enforcement programs focused on vehicle and engine certification. Investigations typically involve non-certified engines, equipment, or vehicles sold in California illegally or violations of the certification process. The following are two representative cases:

- **Makita USA** (La Mirada, CA**)** manufactures power equipment. The company self-disclosed to ARB that they had sold 2,272 uncertified small-off-road engines in California. The case was settled for $230,000, of which $30,000 was directed to the Small Engine Maintenance and Repair SEP.

- **CLAAS of America, Inc.** (Omaha, NE) manufactures agricultural harvesting equipment. Self-disclosure by the company to ARB and a subsequent investigational audit revealed that the company violated ARB regulations with sales of 14 uncertified off-road compression ignition engines and 478 certification violations. The case was settled for $231,750, of which $57,937.50 was directed to the School Bus SEP.

Occasionally, ARB is involved in enforcement cases of national significance. The recent Hyundai Kia case is a good example:

- **Hyundai Kia** (Superior Township, MI) and ARB Enforcement Division reached a $6,343,400 settlement regarding 2012 and 2013 model year vehicles sold in California; this settlement was recorded as a judgement by the Court. It was determined that Hyundai Kia conducted road load calculations using methods not in compliance with the specified test procedures and in violation of the California Health and Safety Code section 43212. Errors in calculating the road load affect the dynamometer coefficients used during emissions testing which can result in errors in the emissions and fuel economy determinations. This settlement was part of a larger U.S. EPA resolution under a consent decree that included greenhouse gas related fuel economy violations. At the time, Hyundai Kia was considered a small volume manufacturer in California, which exempted them from greenhouse gas related requirements in California.

Aftermarket Parts

Add-on and modified aftermarket parts which are not original equipment parts must demonstrate that they do not adversely impact emissions or emission control systems on certified vehicles, and therefore must be exempted by ARB for those applications. Use of non-exempt aftermarket parts violates California's anti-tampering laws. Examples of aftermarket parts include catalytic converters, fuel injectors, intake systems, turbochargers, superchargers, computer devices, sensors, exhaust systems, and other engine performance enhancers. Aftermarket parts for both on-road and off-road vehicles are sold by parts manufacturers, distributors, dealers, online stores, retail auto parts stores, general merchandise retailers, marine equipment stores, motorcycle shops, and many other types of businesses. The overall market for automotive aftermarket parts and accessories, according to a leading industry trade organization, is estimated to be $36 billion nationwide annually, of which performance products is estimated to be over $9 billion.

Non-exempt aftermarket parts can significantly reduce the effectiveness of air pollution control systems on vehicles. Some examples include:

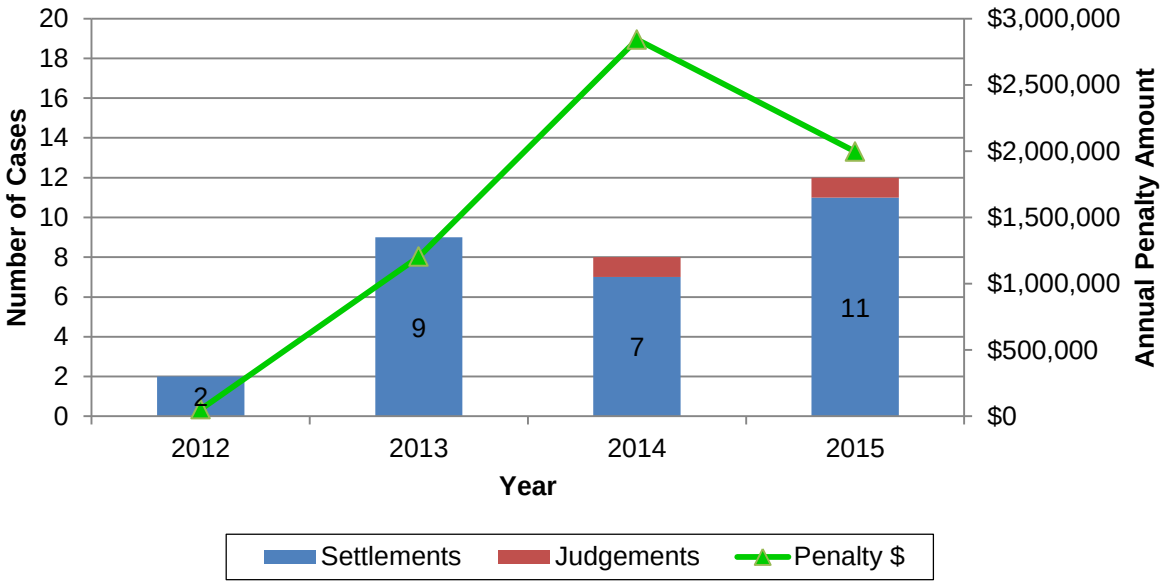
- Diesel and gasoline electronic tuners which intercept and modify, replace, or remove critical sensor and emission control unit logic and signals to alter vehicle performance, usually through modifications to the fuel system and/or emission control equipment, thereby defeating the vehicle's certified programming and configuration. This in turn can increase torque, power, and fuel efficiency, but significantly increases emissions.

- Exhaust gas recirculation (EGR) delete kits incapacitate or remove factory EGR systems which results in increased NOx emissions, an ozone precursor and respiratory irritant.

- Aftermarket motorcycle exhaust systems without a catalytic converter, such as a non-catalyzed muffler replacing a factory catalyzed muffler, significantly increase emissions from loss of conversion of exhaust emissions to harmless components.

In late 2011, the Enforcement Division's engine and parts section was created. The then-newly formed section prioritized enforcement of the aftermarket parts sector along all levels of the marketing chain, especially for the diesel products sector. As seen in Figure 2, staff has increased its focus on illegal aftermarket parts cases, collecting over $6 million dollars in penalties over the past 3 years, including nearly $2 million dollars in 2015.

Figure 2. Aftermarket Parts Annual Case Settlements



The two cases below reflect representative settlements of aftermarket part investigations.

- **Sinister Manufacturing Company, Inc.** (Roseville, CA) sold EGR delete kits and DPF defeat devices which rendered emissions controls inoperative. The company agreed to a buyback program covering all illegally sold products, and to a penalty of $651,450.

- **K&N Engineering, Inc.** (Riverside, CA) is regarded as a leader in the aftermarket parts industry. A routine enforcement investigation revealed that the company marketed 1,343 non-exempt add-on and/or modified parts in California. The case was settled for $521,000, of which $130,250 was directed to the School Bus SEP.

While aftermarket parts enforcement by ARB has increased dramatically since 2012, several challenges still exist in the implementation of existing aftermarket regulations. A primary issue is the prevalence of racing aftermarket parts being purchased and used for non-racing purposes. A majority, if not all, of those products are not exempted or approved by ARB. However, aftermarket products are legal and covered by statutory exemption if used on a dedicated competition vehicle in amateur or professional sanctioned racing applications. In the situation that a certified vehicle is modified and converted to a competition vehicle, the installation of racing aftermarket parts is allowed, but the vehicle must remain a competition vehicle used exclusively for competition purposes and cannot be converted back to its originally certified condition.

A number of enforcement cases have revealed a trend of non-exempt products offered under the guise of exempt race-only parts, at a supply which far exceeds the true racing demand. As a result, a majority of these products end up on certified vehicles. In many cases those vehicles are no longer in certified configuration and operate on public roads illegally. The resulting emissions can be significant and underscore the need to further clarify the competition vehicle exemption. Enforcement Division staff is evaluating options for regulation and/or enforcement policy improvements that could address these issues.

District Support Programs

One of the major responsibilities of the Enforcement Division is to support the enforcement efforts of local air districts. To provide this support, Enforcement Division staff works closely with California's air districts and the California Air Pollution Control Officers Association (CAPCOA), assisting with resolution of more challenging local enforcement cases and providing technical support when needed. Staff provides training, enforcement support, and implements a registration program for portable equipment.

Training and Compliance Assistance

The Enforcement Division's training program supports air districts by offering uniform training to local air district enforcement and engineering staff. Additionally, air districts frequently refer regulated sources within their jurisdictions to ARB training classes as a means to promote full compliance with federal, State, and local air quality regulations. All air districts and the businesses they regulate need to have a clear and consistent understanding of air quality regulations and the methods used to achieve compliance with those regulations.

The Visible Emissions Evaluation (VEE) program trains and certifies local air district staff, as well as members of regulated source staff (as required by their permits), law enforcement personnel, and members of the public in the use of U.S. EPA Method 9 to visually assess the opacity of emissions from stationary sources, essentially to accurately determine the density of a smoke plume visually from the ground. Method 9 is the most widely used approved method for making such determinations in California. A survey of California's 35 local air districts indicates that there are more than 40,000 stationary sources in the State with opacity limits required in their operating permits. All local air districts participate in the VEE program. VEE readings are used to determine whether stationary sources are in violation of opacity limits, to conduct standard and start-up inspections, and when responding to complaints.

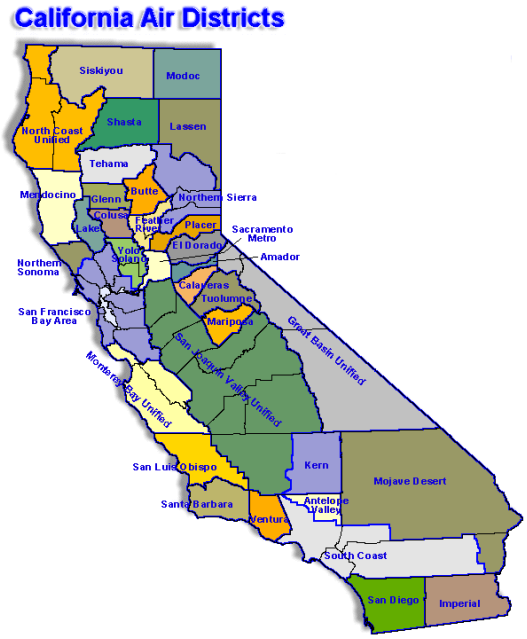
In 2015, the Enforcement Division's training program enrolled 6,482 students in 169 classroom and online courses. Of these, 2,537 students were enrolled in 60 VEE training courses. Further details are provided in Table 5 below.

Table 5. Enforcement Division Training Program Course Statistics

Course Type and Level	Number of Classes	Classroom Students	Number of Online Courses	Online Students
VEE Training and Certification	59	2,165	1	372
Other Introductory Courses (100 Level)	1	27	3	1,044
Source Specific Compliance Courses (200 Level)	62	1,220	1	122
Advanced Courses (300 and 400 Level)	41	953	1	579
Total	**163**	**4,365**	**6**	**2,117**

District Oversight and Enforcement Support

While California's 35 local air districts regulate air pollution from stationary sources, State law requires that ARB provide oversight of district operations. The Enforcement Division's district support and training programs work closely to provide oversight and enforcement support to California's air districts. The Division's district support program provides specialized expertise to assist air districts in addressing complex or challenging local enforcement cases. Enforcement Division staff provides oversight and training to California's 35 air district hearing boards. Because variances provide temporary relief from air pollution rules, Enforcement Division staff review each variance to ensure that, when granting relief from air pollution rules, the hearing boards comply with the statutory requirements. Division staff also help air district enforcement staff understand complex federal regulations, including understanding specific continuous emission monitoring system requirements applicable to sources such as power plants. In doing so, the Enforcement Division provides constructive feedback to the air districts to help improve their local program. This resource is especially valuable in smaller and rural air districts. When supporting local enforcement actions, it is Enforcement Division staff's goal to facilitate local resolution of local cases. This often means that Division staff negotiates a settlement on behalf of an air district, with penalties being collected by the air district directly.



In addition to providing enforcement support, the Enforcement Division's district support program enforces regulations directly. These regulations include the asbestos construction and demolition National Emission Standard for Hazardous Air Pollutants (NESHAP), ARB's stationary diesel airborne toxic control measure (ATCM), and many other regulations adopted by ARB and the U.S. EPA. In 2015, Enforcement Division staff settled four asbestos NESHAP related cases, assessing penalties of $29,750. These cases typically involve demolition and renovation companies that fail to adhere to the asbestos NESHAP requirements, including the requirement to inspect for materials containing asbestos prior to beginning work, and companies that also fail to notify ARB or the U.S. EPA prior to beginning regulated work.

ARB also works with the air districts and local agencies to support enforcement of ARB regulations. ARB currently has agreements with three air districts and the Port of Los Angeles to enforce California's diesel rules. These districts inspect diesel equipment on behalf of ARB. When violations are identified, the air districts write citations and forward those citations to Enforcement Division for resolution by ARB staff. Similarly, ARB has agreements with 23 air districts to implement ARB's landfill methane control regulation. ARB enforcement staff is also working with Research Division staff to explore opportunities to utilize air district enforcement programs to support ARB's Refrigerant Management Program regulation enforcement through contracted inspections.

Portable Equipment Registration Program

Another area where the Enforcement Division supports local air districts is through the voluntary Portable Equipment Registration Program (PERP). The PERP regulation was adopted in 1997 to allow portable engine and equipment owners the option of operating their equipment statewide with a single ARB registration. The voluntary PERP sets stringent engine emissions standards (meaning, the cleanest available standards) for initial engine registration. Equipment units can also be registered through PERP, and the non-combustion related particulate emissions from this equipment are restricted through daily and annual throughput limits. Once the engines and equipment units are registered in PERP, these may operate statewide in portable applications without the need for a local permit to operate in districts where local permits are otherwise required. When the engines and equipment units are registered in PERP, the local air districts maintain responsibility for field inspection and enforcement activities. Examples of PERP registered equipment include, but are not limited to:

- **Compression ignition and spark-ignition engines:** These are engines that power towable generators, pumps, compressors, wood chippers, tub grinders, etc. PERP registered engines also include auxiliary engines on two-engine vehicles. Approximately 30,500 engines are registered in PERP.

- **Equipment units:** These are units such as aggregate crushing and screening plants, abrasive blasters, wood chippers, concrete batch plants, rock drills, and pavement grinders. Approximately 4,500 equipment units are registered in PERP.

- **Tactical support equipment (TSE):** This is equipment that is owned by the U.S. Department of Defense and includes, but is not limited to, internal combustion engines associated with portable generators, compressors, aircraft start carts, heaters, and light carts. Approximately 5,000 pieces of TSE are registered in PERP.

The PERP is funded through authority established by California Health and Safety Code sections 41752(d)(1) and (d)(2) which allows ARB to collect fees to recover the costs of administering, enforcing, and adopting regulations related to the PERP. The fees collected pay for ARB's staff resources and material costs to complete tasks such as handling PERP related mail, processing and evaluating the applications, and issuing the registration materials (registration documents, stickers and placards). ARB also incurs costs to administer the PERP from development and maintenance of the information technology data management systems which are necessary to track and maintain all related PERP data. A new data management system is entering the final stages of testing and is scheduled to deploy in June 2016. Enforcement of the PERP is delegated to the local air districts, who receive a portion of the collected fees for inspection costs.

In 2015, PERP received 2,337 applications for 5,617 units to be registered. Of those units, 5,093 registrations were issued, with the remaining being incomplete or ineligible for registration. The program also renewed 7,876 registrations. In total, 12,969 registrations were issued in 2015; this number of registrations is similar to permit processing volumes at major air districts. The fee for a new registration is $620 per engine and $350 per equipment unit; while the corresponding renewal fees are $570 and $300. Typically, the air districts will receive fifty-five percent of this revenue for inspection costs.

The current PERP fees were adopted in 2004 and have not been adjusted since that time. Although the PERP regulation allows for periodic adjustment of the fees in accordance with the consumer price index as published by the U.S. Bureau of Labor Statistics, ARB has never invoked this provision. The costs incurred for maintaining and enforcing the PERP have increased significantly since 2004. Based on a preliminary analysis, the fees currently collected each year no longer cover the costs of implementing the program. Consequently, as part of the regulatory amendments to the Portable Diesel-fueled Engine ATCM and PERP Regulation, the PERP fees are being re-evaluated and are expected to increase.

Portable Equipment Rulemaking Activities

ARB adopted the Portable Diesel-fueled Engine ATCM in 2004 to protect public health by controlling diesel PM emissions from nearly all diesel-powered portable engines rated at 50 horsepower and greater operating in California. The current ATCM requires subject fleets of engines to meet a series of fleet average diesel PM emission standards. The ATCM fleet standards became effective in January 2013, and will become progressively more stringent in January 2017 and in January 2020.

Industry achieved more than a ninety percent compliance rate for the reported 2013 ATCM fleet standards. During the course of 2014 through early 2015, PERP staff analyzed and evaluated diesel PM fleet emissions data submitted to ARB pursuant to the reporting requirements of the ATCM. These analyses included projections regarding portable engine diesel PM control options and expected fleet turnover relative to the upcoming 2017 and 2020 fleet average standards. As a result of several factors, ARB determined that widespread compliance with the 2017 and 2020 fleet average standards for diesel PM was not feasible. These factors included the lack of diesel PM control devices for portable engine applications; the continuing delay in the availability of cleaner engines; and an inordinate influx of engines manufactured under the U.S. EPA's flexibility provision (flexibility engines) into California's portable diesel engine fleets.

As a result of this determination, during the latter part of 2015, a multi-divisional regulatory amendment Project Team (Team) was formed to start the process of evaluating alternative approaches to reduce diesel PM from portable diesel-powered engines. During the remainder of 2015, the Team conducted detailed emissions analyses; analyzed numerous other ATCM and program related data sets; developed several alternative diesel PM control options; and developed a comprehensive list of potential changes needed in both the ATCM and PERP regulations. The Team also conducted meetings with the CAPCOA Board appointed subcommittee regarding the Team's work products and ideas. The Rulemaking is scheduled for presentation to the Board in spring 2017.

Greenhouse Gas Enforcement

In 2006, the Legislature passed the California Global Warming Solutions Act (AB 32), which established greenhouse gas reduction goals for the State and authorized the creation of a comprehensive, multi-year program to reduce greenhouse gas emissions in California. AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to reduce greenhouse gases to achieve the goal of reducing emissions to 1990 levels by 2020; this Scoping Plan was initially adopted in 2008 and revised in 2014. The Scoping Plan enumerated multiple discrete early actions that were subsequently adopted and implemented. Several of the discrete early action measure regulations are enforced directly by Enforcement Division or in partnership with California's air districts. These programs include:

- **Refrigerant Management Program (RMP) regulation:** Achieves reductions in high-global warming potential (GWP) refrigerants used in industrial refrigeration and process cooling equipment through a leak inspection and repair program. Enforcement Division staff works closely with Research Division staff to implement and enforce the RMP regulation. Research Division staff maintains the registration data and administers RMP on a daily basis. Enforcement Division staff worked closely with Research Division staff to provide outreach and training to refrigeration technician associations.

  Enforcement Division staff conduct enforcement compliance inspections in order to determine facility compliance. When violations are identified, Division staff issues a notice of violation and settles those violations. In 2015, Enforcement Division's focus was on identifying unregistered facilities with refrigerant systems having 200 pounds of high-GWP refrigerants. With a staff of two investigators, Enforcement Division conducted 59 inspections, identified 15 violations, and settled 3 cases for penalties of $337,600. Enforcement staff continue to work to resolve the remaining violations.

  The following is a summary of violations Enforcement staff settled in 2015.

  - **Save Mart Supermarkets Incorporated (Save Mart)** operates a chain of retail food stores. Enforcement Division staff received a referral from the Research Division that Save Mart had not registered or filed the required annual reports for 24 facilities. During the investigation Enforcement Division discovered that these 24 facilities did not have the required automatic leak detection systems. Division staff negotiated a settlement for $150,000 in penalties.

  - **Kerry Ingredients and Flavours, Inc., (Kerry)** manufactures and markets ingredients used in food products. Enforcement Division staff investigated a complaint against Kerry and determined that Kerry owned and operated an unregistered refrigerant system in violation of the RMP regulation. Kerry failed to register and report in accordance with RMP requirements. ARB settled that violation for $133,600 in penalties.

- **Sulfur Hexafluoride Gas Insulated Switchgear (SF_6-GIS) regulation:** Reduces emissions of sulfur hexafluoride (SF_6) used in high-voltage electrical switchgear by establishing declining annual emission rate limitations. The emission rate limitation for 2015 was six percent of the total SF_6 charged to active gas insulated switchgear (GIS). Owners of such equipment are required to report to ARB annually. Enforcement Division staff works closely with Industrial Sources Division staff to enforce the SF_6-GIS

regulation. When owners of regulated GIS equipment report a violation of the emission limit, Industrial Sources Division staff refers the violation to Enforcement Division for resolution. In 2015, Enforcement Division resolved two violations for penalties of $325,000.

- **NRG-El Segundo Operations, Incorporated (NRG)** operates a power plant in El Segundo, California, with ten gas insulated switchgear containing a total of 3,803 pounds of SF_6. NRG exceeded the 2012 annual emission limitation. In this matter ARB concluded there were a number of mitigating factors including the fact that this was a first time violation and NRG cooperated fully with the investigation. Enforcement Division settled this case for $200,000.

- **Merced Power LLC** operates a biomass power plant in El Nido, California, with a single gas insulated switchgear containing 15 pounds of SF_6. Merced Power exceeded the 2012, 2013, and 2014 emission rate limits. This case was settled for $125,000, reflecting the company's cooperation with the investigation, efforts to repair the equipment to prevent future violations, and other factors.

- **Landfill Methane Gas Control Regulation (LMR):** Reduces methane emissions from municipal solid waste landfills by requiring the installation of methane capture and control equipment. LMR is primarily enforced by California's air districts, which may choose to enforce LMR concurrently with federal and local volatile organic compound emission control regulations. Enforcement Division works with ARB's Transportation and Toxics Division to provide training and enforcement support to air district staff. Enforcement Division also maintains the equipment needed to conduct independent inspections of landfills in air districts that have not elected to enforce the regulation on ARB's behalf. In 2015, Transportation and Toxics Division referred a case to Enforcement Division relating to a landfill that failed to report to ARB in accordance with the requirements of LMR. Enforcement Division expects to conduct the first compliance inspections at landfills throughout California beginning in 2016.

Focus in 2016

As ARB's regulatory programs continue to expand, the demands for enforcement services will increase. Staff is taking actions in several areas to focus enforcement efforts, address key areas of compliance challenges, and expand enforcement of new programs.

Focusing Enforcement Efforts

Because resources are limited, the Enforcement Division is developing new tools and strategies to prioritize and focus the use of enforcement resources in areas that have the highest likelihood of noncompliance with ARB rules. This maximizes the efficient use of limited resources and ensures that the Division's work has a greater impact on improving air quality. For 2016, the Enforcement Division has established key priorities and projects that will further improve the Division's efficiency and effectiveness:

- **Understanding Compliance Rates:** One of the challenges that almost any regulatory program faces is in determining how well regulated companies and individuals comply with regulatory requirements. In 2016, the Enforcement Division is undertaking an effort to collect and analyze industry and enforcement data to better assess compliance rates in ARB's major regulatory programs so that compliance rates can be reported in next year's annual report. Improved compliance rate information will assist the Division in determining how to most efficiently and effectively deploy resources.

- **Improving Enforcement Considerations in the Regulatory Development Process:** In 2015, the Division initiated a review of ARB's regulatory development process, looking at the Division's experience enforcing key rules and, based on lessons learned, determining ways to ensure that the development of future rules more fully incorporates enforceability as a key part of the regulatory design. Staff will be developing recommendations in late 2016.

Addressing Compliance Challenges

- **In-Use Diesel Rules:** Over the coming year, staff will continue to refine the Smart Audit approach and use the results to focus enforcement resources on those truck fleets that are most likely to be out of compliance. Compliance rate estimates will be updated every six months. Staff will also be mining field inspection data to identify fleets for broker audits, which will allow staff to reach more noncompliant trucks in each investigation.

- **Automotive and Aftermarket Parts Industries:** The automotive and parts industries are highly competitive. When a company makes a decision to sell racing parts in non-racing applications, or to install defeat devices in their vehicles, they do so to gain a competitive advantage in the market. Left unchecked, these violations create a market incentive for others in the industry to make similar decisions, which can undermine

regulatory efforts. Enforcement actions against individual companies send a powerful message to industry that they must meet regulatory requirements. However in industries like aftermarket parts where noncompliance is more widespread, additional enforcement efforts are necessary. ARB is now investigating every light duty diesel manufacturer to determine if their certifications were valid, and that vehicles meet emissions requirements over the road, and is working to determine better ways of limiting the sale and purchase of racing parts to consumers for competition only.

- **Drayage Trucks at Rail Yards:** Staff is investigating Drayage Truck noncompliance at rail yards, and is working with rail companies to ensure compliance with reporting requirements. Data produced from compliance reporting will be subsequently used to enforce against noncompliant fleets entering these rail yards.

- **Addressing High Emitting PM Filter Equipped Trucks:** The current opacity level of 40 percent was adopted more than 35 years ago. Diesel emissions control technology has improved so dramatically during this time that any visible emissions from a modern heavy-duty vehicle is an indication that there is a problem with the engine and diesel particulate filter. The Enforcement Division is supporting ARB efforts to assess the potential for reducing the current Periodic Smoke Inspection Program and Heavy-duty Diesel Vehicle Inspection Program emissions limit from 40 percent opacity to a significantly lower limit relevant to the emissions system technology on today's filter-equipped fleets. Lowering the opacity to a more appropriate level is an important step toward implementation of a heavy-duty diesel inspection maintenance program that is critical for ensuring the benefits envisioned by the emissions standards and in-use rules are achieved.

  Staff is also developing new video-based tutorials on preventive maintenance to teach truck owners and drivers how to maintain newer diesel engines with modern emissions systems. These videos will be used to support outreach and compliance assistance efforts.

Expanding Enforcement

- **Ocean-going Vessel Shore Power:** The shore power regulation is designed to reduce PM and NOx emissions from auxiliary engines of certain vessel types while berthed at port. The first fleet reporting occurred in 2015 for the 2014 calendar year. Enforcement Division staff conducted audits of all the companies subject to the regulation and is working with program staff to understand the compliance issues and bring fleets into compliance.

- **Low Carbon Fuel Standard (LCFS):** Staff is transitioning fuels enforcement to focus on the LCFS and Alternative Diesel regulations. LCFS is a regulation designed to lower greenhouse gas emissions associated with the lifecycle of transportation fuels used in California. Regulated parties (producers and importers) are expected to meet specified carbon intensity (CI) targets for each given year. The Enforcement Division has conducted a preliminary audit in conjunction with ARB's Industrial Strategies Division and Legal Office to evaluate what information could feasibly be obtained and what type

of sampling can be conducted on site at a biodiesel production facility. A multi-divisional team has also been working to develop a chemical fingerprint database for various biodiesel feedstocks in order to improve future enforcement.

- **Tractor-Trailer Greenhouse Gas (TTGHG):** The regulation requires trucks and the trailers they pull to be equipped with aerodynamic devices designed to increase aerodynamics and reduce drag while driving down the highway. This reduces fuel usage and the production of greenhouse gas emissions from heavy-duty diesel vehicles. Vehicles subject to this regulation must either use U.S. EPA SmartWay® certified tractors and trailers or be retrofitted with SmartWay® verified technologies. Enforcement of this regulation is beginning in the summer of 2016. Vehicle owners and California-based brokers and shippers who do not comply with this rule will be subject to enforcement actions.

Upcoming Board Items

- **SEP Policy Update and AB 1071 Implementation:** Staff is implementing requirements of AB 1071 by revising the existing Supplemental Environmental Project (SEP) Policy in a public process and taking the revised SEP policy to the Board in late 2016. The revised SEP policy will include the requirements to allow for a public process in determining SEP project ideas, allowing up to 50 percent of penalties be directed to SEPs with priority going to disadvantaged communities, and creating a nexus between where violations occurred and the communities that were harmed.

- **Portable Equipment Registration Program and Air Toxic Control Measure:** In a joint effort, ARB and CAPCOA will be conducting workgroup meetings and workshops throughout 2016 to update the Portable Diesel-fueled Engine regulation. The PERP regulation was adopted in 1997 to allow portable engine and equipment owners the option of operating their equipment Statewide with a single ARB registration. The proposed amendments are intended to simplify the administration of the rule, accelerate the transition to newer engines, and update the fee schedule. The proposed amendments will be presented to the Board in Spring 2017.

Appendix A
2015 Enforcement Program Statistics

Program Category	Total Closed Enforcement Actions	Penalties Assessed[a]		Total Penalties Assessed
		Judgments	Settlements	
Certifications				
Consumer and Aerosol Coating Products	46	$0	$2,375,655	$2,375,655
Vehicles	2	$6,343,400	$25,000	$6,368,400
Dealer and Fleet Citations	12	$0	$20,000	$20,000
Engines	10	$14,409,599	$875,250	$15,284,849
Parts[b]	12	$240,000	$1,756,675	$1,996,675
Fuels				
Fuels Specifications	3	$0	$75,500	$75,500
Cargo Tanks	19	$0	$9,000	$9,000
Stationary Sources				
Asbestos	4	$0	$29,750	$29,750
Refrigerant Management	3	$0	$337,600	$337,600
Sulfur Hexafluoride Gas Insulated Switchgear	2	$0	$325,000	$325,000
Diesel				
Diesel Fleet Investigations[c]	187	$0	$4,089,045	$4,089,045
Railroad MOU	5	$0	$2,000	$2,000
Ports and Marine	34	$0	$477,187	$477,187
Subtotal of Enforcement Cases	**339**	**$20,992,999**	**$10,397,662**	**$31,390,661**
Heavy-duty Diesel Field Citations	2,847	$0	$2,699,580	$2,699,580
Total Enforcement Actions	**3,186**	**$20,992,999**	**$13,097,242**	**$34,090,241**

[a] The amounts shown include penalties assessed for all Case Investigation and Resolution Programs and penalties collected, including delinquent account collections, for all Field Inspection Programs (see Appendix B).

[b] An aftermarket part is issued an Executive Order, providing exemption from California anti-tampering law, if the part satisfies an ARB engineering evaluation. For more information visit ARB's Aftermarket, Performance, and Add-On Parts Regulations webpage at http://www.arb.ca.gov/msprog/aftermkt/devices/amquery.php.

[c] This amount includes $3,000 collected from Sunrise Growers and $5,250 from Bernardini Enterprises, Inc. for violations of the Carl Moyer Program. This amount was returned to the local air districts as part of the settlement.

Appendix B
2015 Field Operations Statistics

Table B-1. Fuels, Cargo Tank, and Railroad and Marine Programs Statistics

Program Category		Product Samples Tested	Inspections Completed	Citations and NOVs Issued	Pending Citations and NOVs 01/01/15	Citation and NOV Dispositions			Pending Citations and NOVs 12/31/15	Penalties Assessed
						Rescinded, Compliant, or NFA	Closed	Total		
Fuels Programs	Refineries	407	64	4	6	0	2	2	8	$62,500
	Terminals	372	64	1	1	0	1	1	1	$13,000
	Service Stations	273	78	0	0	0	0	0	0	$0
	Marine Vessels	107	10	0	1	0	0	0	1	$0
	Railcars	3	3	0	0	0	0	0	0	$0
	RFG Certifications	n/a	3,348	0	0	0	0	0	0	$0
	Red-Dyed Diesel Fuel[a]	1	5,093							
	Other	344	171	0	0	0	0	0	0	$0
	Total - Fuels Programs	**1,507**	**8,831**	**5**	**8**	**0**	**3**	**3**	**10**	**$75,500**
Cargo Tank Programs	Cargo Tank Inspection Program		1,409	0	0	0	0	0	0	$0
	Cargo Tank Pressure Test Program		421	25	2	1	18	19	8	$9,000
	Annual Test Observation Program		68	0	0	0	0	0	0	$0
	Total - Cargo Tank Programs		**1,898**	**25**	**2**	**1**	**18**	**19**	**8**	**$9,000**
Railroad MOU Programs	Railroad Locomotive Inspection Program		1,863	2	14	11	5	16	0	$2,000
	Total - Railroad MOU Programs		**1,863**	**2**	**14**	**11**	**5**	**16**	**0**	**$2,000**
Marine Programs	Ocean-going Vessel Program		987	28	13	0	31	31	10	$396,187
	Commercial Harbor Craft Program		31	0	0	0	0	0	0	$0
	Shore Power Program[b]		252	0	0	0	0	0	0	$0
	Cargo Handling Equipment Program		32	0	6	1	2	3	3	$73,000
	TRU Program (see also Heavy-duty Diesel Field Inspection Programs)		253	0	10	0	8	8	2	$8,000
	Total - Marine Programs		**1,555**	**28**	**29**	**1**	**41**	**42**	**15**	**$477,187**
Total – Fuels, Cargo, RR & Marine Programs			**14,147**	**60**	53	13	67	80	33	$563,687

[a] The Board of Equalization resolves investigations of noncompliant red-dye samples taken by ARB.

[b] Shore Power fleet compliance is determined when ships have turned in their annual compliance reports and the fleet information is audited/verified against terminal wharfinger data. Inspections confirm whether a ship is shore power equipped and is plugged in.

Appendix B
2015 Field Operations Statistics *(continued)*

Table B-2. Heavy-duty Diesel Inspection Programs

	Program Category	Inspections Completed	Citations Issued	Ratio of Citations to Inspections	Pending Citations 01/01/15	Citations Dispositions			Pending Citations 12/31/15	Penalties Collected
						Rescinded, Compliant, NFA	Closed	Total		
Heavy-duty Diesel Inspection Programs	Heavy-duty Vehicle Inspection Program	7,244	107	1%	104	1	77	78	133	$45,450
	Emission Control Label Program	7,260	427	6%	530	9	347	356	601	$223,175
	Commercial Vehicle Idling Program	6,126	569	9%	820	12	283	295	1,094	$88,600
	Solid Waste Collection Vehicle Program	82	20	24%	45	15	34	49	16	$34,025
	Truck and Bus Program	6,113	2,138	35%	1,596	171	1,277	1,448	2,286	$1,594,435
	Tractor-Trailer (GHG) (SmartWay®) Program	61	0	0%	0	0	0	0	0	$0
	Drayage Truck Regulation Program	1,082	111	10%	261	4	78	82	290	$109,770
	Transport Refrigeration Unit Program	2,375	927	39%	1,949	26	377	403	2,473	$504,525
	Off-road Diesel Vehicle Program	510	82	16%	118	18	110	128	72	$94,000
	Diesel Exhaust Fluid /Selective Catalytic Reduction	307	0	0%	0	0	0	0	0	$0
	School Bus Idling Program	0	0	0%	0	0	0	0	0	$0
	Other Programs	12	0	0%	11	0	8	8	3	$5,600
	Total – Heavy-duty Diesel Field Program Inspections	**31,172**	**4,381**	**14%**	**5,434**	**256**	**2,591**	**2,847**	**6,968**	**$2,699,580**

Table B-3. Heavy-duty Diesel Inspection Program Totals

Total California Vehicles Inspected	**12,138**
Total Out-of-State Vehicles Inspected	**5,858**
Total Number of Vehicles Inspected	**17,996**

Appendix C
2015 Complaint Program Statistics

CalEPA and ARB Hotline Services 2015	Complaints Received	Complaints Referred to Air District	Investigated By ARB	Other Dispositions[a]	Total Complaints Resolved
Stationary Source Complaints	470	470			470
Vapor Recovery Complaints	310	310			310
School Bus Idling Complaints	29		29		29
Commercial Vehicle Idling Complaints	261		261		261
Smoking Vehicle Complaints	9,643		9,643		9,643
All Other Complaints[b]	1,015		297	718	1,015
Total Complaints	11,728	780	10,230	718	11,728

[a] Complaints referred to an external agency or those complaints without enough information to take action.
[b] Includes Weights and Measures complaints and those that fall outside the purview of ARB..

Appendix D
2015 Portable Equipment Registration Program Statistics

Table D-1. PORTABLE REGISTRATION – NEW APPLICATIONS					
	Application Count	Registration Unit Count	Unit Count By		
			Engine	Equipment	TSE[a]
Received	2,337	5,617	4,938	674	5
Issued	2,140	5,093	4,474	617	2
Deemed Incomplete [b]	470	940	813	127	0

[a] Tactical Support Equipment (TSE)

[b] Includes some applications from latter part of previous year – data based on date deemed incomplete.

Table D-2. PORTABLE REGISTRATION – RENEWAL APPLICATIONS				
	Application Count	Registration Unit Count	Unit Count By	
			Engine	Equipment
Invoices Mailed	5,502	10,598	9,162	1,436
Issued[a]	4,170	7,876	6,842	1,034
Not Renewed[b]	1,318	2,402	2,100	302
Deemed Incomplete	170	311	273	38
TSE Annual. Reporting[c]	68	68	3,678	

[a] Multiple unit renewal applications include units that are renewed and those that are not renewed.

[b] See above note.

[c] TSE has different requirements in that one application/registration is designated for each base and only total unit counts are required based on facility information as of 12/31/14 (end of previous calendar year).

Appendix E
2015 Enforcement Support Statistics

Table E.1 - Air District Variance Reviews	
Variances Reviewed	267
Notices Reviewed	349
Variances Returned for Rehearing	0

Table E.2 - Full Compliance Evaluation (FCE) Federal Data Reporting Services	
FCE Reports Received and Reviewed	44
FCE Reports Entered	25
FCE Reports Sent to Air Districts	0

Table E.3 - Federally Enforceable Violations Data Reporting Services	
Federally Enforceable Violation Reports Received	85
Federally Enforceable Violation Reports Entered	40
Federally Enforceable Violation Reports Sent to Air Districts	0

Table E.4 - Other Air District Enforcement Support Services	
Air District Investigation Reports Reviewed	0
Environmental Crimes Task Force Meetings Attended	0
New Surveillance Equipment Set-Ups	2

Table E.5- Perchloroethylene Program Services	
Inspections Completed	0
Complaint Investigations Completed	0
Violations resolved	0

Table E.6 - Asbestos Program Services	
Inspections Completed	18
Complaint Investigations Completed	4
Violations Referred to EPA	0
Training Sessions Conducted	4
Task Force Workshops Conducted	2

Table E.7- Landfill Methane Gas Program Services	
Inspections Completed	0
Complaint Investigations Completed	0
Violations resolved	0

Table E.8 – Refrigerant Management Program Services	
Inspections Completed	59
Complaint Investigations Completed	2
Violations resolved	3
Training Sessions Conducted	2

Table E.9 - Sulfur Hexafluoride Reduction Program Services	
Inspections Completed	1
Complaint Investigations Completed	0
Violations resolved	2
Training Sessions Conducted	0

Table E.10 - Stationary Source and Equipment Inspection Services	
Stationary Source Inspections	5
Stationary Diesel Equipment Inspections	0
Total Inspections	5

Appendix F
2015 Training Program Statistics

California Based Classroom Training Programs	No. of Classes	Students Per Class		
		Classroom	Webcast	Total
100 Series Courses				
100 - Fundamentals of Enforcement (FOE)	5	158	0	158
100A – FOE- Visible Emissions Evaluation (VEE) Online Training	1	0	372	372
100B – FOE-VEE Field Training	5	108	0	108
100.1 - Visible Emissions Evaluation (Day) Certification	43	1,798	0	1,798
100.2 - Visible Emissions Evaluation (Night) Certification	6	101	0	101
102 – Air Quality Training Program (AQTP) (Online)	1	0	658	658
175W -- Smoke Management Webinar	1	0	42	42
190 – Air Academy Online Training (AAOT) (Online)	1	0	344	344
197 - Basics of New Source Review (NSR) and Title V Permitting	1	27	0	27
200 Series Courses				
202 - Health & Safety	3	47	0	47
215 - Particulate Matter (PM) Control Technology	8	181	0	181
216 - Volatile Organic Compounds (VOC) Control Technology	8	187	0	187
217 – Oxides of Nitrogen (NOx) Control Technology	8	201	0	201
231 - Coatings: Auto, Metal Parts & Products	2	24	0	24
251 - Asbestos Demolition & Renovation – Regulator Training	3	40	0	40
252 - Fugitive Dust	2	22	0	22
260 - Oil and Gas Extraction and Processing	6	132	0	132
267 – In-Station Diagnostics	4	32	0	32
268 - Above Ground Storage Tanks	3	47	0	47
272 - Stationary Gas Turbines & Power Plants	3	101	0	101
273 - Industrial Boilers	3	93	0	93
290.7 - Chrome Plating ATCM: Certification (Recorded)	1	0	122	122
296 - Health Risk Assessment & Dispersion Modeling	9	113	0	113
300 Series Courses				
300 - Fundamental Inspector Course (FIC) - (Online)	1	0	579	579
302 - Portable Equipment Registration (PERP)/Portable Diesel Engine ATCM	9	268	0	268
310 - CalEPA Basic Inspector Academy	11	242	0	242
321 - Introductory Variance/Hearing Board Workshop	2	22	0	22

Appendix F
2015 Training Program Statistics *(continued)*

California Based Classroom Training Programs	No. of Classes	Students Per Class		
		Classroom	Webcast	Total
300 Series Courses				
330 – CAPCOA Permitting Staff Development Class	1	30	0	30
340 - Gasoline Facilities Phase I and II Seminar	6	92	0	92
396 - HARP2	3	53	0	53
400 Series Courses				
401 - Continuous Emissions Monitoring	9	246	0	246
TOTAL	**169**	**4,365**	**2,117**	**6,482**

Appendix G
Alphabetical Listing of ARB Programs[1]

Mobile Source Programs	Additional Information
1. Aftermarket Parts Program	http://www.arb.ca.gov/enf/othermbl.htm#obdc
2. Commercial Vehicle Idling Program	http://www.arb.ca.gov/enf/diesel.htm#cmvidling
3. Compression Ignition Engine Program	http://www.arb.ca.gov/msprog/onroadhd/onroadhd.htm
4. Dealership and Fleet Tampering Program	http://www.arb.ca.gov/enf/othermbl.htm#tdc
5. Drayage Truck Program	http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm
6. Emission Control Label Program	http://www.arb.ca.gov/enf/diesel.htm#ecl
7. 49-State Vehicle Program	http://www.arb.ca.gov/enf/othermbl.htm#icv
8. Heavy-duty (Diesel) Vehicle Inspection Program	http://www.arb.ca.gov/enf/hdvip/hdvip.htm
9. Large Spark-ignition Engine Program	http://www.arb.ca.gov/msprog/offroad/orspark/orspark.htm
10. Marine Fuel Tank Program	http://www.arb.ca.gov/msprog/offroad/recmarine/recmarine.htm
11. New Motor Vehicle and Engine Program	http://www.arb.ca.gov/msprog/onroad/cert/cert.php
12. Off-Highway Recreational Vehicle Program	http://www.arb.ca.gov/msprog/offroad/orrec/orrec.htm
13. Off-road Heavy-duty Diesel Vehicle Program (Construction)	http://www.arb.ca.gov/msprog/offroad/orcomp/orcomp.htm
14. Outboard Engine Program	http://www.arb.ca.gov/msprog/offroad/recmarine/background.htm
15. Periodic Smoke Inspection Program	http://www.arb.ca.gov/enf/hdvip/hdvip.htm
16. Portable Fuel Container Program	http://www.arb.ca.gov/enf/oasse.htm#port
17. Public Agency and Utility Fleet Program	http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm
18. Refrigerant Canister Program	http://www.arb.ca.gov/cc/hfc-mac/hfcdiy/hfcdiy.htm
19. School Bus Idling Program	http://www.arb.ca.gov/toxics/sbidling/sbidling.htm#Enforcement
20. Selective Catalytic Reduction Program	http://www.arb.ca.gov/msprog/cihd/cihd.htm
21. Small Off-road Engine Program	http://www.arb.ca.gov/msprog/offroad/sore/sore.htm
22. SmartWay® Truck Technology Program	http://www.arb.ca.gov/cc/hdghg/hdghg.htm
23. Solid Waste Collection Vehicle Program	http://www.arb.ca.gov/enf/diesel.htm#swcv
24. Truck and Bus Program	http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm
25. Transport Refrigeration Unit Program	http://www.arb.ca.gov/diesel/tru/tru.htm
26. Urban Transit Bus and Transit Fleet Vehicle Program	http://www.arb.ca.gov/msprog/bus/bus.htm
27. Verified Diesel Emission Control Strategies Program	http://www.arb.ca.gov/diesel/verdev/verdev.htm

[1] The above listing is not complete and also excludes a number of enforcement-related services provided by Enforcement Division. For information about programs not listed, please visit the Enforcement Programs website at http://www.arb.ca.gov/enf/enf.htm.

Appendix G
Alphabetical Listing of ARB Programs *(continued)*

Other Programs	Additional Information
1. Aerosol Coating Products Program	http://www.arb.ca.gov/consprod/consprod.htm
2. Asbestos National Emissions Standards Program	http://www.arb.ca.gov/enf/asbestos/asbestos.htm
3. Cargo Tank Program	http://www.arb.ca.gov/enf/cargotanks/cargotanks.htm
4. Complaint Hotline Services	http://www.arb.ca.gov/enf/complaints/complaints.htm
5. Composite Wood Products Program	http://www.arb.ca.gov/enf/compwood.htm
6. Consumer Products Program	http://www.arb.ca.gov/enf/consprod.htm
7. Indoor Air Cleaning Device Program	http://www.arb.ca.gov/research/indoor/aircleaners/certified.htm
8. Fuels Program	http://www.arb.ca.gov/enf/fuels/fuels.htm
9. Fuel Distributor Registration Program	http://www.arb.ca.gov/enf/fuels/distcert.htm
10. Harbor Craft Program	http://www.arb.ca.gov/ports/marinevess/harborcraft.htm
11. Landfill Methane Gas Program	http://www.arb.ca.gov/cc/landfills/landfills.htm
12. Ocean-going Vessel Program	http://www.arb.ca.gov/enf/goodsmvmt/goodsmvmt.htm#ogvi
13. Oxygenate Blender Registration Program	http://www.arb.ca.gov/enf/fuels/oxyblend.htm
14. Perchloroethylene Program	http://www.arb.ca.gov/toxics/dryclean/dryclean.htm
15. Port/Rail Cargo Handling Equipment Program	http://www.arb.ca.gov/ports/cargo/cargo.htm
16. Port/Rail Transport Refrigeration Unit Program	http://www.arb.ca.gov/enf/diesel.htm#tru
17. Railroad MOU Program	http://www.arb.ca.gov/enf/goodsmvmt/goodsmvmt.htm#mou
18. Red-Dyed Diesel Fuel Program	http://www.arb.ca.gov/enf/advs/advs124.pdf
19. Training Program	https://ssl.arb.ca.gov/training/training.htm
20. Reformulated Gas Certification Program	http://www.arb.ca.gov/fuels/gasoline/premodel/premodel.htm
21. Refrigerant Management Program	http://www.arb.ca.gov/cc/rmp/RMP_Program_FAQ.pdf
22. Sulfur Hexafluoride Reduction Program	http://www.arb.ca.gov/cc/sf6elec/sf6elec.htm
23. Vapor Recovery Program	http://www.arb.ca.gov/vapor/vapor.htm
24. Visible Emissions Evaluation Program	https://ssl.arb.ca.gov/training/courses.php?course=100.1

Appendix H
2015 Enforcement Settlement Agreements

Most settled cases may be viewed on ARB's website at http://www.arb.ca.gov/enf/casesett/casesett.htm. A table summarizing 2015 Case Settlement penalties assessed and contributions to SEPs is provided online with this report but, due to length, is not contained in the hardcopy release of this report. An electronic version of the Enforcement Division's annual report may be accessed online at http://www.arb.ca.gov/enf/reports/reports.htm.

Appendix I
2015 Diesel Programs Compliance Calculations

California Registered Heavier[a] Diesel Truck Counts GVWR > 26,000 (excludes IRP[b])	
Pre-1995MY	30,028
MY1995 – MY1996	9,837
MY1997 – MY2000	22,171
MY2001 – MY2005	25,248
MY2006 – MY2007	14,873
MY2008 – MY2010	30,274
MY2011 +	41,629
Total All MY's	174,060
Pre-2008MY Total	102,157

IRP Registered Heavier Diesel Truck Counts GVWR > 26,000	
Pre-1995MY	12,180
MY1995 – MY1996	10,926
MY1997 – MY2000	59,026
MY2001 – MY2005	110,545
MY2006 – MY2007	138,077
MY2008 – MY2010	109,936
MY2011 +	614,149
Total All MY's	1,054,839
Pre-2008MY Total	330,754

[a] Heavier trucks refer to trucks with GVWR >26,000 pounds for purposes of the Truck and Bus Regulation.
[b] International Registration Plan (IRP)

Summary of TRUCRS data[a]

Retrofits	Ag 15K	Ag 20K	Ag 25K	Ag Specialty	Low NOx	Work Truck	Low Use	Log Truck	Total
50,000	2,123	1,561	242	1,684	2,595	3,415	23,422	619	85,661

[a] Numbers of trucks with extensions, provisions, exemptions and retrofits, adjusted for maximum number of retrofits sold in California, per the Manufacturers of Emissions Controls Association.

Heavier Vehicle Calculations:

1. As of 2016, all engines in heavier vehicles (exceeding 26,000 pounds gross vehicle weight rating) which are not equipped with a diesel particulate filter must register in the Truck and Bus Registration, Upload, and Compliance Reporting System (TRUCRS), which is maintained by ARB.

2. Calculate TRUCRS noncompliance rate for IRP registered and California registered trucks without a VIN match to TRUCRS data:
    a. Noncompliance rate for IRP registered and CA registered combined is calculated as follows:
    b. Total pre-2008 model year trucks is 330,754 + 102,157 = 432,911 noncompliant trucks
        i. 432,911 - 85,661 (Total TRUCRS exemptions) = 347,250 potentially noncompliant trucks
    c. Noncompliance rate for IRP and CA registered is:
        i. (347,250/(1,054,839 + 174,060)) * 100 = 28%
    d. Compliance rate for IRP and CA registered is:
        i. (881,649/(1,045,839 + 174,016)) * 100 = 72%