





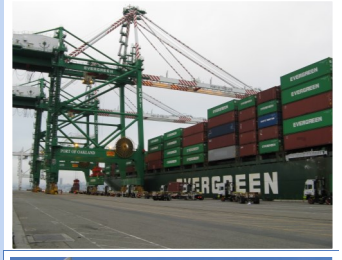


2016
ENFORCEMENT REPORT

June 2017

California Environmental Protection Agency

Air Resources Board

To learn more about ARB Enforcement Programs or to file an air pollution complaint, please visit http://www.arb.ca.gov.

To register a complaint by phone, please call the Statewide Hotline at 800-952-5588 or the Vehicle Complaint Hotline at 800-END-SMOG (800-363-7664).


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Executive Summary

California is one of the most vibrant, diverse, and innovative places in the world. With a gross domestic product of $2.6 trillion dollars, California represents 14% of the national economy; if California were its own country, it would be the sixth largest economy in the world. With 40 million people and 27 million vehicles, achieving clean air and reducing carbon emissions is a challenge. The California Air Resources Board (CARB or Board) adopts regulations to achieve air quality standards and protect public health.

California at a Glance

- ✓ 40 million residents
- ✓ 18 million workers
- ✓ $2.6 trillion GDP
- ✓ 27 million vehicles
- ✓ 970 million vehicle miles traveled daily
- ✓ 49 million gallons of gasoline and diesel fuel burned daily

The goal of CARB enforcement programs is to achieve compliance with each and every regulation the agency adopts. To achieve this goal, CARB pursues cases of non-compliance, brings those companies into compliance, and assesses penalties that act as a deterrent to future non-compliance. 2016 was a very successful year for CARB enforcement.

2016 and early 2017 marks the closing of the largest enforcement action in CARB history – Volkswagen. Volkswagen and sister companies Audi and Porsche installed defeat devices in 85,000 diesel-fueled vehicles sold in California, although these vehicles did not comply with emissions standards. CARB engineers identified these illegal actions, and the resulting enforcement settlement is historic in scope: $25 billion in civil and criminal penalties nation-wide and six company staff indicted for criminal acts. The resulting settlement agreement negotiated between the companies, consumers, the United States, and CARB addresses each of the illegal vehicles, compensates consumers for misleading them, and mitigates harm to the environment and to zero emission vehicle markets. As a condition of settlement here in California, the companies will pay more than $1.4 billion in mitigation and investments that will reduce emissions and support zero-emission technologies so critical to California's low carbon and clean air future.

In addition to Volkswagen, CARB settled 220 cases in more than 15 different regulatory programs, assessing more than $13 million in penalties, and closed 2,900 citations, collecting an additional $2.8 million in penalties.

In 2016 staff initiated a policy to develop new SEPs benefiting disadvantaged communities. This policy is being implemented now, in 2017. In 2016, violators paid more than $1.8 million of penalty funds to support existing Supplemental Environmental Projects (SEP) including over $1,000,000 to the School Bus SEP to upgrade school buses, more than $722,000 to the California Council on Diesel Education and Training for funding equipment and scholarships at community colleges to train diesel mechanics

on proper maintenance of diesel engines, and $35,343 for training students on small off-road engine repair.

CARB enforcement programs issue permits and registrations, provide training and support to local air districts for stationary source program implementation and enforcement, address complaints from the public, and provide compliance assistance. Each year these programs evolve and improve. 2016 was a year of innovation, with significant program improvements made to diesel program enforcement, complaint processing, portable equipment registration, supporting disadvantaged communities, and developing new SEP programs. Staff focuses on ensuring that regulatory compliance rates are high and targeted emission reductions are achieved, especially as regulatory implementation deadlines established in the state implementation plan are reached. We also accelerated efforts to assess compliance rates in key programs, both to help focus resources and to provide a metric for assessing program effectiveness. Where results are available, they are presented in this report.

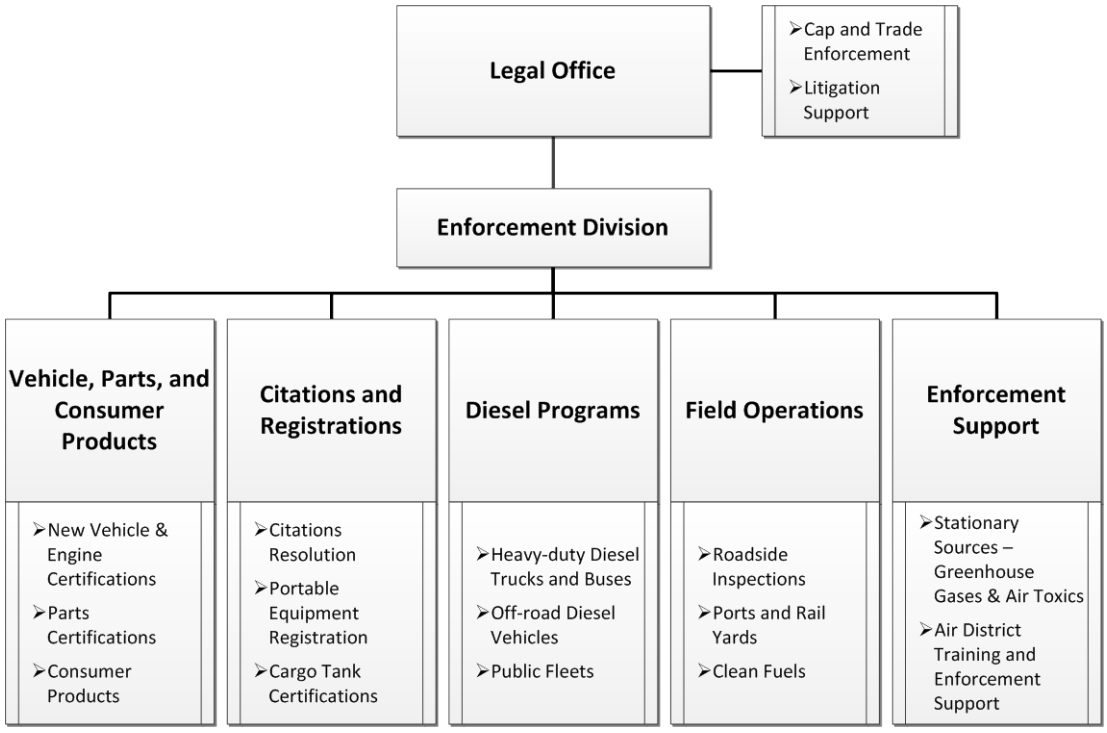
Overview of Enforcement Programs

The Board 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. To carry out its responsibilities, CARB 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.

An active and effective enforcement program at CARB is led by the Enforcement Division (ED), which works closely with CARB's regulatory program staff and Legal Office to identify and resolve violations. Smaller scale violations are addressed through citations and notices of violation issued in the field. Larger scale violations are resolved through negotiated settlement agreement with the responsible party where the responsible party agrees to comply with regulatory requirements and to pay a penalty for non-compliance. When a settlement is not possible CARB refers cases to the Office of the Attorney General for prosecution.

The Enforcement Division is currently divided into five branches, each of which is described in greater detail, below, and shown in Figure 1.

Figure 1 – Enforcement Division Structural Overview



ED's Vehicle, Parts, & Consumer Products Enforcement Branch works closely with two other divisions, the Emissions Compliance, Automotive Regulations and Science Division and Air Quality Planning and Science Division to ensure vehicles, engines, and consumer products that are sold, offered for sale, advertised for sale, and/or manufactured for sale in California meet CARB's stringent standards designed to protect public health. The Branch is comprised of 27 full and part-time staff each focusing on a different subset of certification-based regulatory requirements. Enforcement efforts focus on vehicles, engines, after-market parts, and consumer products ranging from cosmetics to windshield wiper fluids, solvents/cleaners, aerosol spray cans, furniture, composite wood flooring products, and air cleaners. In 2016 the Branch closed 80 cases and citations, assessing more than $6.9 million in penalties. This report describes key achievements in 2016, and in particular describes our consumer product enforcement programs.

The Diesel Programs Enforcement Branch (DPEB), which works closely with the Mobile Source Control Division, is comprised of 36 staff and is responsible for enforcing CARB regulations designed to reduce emissions from on-road and off-road diesel-powered engines operating throughout the State. These regulations generally require fleets to upgrade vehicles by installing a verified diesel emission control strategy (VDECS) or by replacing the older vehicle with a newer vehicle equipped with modern emissions control equipment. DPEB enforces regulations that apply to mobile diesel vehicles and equipment including trucks, construction equipment, and transportation refrigeration units. Staff also enforces rules designed to ensure that all engines and associated emission control components are properly maintained, and that any VDECS is installed in accordance with CARB regulations. DPEB primarily conducts enforcement through investigations of fleets of on-road vehicles and off-road equipment, companies that hire and dispatch fleets, and VDECS installers suspected of not complying with CARB regulations. In 2016, the Branch closed 120 cases, bringing each of the involved fleets into compliance with the Truck and Bus regulation, Periodic Smoke Inspection Program, and other CARB diesel regulations, and assessing nearly $3.8 million in penalties. Beyond that, the Branch is continuing to refine enforcement procedures; this report describes those efforts as they are currently being implemented.

The Field Operations Branch (FOB) works closely with the Transportation and Toxics and the Industrial Strategies Divisions to focus on diesel vehicle and fuels enforcement primarily, but not exclusively, in disadvantaged communities. Comprised of 26 staff, enforcement efforts are focused on rules applying to trucks, off-road equipment, and ships at ports, rail yards, and on highways and in disadvantaged communities where regulated vehicle and equipment operates. During the development of CARB's Sustainable Freight Strategy in 2014, CARB established a goal to conduct at least 50 percent of all diesel field inspections in

disadvantaged communities. In 2016, we met that goal, conducting 52 percent of field inspections in disadvantaged communities. To help target enforcement efforts, in 2015 staff established an environmental justice team that attends local community meetings to identify priorities for enforcement. That team is managed through the FOB, and regularly attends community meetings in Brawley and Coachella, Los Angeles, Bakersfield, Fresno, and Oakland. In 2016, the Branch closed 22 cases, issued 4,700 citations, and assessed nearly $500,000 in penalties and citations. This report highlights achievements in 2016, and key challenges CARB is working to address.

The Citations and Registrations Enforcement Branch is comprised of 35 staff that issue portable equipment registrations, issue cargo tank certifications, process citations issued by other Branches; and also manage mobile and stationary source complaints and tips from the public. In 2016, the Branch issued approximately 10,300 portable engine registrations, issued about 5,700 cargo tank certifications, processed 4,700 new citations issued by field staff, closed 2,863 citations for $2.8 million in penalties, and processed close to 15,000 complaints, a volume comparable to the largest air districts in California. In 2016, staff worked with industry and air district stakeholders to develop potential amendments to regulations affecting portable equipment. Those amendments are expected to be considered by the Board in the fall of 2017.

The Enforcement Support Branch consists of 23 staff focused on assuring compliance with stationary source regulations in California. Because the primary responsibility for stationary source enforcement in California is handled by California's 35 local air pollution control agencies, the Branch focuses on collaborating with these agencies to assure effective local enforcement programs. The Branch achieves this goal by providing a comprehensive training program to ensure local air district staff has a broad and deep understanding of regulatory requirements, by supporting local district enforcement efforts when requested, and by directly enforcing stationary source rules adopted by CARB to reduce emissions of greenhouse gases. In 2016, the Branch offered 134 classes attended by 5,430 students, and closed 18 cases assessing more than $800,000 in penalties.

2016 Accomplishments

Vehicle, Engine, and Parts Certification Regulations

Certification requirements are the cornerstone of CARB efforts to control emissions, because they establish the emissions limits that must be met, and ensure emissions remain low over the full useful life of a vehicle, engine, or part. Vehicles and engines sold in California are required to be certified to model year emissions standards and demonstrate durability. 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 CARB and issued an aftermarket part Executive Order exempting that part from California's anti-tampering laws.

Automobile manufacturers certify a vehicle by documenting that their vehicle meets certification requirements in a comprehensive application. The documentation is based on testing emissions from prototype vehicle(s) on specified dynamometer-based duty cycles. Emissions testing results from product testing are documented, in detail, in annual certification applications. It is illegal to sell or offer to sell new vehicles in California, without meeting California emission standards and receiving CARB certification. The certification process relies on engine and vehicle manufacturers to submit certification applications to CARB that are accurate and complete.

Volkswagen, Audi and Porsche

In September 2015, based on several years of intensive investigation by CARB staff, Volkswagen and Audi admitted that their certified 2009 through 2015 model year, 2.0 liter, diesel passenger cars violated certification requirements because illegal defeat devices used computer software to switch between different emission calibrations maps depending on whether the car was undergoing certification testing or was driving normally on the road. Additional information established that 3.0 liter diesel engines were also sold with defeat devices. These violations caused very high emissions of oxides of nitrogen (NOx) throughout the State and represented a serious breach of trust to customers who believed they were purchasing clean diesel vehicles.

These issues are now largely resolved through a series of settlement agreements established between CARB, the U.S. Environmental Protection Agency (U.S. EPA), U.S. Department of Justice, the California Office of the Attorney General, consumer groups, Volkswagen, and Audi in 2016 and

early 2017. The settlement agreements address the illegal vehicles, compensate consumers, protect the environment and public health, mitigate harm to the zero emission vehicle market, compensate CARB for investigation costs and assess an appropriate penalty. The combined national settlement is the largest in the history of air quality enforcement, totaling at least $25 billion in company expenditures nationwide. Elements include:

- **Addressing the vehicles –** The companies will offer to buy back or modify (to an appropriate level of emissions control going forward) 85,000 vehicles in California. The consent decrees establish stringent and enforceable emissions requirements that all illegal vehicles remaining on the road must meet over their remaining lifetime.

- **Compensating consumers –** The settlement agreement requires compensation to vehicle owners for Volkswagen's, Audi's, and Porsche's illegal actions whether they are emissions-fixed or bought back. Compensation ranges from $5,100 to $44,176 per vehicle depending on the vehicle type, age, and mileage.

- **Protecting the environment –** Under the agreement, California receives about $423 million for mitigation projects, plus $25 million to be deposited directly into the Air Pollution Control Fund for zero emission vehicle (ZEV) related projects for low-income Californians, such as the Enhanced Fleet Modernization Program.

- **Mitigating harm to the zero emission vehicle market –** Over ten years, $800 million will be invested by VW in California to not only enhance zero emissions vehicle infrastructure, but also enhance accessibility to zero emission vehicles and demonstrate technology deployments in a "green cities" concept. CARB approval is needed for these investment plans.

- **Assessing penalties –** Under the settlement agreement, Volkswagen must pay $93.8 million in penalties for deterrence and $60 million for CARB's testing and implementation costs.

CARB was the agency responsible for uncovering Volkswagen's illegal actions. In addition to the above compensation and mitigation costs, VW will pay more than $4.3 billion in civil and criminal fines nationwide to address the scandal, and six company employees have been indicted on criminal charges.

In 2016, CARB announced in a letter that it would investigate all diesel vehicle manufacturers for violations similar to those committed by Volkswagen, Audi, and Porsche. While many manufacturers have passed these screening tests, several have not.

In January 2017, CARB issued a Notice of Violation to FCA US LLC, Fiat Chrysler Automobiles N.V., and Chrysler Group LLC (collectively FCA), as the agents responsible for all certification applications submitted to CARB for violations associated

with approximately 14,000 model year (MY) 2014 through 2016, 3.0 liter diesel powered vehicles. FCA violated California law by failing to disclose auxiliary emission control devices (AECD) for each model year vehicle in their certification applications. Some of the undisclosed AECDs shut off portions of the emission control system under specific conditions that lead to substantial excess NOx emissions, yet are not triggered during regulatory certification cycles. CARB staff believes some of these undisclosed AECDs are potential defeat devices. CARB is working with U.S. EPA, the U.S. Department of Justice, the California Office of the Attorney General and FCA to address these violations. Further investigations into the extent of potential violations with other companies are on-going.

Other Vehicle and Parts Certification Investigations

The investigations into Volkswagen / Audi / Porsche, and FCA are unprecedented in scope and extent of severity of violations. Most enforcement efforts have historically focused on vehicles, engines, and parts are for more common types of violations such as failure to certify, or sales of racing parts used in non-racing applications. CARB also pursued these more common types of cases in 2016, including:

- **American Honda Motor Co., Inc. –** In August 2016, American Honda Motor Co., Inc., (Honda) settled its case with CARB for importing and delivering uncertified vehicles into California in violation of State law[1]. These vehicles included off-highway motorcycles and all-terrain vehicles that were equipped with engine control modules containing an alternate ignition map that was not previously disclosed. Honda also sold, offered for sale, and/or advertised for sale in California, aftermarket critical emission control parts associated with these vehicles prior to obtaining an exemption from CARB pursuant to California Code of Regulations, title 13, section 2222 et seq.

  Staff entered into a settlement agreement in the amount of $1,037,100 for the uncertified vehicles from 2012-2014 and associated modification part kits. Of this amount, $259,275 was allocated to the School Bus SEP. Honda fully cooperated with CARB in resolving this matter by self-disclosing the facts and circumstances regarding the vehicles in this case.

- **LeMans Corporation –** In January 2016, LeMans Corporation (LeMans) agreed to pay $627,250 for violating California's aftermarket parts regulations. LeMans sold, offered for sale, and/or advertised for sale in California, aftermarket critical emission control parts. These parts modified or altered the original design or performance of the motor vehicle pollution control device or system. Upon receiving an administrative subpoena from CARB, LeMans immediately halted all performance parts sales and transactions in California. LeMans promptly and fully cooperated with CARB to resolve the violations at hand. LeMans paid $470,437.50 to the California Air Pollution Control Fund and $156,812.50 to the School Bus SEP.

[1] See Health and Safety Code sections 43151-43153.

- **Midwest Can Company –** In March 2016, Midwest Can Company (Midwest Can), located in Franklin Park, Illinois, agreed to pay $300,000 to the California Air Pollution Control Fund and $100,000 to the School Bus SEP for selling gas cans that failed to meet performance standards required under title 13, California Code of Regulations, section 2467. Midwest fully cooperated with CARB to correct the manufacturing defect and return to providing compliant products.

- **Derive Systems, Inc. –** Derive Systems, Inc., the parent company of performance part manufacturer Bully Dog Technologies, LLC (Bully Dog), agreed to settlement terms with the Air Resources Board (CARB) in September 2016 to resolve the sale of diesel and gasoline aftermarket parts illegally sold by Bully Dog in California during the 2010 through 2012 calendar years. The subject parts replaced original emission components on cars and trucks, such as the intake and exhaust systems, or employed different engine calibration software to increase vehicle power. However, Bully Dog did not first provide these parts to CARB to evaluate them for continued emissions compliance and consequently be exempted from California's anti-tampering laws prior to them being be sold and installed on consumer vehicles.

  Derive Systems, Inc. fully cooperated with CARB during the entirety of the investigation, and provided all requested information promptly. CARB consequently resolved the case with the company for a total civil penalty $281,840, with $70,460 of this total being directed toward the School Bus SEP. This penalty applies to 1,084 illegal parts. The company also agreed to institute a voluntary buyback program to recover these parts from its distributors, dealers, and customers at no cost to them.

Consumer Products Enforcement Programs

CARB's consumer products programs achieve dramatic reductions in reactive organic pollutants to achieve ozone air quality standards, protect public health from exposure to toxic air contaminants, and reduce greenhouse gas emissions. CARB has enforced statewide regulations governing consumer products for over 15 years. Three main types of consumer products are regulated: chemically formulated products, composite wood products, and indoor air cleaning devices. A summary of each of these programs and CARB's significant accomplishments during 2016 is provided below.

Chemically Formulated Consumer Products Program

Beginning in 1989, CARB implemented regulations that limit the volatile organic compound (VOC), greenhouse gas and toxic air contaminants content of over 160 categories of chemically formulated consumer products. In 2016, consumer products accounted for about 12 percent of total VOC emissions statewide. Current regulation of the consumer products source category has resulted in a projected reduction of over 209 tons per day of VOC emissions. In order to ensure these reductions are maintained, CARB maintains a focused, active, and effective enforcement program.

Figure 2 – Consumer Products Enforcement Program Annual Case Settlements*

* In 2011, three consumer products cases were settled with a total of $213,000 in penalties collected. The total number of cases resolved was reduced that year due to delays caused by the implementation of Health and Safety Code section 39619.7.

Staff enforces these regulations by purchasing products, and submitting to the laboratory for testing. Products that exceed regulatory limits are targeted for enforcement. Staff is experienced in identifying non-compliant products in the field. Since 2006, the program has purchased and tested over 18,000 product samples, with over 45 percent of these exceeding the regulatory standard upon testing. Since 2006, the consumer products program has successfully settled over 525 cases cumulatively totaling in excess of $18 million. Staff generally closes more than 30 cases per year, assessing more than $1 million in penalties, as shown in Figure 2. In 2016, staff closed 37 cases assessing $1.3 million in penalties.

Notable 2016 cases include:

- **Big Lots Stores, Inc. –** In June 2016, staff settled a case with Big Lots Stores, Inc., for selling four types of non-compliant Automotive Windshield Washer Fluid products in its California stores. The total excess VOC emissions from the sales of these products between September 2013 and November 2014 were approximately 5.0 tons. Since the case involved repeat violations of the regulation, the case was settled for $250,000.

- **Target Corporation –** In March 2016, staff settled a case with Target Corporation for selling one product that was subject to the Automotive Windshield Washer Fluid category. The excess VOC emissions for the sales of this product were approximately 0.045 tons; however, due to the repeat nature of the violation, the penalty was assessed at $1,000 per day for the 56 days the product was sold, plus investigative costs. The company paid $58,300 to settle the case.

- **Unilever –** In June 2016, a case was settled with Unilever for manufacturing and selling a Hair Styling Product that exceeded the 6 percent VOC limit for that category. Excess emissions in this case were approximately 9.81 tons, and the company paid $199,500 to settle the case.

- **High Ridge Brands –** In October 2016, a case was settled with High Ridge Brands the sale of two non-compliant Hair Styling Products. Sales of these two products resulted in 9.04 tons of excess VOC emissions and the company paid $127,050 to settle the case.

- **Vi-Jon, Inc., Garfield Beach CVS, L.L.C., Longs Drugs Stores California, L.L.C., and Rite Aid Corporation –** In November 2016, two cases were settled involving non-compliant Hair Styling products manufactured by Vi-Jon, Inc. These products were manufactured as private label products marketed and sold by Rite Aid and CVS/Longs. The cases collectively resulted in 8.9 tons of excess VOC emissions, and were settled for $199,500.

Composite Wood Program

The Composite Wood Airborne Toxic Control Measure (ATCM) established in 2008 is designed to minimize exposure to formaldehyde by regulating emissions from hardwood plywood, particleboard, and medium density fiberboard and finished goods containing these wood based products. California has identified formaldehyde as a toxic air contaminant (TAC) and human carcinogen with no known safe level of exposure. The ATCM reduces formaldehyde emissions, total public exposure, and excess cancer risk in California through stringent emission requirements that must be met by panel manufacturers, importers, distributers, fabricators, and retailers. Panel manufacturers must certify through CARB-approved third party certifiers that the materials they

produce meet the required emission limits, and all regulated entities must keep records to document how they are using compliant products.

Staff conducts inspections and purchases samples that are tested to determine compliance. When violations are identified, staff notifies the responsible party, often by issuing a notice of violation or a cease and desist letter, and then works with responsible party to resolve the violations. Staff closed its first composite wood case in 2016 with Lumber Liquidators. Lumber Liquidators is a company that imports and sells wood flooring at more than 40 stores throughout California. The company sells wood flooring containing composite wood products subject to the regulation. Enforcement staff conducted inspections from September 2013, to May 2015, and found flooring samples that exceeded the State formaldehyde limits. CARB notified Lumber Liquidators, Inc., of the violations, and settled the case for $2,500,000. This was the first composite wood program case settled by CARB.

As important as the penalty, the settlement agreement required Lumber Liquidators to implement for a period of 12 months a Voluntary Measures and Research Program requiring the company to conduct regular audits of existing and new suppliers and randomly test composite core samples in accordance with CARB's Standard Operating Procedure for Preparing Finished Goods Samples. This program has served as a model for industry and consists of three parts:

- **Fabricator Laminate Evaluation and Audit Program (LEAP) –** LEAP is a ten-step audit program that applies to all existing and new fabricators supplying laminate products to Lumber Liquidators, Inc. The scope of the audits performed are designed to identify priority or high risk fabricators through an evaluation of each fabricator's understanding of requirements set forth in the Composite Wood Regulation, its compliance history and records relating to the use of compliant raw materials, and its employee training and awareness programs relating to the Composite Wood ATCM. Audits are performed periodically and frequency is based on the outcome of findings through LEAP.

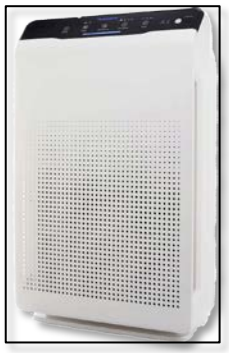
- **Composite Core Testing Research Program and Finished Goods Testing Program (Testing Research Program) –** The Testing Research Program applies to priority or high risk fabricators that are identified through LEAP and requires Lumber Liquidators, Inc., to collect composite core material samples entering the hot press production phase of the finished good manufacturing process and submit them to a third party laboratory for emissions testing. If testing indicates that the sample does not comply with the Composite Wood ATCM, Lumber Liquidators, Inc., will not accept products from the production run in question until the issue is resolved and compliance is confirmed through further testing.

- **Enhanced Regulatory Collaboration –** Through enhanced regulatory collaboration, Lumber Liquidators, Inc., has agreed to share information regarding the suppliers subject to their Testing Research Program and its findings with CARB, and make recommendations that may assist CARB in future modifications to the sample preparation procedure and third party certifier's certification process.

CARB is actively enforcing the composite wood regulation. In addition to product testing, staff has broadened enforcement activities to include detailed, recordkeeping audits of finished goods retailers in California to trace records back through a retailer's supply chain and verify compliance with the composite wood ATCM recordkeeping requirements. Beyond Lumber Liquidators, we recently settled two additional cases with other responsible parties in 2017. Additional investigations are underway.

Indoor Air Cleaning Device Program

Manufacturers of air cleaning devices, including ozone-generating devices and electrostatic precipitator devices, sold or advertised for sale in California, after October 18, 2010, must certify, using independent laboratory testing, that their products meet an ozone emission limit of 0.050 parts per million and comply with specified labeling and notification requirements.



In 2016, staff settled one case with Atlas California Trading for selling nine models of non-certified indoor air cleaning devices that are subject to the regulation. Atlas California Trading also failed to notify its distributors and resellers of the regulation as required, as well as failed to display proper warnings on its web page that offered the product for sale. Atlas California Trading paid $24,000 in penalties to settle the case.

The internet is becoming a major market for these products; Enforcement staff is working with major online retailers to block sales of non-compliant air cleaning devices, while continuing its active enforcement of vendors selling non-compliant units.

Diesel Enforcement Programs

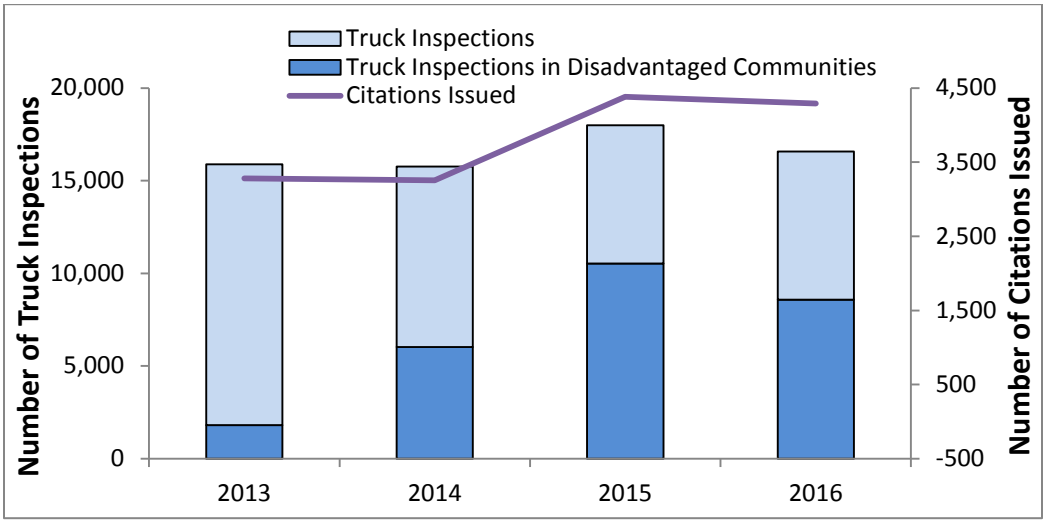
California identified particulate matter (PM) emissions from diesel-powered engines as a toxic air contaminant based on its potential to cause cancer, premature death, and other health problems. CARB has adopted regulations to control diesel PM emissions and is focused on achieving compliance with diesel regulation requirements across the full range of regulated vehicles and equipment, especially in communities near highways, ports, and other high traffic areas that are disproportionally affected by diesel PM emissions. Enforcement efforts use two broad methods: field enforcement and audits.

Field Enforcement

Staff inspects a wide variety of vehicles and equipment in the field for compliance with regulatory requirements. Depending on the program, non-compliant vehicles and equipment may be issued a citation or notice of violation in the field, and/or may be targeted for a subsequent fleet-wide audit.

Staff inspectors work in tandem with the California Highway Patrol at weigh stations and at the roadside to pull over and inspect heavy-duty diesel trucks. Trucks are inspected for legible engine labels, for meeting opacity standards, and for compliance with all other applicable regulations. The Enforcement Division has established a goal to achieve at least 50 percent of inspections in disadvantaged communities. In 2016, staff inspected 16,576 trucks of which 8,586, or 52 percent, were in disadvantaged communities. These results are shown in Figure 3. Staff issued 4,292 citations, with three quarters of citations written for violations of the Truck and Bus or Transportation Refrigeration Unit regulations.

Figure 3 – Truck Roadside Inspections and Citations (2013-2016)



On-Road Investigations

Investigations focus on on-road vehicle and off-road equipment fleets operating in California. Overall, staff settled 131 cases and assessed nearly $4.3 million in penalties. Many fleets violated multiple regulations as shown in Table 1**.**

Table 1 – Summary of Diesel Fleet Investigations Settled by Program in 2016

Regulatory Program	Number of fleets with violations of each program[1]
Periodic Smoke Inspection Program	90
Engine Control Label Program	17
Truck and Bus Regulation	103
Truck and Bus Broker Requirements	4
Solid Waste Collection Vehicle Regulation	4
Drayage Truck Regulation	1
Heavy Duty Vehicle Inspection Program	1
Transportation Refrigeration Unit Regulation	32
Urban Bus	1
Verified Diesel Emissions Control System Regulation	4
Diesel In-Use Off-road Regulation	10
Ocean-going Vessels Regulation	17

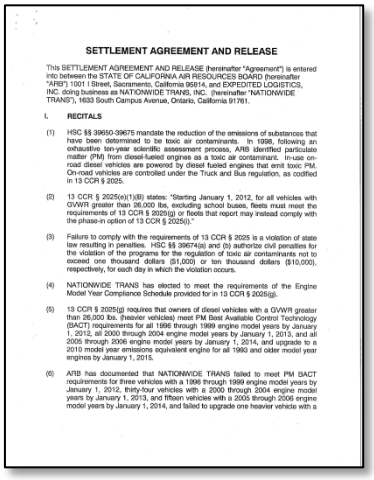
1. An individual fleet settlement agreement may include violations of multiple regulatory programs.

Notable cases include:

- **Quality 1st Produce, Inc./Young Trucking LLC/Forever Young Transport LLC** (Commerce, CA) is an interstate trucking company that specializes in the cross-country transportation of refrigerated goods. An investigation by CARB revealed that Quality 1st Produce, Inc./Young Trucking LLC/Forever Young Transport LLC failed to meet the compliance requirements of the Truck and Bus Regulation for 42 vehicles, the Periodic Smoke Inspection Program requirements for 23 vehicles, and the Transportation Refrigeration Unit (TRU) Regulation for 33 TRUs. The case was settled for $100,000, of which $25,000 was directed to the California Council for Diesel Education and Training (CCDET) SEP.

- **Vicco Inc., DBA Platinum Enterprises** (Riverside, CA) is an asset based transportation company servicing 48 states. Platinum Enterprises specializes in full and partial truckloads, heavy equipment moving, oversize loads and trucking for emergency train derailment. Staff's investigation revealed that Platinum Enterprises installed two diesel particulate filters in a non-verified configuration and reported them as verified diesel emission control strategies. The company also failed to meet the Truck and Bus Regulation for three

vehicles and the Periodic Smoke Inspection Program requirements for three vehicles. The case was settled for $5,000 of which $1,250 was directed to the CCDET SEP.



SETTLEMENT AGREEMENT AND RELEASE

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 EXPEDITED LOGISTICS, INC. doing business as NATIONWIDE TRANS, INC. (hereinafter "NATIONWIDE TRANS"), 1633 South Campus Avenue, Ontario, California 91761.

I. RECITALS

(1) HSC §§ 39650-39675 mandate the reduction of the emissions of substances that have been determined to be toxic air contaminants. In 1998, following an exhaustive ten-year scientific assessment process, ARB identified particulate matter (PM) from diesel-fueled engines as a toxic air contaminant. In-use on-road diesel vehicles are powered by diesel fueled engines that emit toxic PM. On-road vehicles are controlled under the Truck and Bus regulation, as codified in 13 CCR § 2025.

(2) 13 CCR § 2025(e)(1)(B) states: "Starting January 1, 2012, for all vehicles with GVWR greater than 26,000 lbs, excluding school buses, fleets must meet the requirements of 13 CCR § 2025(g) or fleets that report may instead comply with the phase-in option of 13 CCR § 2025(i)."

(3) Failure to comply with the requirements of 13 CCR § 2025 is a violation of state law resulting in penalties. HSC §§ 39674(a) and (b) authorize civil penalties for the violation of the programs for the regulation of toxic air contaminants not to exceed one thousand dollars ($1,000) or ten thousand dollars ($10,000), respectively, for each day in which the violation occurs.

(4) NATIONWIDE TRANS has elected to meet the requirements of the Engine Model Year Compliance Schedule provided for in 13 CCR § 2025(g).

(5) 13 CCR § 2025(g) requires that owners of diesel vehicles with a GVWR greater than 26,000 lbs. (heavier vehicles) meet PM Best Available Control Technology (BACT) requirements for all 1996 through 1999 engine model years by January 1, 2012, all 2000 through 2004 engine model years by January 1, 2013, and all 2005 through 2006 engine model years by January 1, 2014, and upgrade to a 2010 model year emissions equivalent engine for all 1960 and older model year engines by January 1, 2015.

(6) ARB has documented that NATIONWIDE TRANS failed to meet PM BACT requirements for three vehicles with a 1996 through 1999 engine model years by January 1, 2012, thirty-four vehicles with a 2000 through 2004 engine model years by January 1, 2013, and fifteen vehicles with a 2005 through 2006 engine model years by January 1, 2014, and failed to upgrade one heavier vehicle with a

- **Nationwide Trans, Inc.** (Ontario, CA) provides general freight transportation throughout the United States. An investigation of Nationwide Trans, Inc. was initiated utilizing the Smart Audit approach. The investigation revealed that Nationwide Trans, Inc. failed to meet the compliance requirements of the Truck and Bus Regulation for 53 vehicles. The case was settled for $393,000, of which $92,250 was directed to the School Bus SEP.

- **San Francisco Municipal Transit Agency (MTA)** (San Francisco, CA) provides transit services to residents in the City of San Francisco. Staff opened an investigation on MTA after receiving complaints alleging that buses were smoking and noncompliant with CARB's Periodic Smoke Inspection Program recordkeeping requirements. The investigation found that MTA failed to bring 329 of their transit buses into compliance with the applicable in-use performance standards of the Transit Fleet Vehicle Rule and the Periodic Smoke Inspection Program. To settle the case, MTA agreed to the $220,000 penalty. The Peralta Colleges Foundation received $55,125 to fund diesel education and technology classes conducted by participating California community colleges, under the CCDET SEP.

- **All Cartage Transportation, Inc.** (Hawthorne, CA) specializes in domestic and international air freight transportation. Staff's investigation revealed that All Cartage Transportation, Inc. failed to meet the compliance requirements of the Truck and Bus (TB) Regulation for 2 vehicles, failed to verify that each hired or dispatched vehicle was in compliance with the TB Regulation for 24 fleets and failed to meet the Periodic Smoke Inspection Program requirements for 4 vehicles. The case was settled for $39,379, of which $9,845 was directed to the CCDET SEP.

- **ESW Technologies** (ESWT) (Montgomeryville, PA) provides a diverse line of after-treatment emission technologies for the transportation, construction, rail, marine, utility and other markets. These products are primarily designed for use on medium and heavy-duty diesel engines. A routine investigation by CARB documented that ESWT had: (1) failed to properly submit an In-Use Compliance test plan to CARB, as required by the Regulation for the Verification Procedure for In-Use Strategies to Control Emissions from Diesel Engines; and (2) improperly installed six of their verified after-treatment devices onto off-road diesel vehicles. The case was settled on June 12, 2016, for $60,000, of which $15,000 was paid to the School Bus SEP.

- **Univan Ship Management, Ltd.** (Hong Kong, SAR of China) paid $30,000 in penalties for violating air quality regulations. This settlement agreement was reached on November 3, 2016. An investigation by CARB showed that the Univan Ship Management, Ltd., vessels *Hyundai Hong Kong* and *Hyundai Tokyo*, both failed to switch over to compliant fuel, and the fuel analyzed for sulfur content came back higher in sulfur than the regulated limit. Univan Ship Management, Ltd., took prompt action after being notified of these violations and under CARB's supervision began operating in compliance. To settle the case, Univan Ship Management, Ltd., agreed to the $30,000 penalty and to comply with CARB regulations.

- **Ross Stores, Inc.** (Dublin, CA) failed to verify that each hired or dispatched vehicle complied with the Truck and Bus Regulation at the time of hire and that Ross failed to comply with the record keeping requirements of the regulation. Ross signed a settlement agreement on January 21, 2016. Ross agreed to the $38,250 penalty and to comply with CARB regulations. A penalty of $28,688 will be paid to the California Air Pollution Control Fund, and $9,562 to the School Bus SEP.

- **United States Cold Storage, Inc. (USCS)** (Vorhees, New Jersey) failed to verify that each hired or dispatched vehicle was in compliance with the Truck and Bus Regulation at the time of hire and that USCS failed to comply with the record keeping requirements of the regulation. USCS has agreed in principal with the violations and signed a settlement agreement on July 18, 2016. USCS agreed to the $21,750 penalty and to comply with CARB regulations. A penalty of $16,313 will be paid to the California Air Pollution Control Fund, and $5,437 to the School Bus SEP.

Program Improvements Under Development

In the 2015 Annual Enforcement Report, we reported that approximately 70 percent of vehicles meet current Truck and Bus regulation requirements; conversely, 30 percent of vehicles do not appear to meet those regulatory requirements. Since more than one million trucks operate in California, this means more than 300,000 non-compliant trucks currently operate in California. As a first step to address this non-compliance, staff developed a new database tool that merged vehicle registration, national inspection databases, CARB compliance reporting databases, citations, and other information. Vehicles are grouped by fleet and each fleet is evaluated using multiple audit indicators, given an audit score, and prioritized for enforcement. Fleets identified as high priority are audited for compliance and any non-compliant vehicles are brought into compliance with diesel regulation requirements.

In 2016 staff continued developing a new process to streamlining auditing procedures in an effort to move cases more quickly. Full implementation of the new Smart Audit approach began in early 2017. As of March 31, 2017, staff had initiated 48 audits

involving 1,861 vehicles. Staff is monitoring the time necessary to close cases to determine if streamlined procedures coupled with prioritization tools will help move cases more quickly to resolution.

For the past several years, CARB staff has been working with the Department of Motor Vehicles and key stakeholders to develop a bill to make truck and bus registration contingent on demonstrating Truck and Bus Rule compliance. In early 2017 the bill was introduced by Senator Ricardo Lara, and adopted as part of SB-1, the Transportation Bill. Effective in 2020, these new registration requirements will provide a powerful new tool to help ensure comprehensive compliance with the Truck and Bus Regulation. Achieving full compliance with the Truck and Bus Regulation will result in an additional 50 tons per day of NOx reductions, which is equivalent to removing the entire fleet of automobiles, 26,000,000 cars, from the road.

In 2015, CARB released its evaluation of PM filters. One of the findings in this report was that truck drivers do not necessarily understand how to maintain engines and diesel particulate filters. For the past two years, CARB staff has been working with CCDET, and a working group of industry professionals to develop a new document to help educate truckers and fleet operators about how to conduct simple and effective preventive maintenance. The resulting handbook published by CCDET provides simple preventive maintenance procedures, which were reviewed by stakeholders and professionals in the field, in order to help truck owners save fuel costs, reduce downtime, maximize truck performance and engine life, and increase overall operational efficiency. The publication was finalized, printed, and is now included as a free download on the newly designed http://www.ccdet.org website[2]. The electronic version of the report contains short videos that demonstrate how to perform preventive maintenance. Staff is now distributing this handbook to truck and bus operators.

Another one of the findings in the PM filter evaluation was that a small fraction of diesel particulate filter-equipped trucks are responsible for the majority of emissions from the diesel particulate filter-equipped fleet. Because of the Truck and Bus Rule California truck and bus fleets are now equipped with diesel particulate filters, but some of these filters become damaged and require repair in order to function properly. Damaged diesel particulate filters emit excess emissions, and continued operation of a damaged diesel particulate filter is a violation of Vehicle Code section 27156(b), which requires motor vehicle pollution control devices to be properly installed and operating. CARB staff is taking several actions to address this issue and ensure the emissions reductions envisioned by regulation are in fact achieved on the road and in disadvantaged communities.

Under the existing heavy-duty vehicle inspection program, Enforcement Division field inspectors inspect trucks at the roadside and administer a snap acceleration test as defined by the Society of American Engineers J1667. This test was designed to identify trucks that are not operating properly and in need of repair. 1991 or newer trucks

[2] Link: http://ccdet.org/resources/

exceeding 40 percent opacity can be cited as failing this test. Filter-equipped trucks can be cited if they show evidence of tampering under California Vehicle Code section 27156. Fleets are required to conduct opacity tests under the Periodic Smoke Inspection Program once per year and maintain records demonstrating compliance with the 40 percent opacity limit.

CARB staff is working to implement a lower opacity limit for filter equipped trucks. The current proposal is 5 percent opacity, which is sufficient to diagnose trucks with damaged diesel particulate filters at the roadside that require repair. Implementing this opacity limit through the heavy duty vehicle inspection program and the periodic smoke inspection program could reduce toxic diesel particulate emissions from the filter-equipped fleet by as much as half.

Because a 5 percent opacity limit is at the lower limit of visibility to the naked eye, enforcement staff will require new tools to identify trucks which may exceed the 5 percent limit in the field. In 2016 CARB staff developed and demonstrated a new tool to screen trucks for enforcement purposes. The new system is called the Portable Emission AcQuisition System, or PEAQS. PEAQS is a roadside emission measurement system that captures a portion of a passing vehicle's exhaust as it drives through. PEAQS captures a portion of the exhaust plume and determines an "emissions snapshot" for each passing vehicle in real-time. The "emissions snapshot" is paired with license plate data collected by an automatic license plate reader. CARB staff is currently working to test the portability and durability of PEAQS, in addition to validating the PEAQS instrumentation to that of CARB's lab grade instrumentation. CARB staff currently has multiple field campaigns and lab studies planned to accomplish these goals. As part of developing PEAQS, staff is working to establish the most practical way to set up PEAQS as a useful tool to find potentially non-compliant vehicles on the road.

The goal for PEAQS is to be able to identify vehicles that are emitting pollutants at levels above certified standards, and identify emissions control equipment on the vehicle that have been tampered and/or improperly maintained. The information obtained from this system will assist CARB in identifying high emitting vehicles and targeting those vehicles for enforcement, and it will play a vital role in implementing the future Heavy-Duty Vehicle Inspection and Maintenance Program.

Finally, CARB annually receives over 500 complaints related to on-road heavy-duty diesel vehicles, diesel off-road equipment, transport refrigeration units (TRU), or verified diesel emission control strategies. CARB staff investigates and resolves each complaint. All fleets that are the subject of a complaint receive a letter informing the fleet owner of the complaint and summarizing applicable regulatory requirements.

Additionally, staff has developed an improved approach, through the Governor's Office sponsored Lean Six Sigma training program, for screening complaints that builds on the Smart Audit approach for identifying non-compliant fleets for further enforcement action, and includes evaluating the complaint to determine whether it is viable and whether it appears that the vehicle or fleet is compliant or non-compliant. By implementing this process, the time to action on complaints has been reduced from 42 days down to 3 days. Once received and screened, the complaint will be closed if an investigation is not warranted based on the information available, or the complaint will be assigned for further investigation. During 2016, CARB received 558 heavy duty diesel complaints involving multiple program areas as shown in Table 2. Of the 558 complaints received, 265 are undergoing further investigation and 293 were closed based on lack of information available about the vehicle, fleet, or equipment. Staff is working to ensure every complaint contains sufficient information to investigate.

Table 2 – Heavy Duty Diesel Complaints Received by Diesel Program in 2016

	Total Diesel Complaints Received*	Number of Complaints Received
Number of complaints received for each program	Periodic Smoke Inspection Program	255
	Engine Control Label Program	209
	Truck and Bus Regulation	414
	Solid Waste Collection Vehicle Regulation	0
	Drayage Truck Regulation	1
	Broker Fleets	14
	Heavy Duty Vehicle Inspection Program	0
	Transportation Refrigeration Unit Regulation	10
	Transit Fleet	1
	Urban Bus	0
	Public Agency and Utility	1
	Tractor Trailer Greenhouse Gas	0
	Verified Diesel Emissions Control System Regulation	29
	Diesel In-Use Off-road Regulation	39

* A complaint can focus on more than one diesel program.

Working Toward Environmental Justice

Through CalEnviroScreen, California has identified disadvantaged communities across the State. These areas are impacted by multiple sources of air pollution and a wide variety of other pollution sources. People who live in these communities often express concerns about a lack of enforcement in these areas. In 2015, staff established a team to address this issue. This team serves three functions. First, the team regularly attends community meetings in multiple communities across the State including Oakland, Hunters Point (San Francisco), Kern Environmental Enforcement Network

(Bakersfield and Fresno), South Gate, Watts, Los Angeles, Coachella, and Brawley. In 2016 staff focused on building a relationship with community representatives and in understanding community concerns. Staff is looking for more opportunities to engage with different community groups across the State.

Second, the team is working to expand enforcement efforts in disadvantaged communities beyond existing commitments already described in this report. In 2016, the team focused on supporting the California Environmental Protection Agency (Cal/EPA) Environmental Justice Enforcement initiatives in Pacoima and Boyle Heights in Los Angeles. Boyle Heights is located just east of downtown Los Angeles, and is intersected by several of the most heavily travelled freeways in California. It is adjacent to major rail yards and contains many local industries. To address community concerns regarding air pollution, CARB inspectors conducted roadside diesel truck inspections and rail yard inspections. CARB conducted roadside diesel truck inspections at three locations and evaluated a total of 463 heavy duty diesel trucks and TRUs for compliance and issued 117 citations. The findings also resulted in opening investigations of two fleets, in addition to the eight fleets that were already under investigation. Rail yard inspections at Union Pacific and BNSF facilities evaluated 144 locomotives for compliance, resulting in zero idling or emission violations. Forty railcars with TRUs were inspected that resulted in two citations.

Pacoima is located north of the Burbank Airport in the San Fernando Valley, and contains transportation oriented businesses with frequent truck visits. The community expressed a concern about truck trips generated by aggregate and cement processing facilities in and around the neighborhood. As a result, CARB conducted roadside diesel truck inspections at three locations in the community, inspecting 228 trucks and writing 78 citations. These efforts also led CARB to initiate on-going investigations into 16 fleets operating in the community for potential violations of the Truck and Bus Regulation.

Third, the team is working to implement AB1071 (2015). AB1071 requires each agency within the Cal/EPA to conduct a public process to solicit potential SEPs from disadvantaged communities, allow the amount of the SEP to be up to 50 percent of the penalties, submit an annual list of SEPs to Cal/EPA that may be selected to settle a portion of an enforcement action, and give consideration in the relationship between the location of the violation and location of the proposed SEP with priority given to projects in disadvantaged communities.

Throughout 2016, staff worked directly with disadvantaged communities through a public process to draft a revised SEP policy. Staff held two rounds of public meetings,

hosting a total of thirteen workshops across the state, in Coachella, Oakland, Brawley, Fresno, Hanford, Bakersfield, and El Monte, to get community input and advice on the policy and ideas for SEP proposals. In December 2016, staff presented the updated SEP policy to the Board and began implementing the policy. Staff received 22 applications, of which 12 were identified as consistent with the policy and feasible; these projects were provided to Cal/EPA. Applications continue to be received and evaluated.

Staff also committed to an on-going public process with disadvantaged communities as the SEP program continues to evolve. Staff is planning workshops throughout the State in the summer of 2017 to follow up on our commitment to obtain additional input through a public process on plans relating to SEP policy implementation and to solicit additional SEP applications.

In 2017, staff is working to expand upon its work in disadvantaged communities by targeting enforcement efforts in disadvantaged communities. For example, staff is currently focusing enforcement efforts in Oakland as part of the Cal/EPA initiative, and in container yards in Southern California at community request. Staff is also working to expand the list of eligible SEP projects (see Appendix M) by developing more comprehensive SEP evaluation procedures, completing evaluations of all submitted SEPs, conducting public meetings to solicit new SEP proposals, and by providing assistance to communities to develop SEP concepts when requested. Staff actively promotes to violators those SEPs benefitting disadvantaged communities. To date in 2017, violators have selected to fund one project benefitting disadvantaged communities, contributing $625,000 to its implementation.

Finally, staff is continuing to work on developing a new SEP designed to focus on supporting projects in disadvantaged communities, which would be managed by a third party administrator consistent with the adopted policy. Because this work is more complex than initially anticipated, it is taking longer than originally projected. While this broader approach is being developed, violators may continue to choose SEPs benefitting disadvantaged communities and pay to implement them directly.

Portable Equipment Registration Program

The Portable Equipment Registration Program (PERP) is a voluntary program that provides industry the opportunity to obtain a single statewide registration instead of obtaining multiple local air district permits where the engine or equipment unit operates. The PERP Regulation establishes eligibility criteria to ensure only the cleanest new engines are registered. CARB also adopted an ATCM in 2004 designed, like other diesel in-use rules, to require fleets to upgrade portable engines over time to meet modern emissions standards.

In 2016, PERP received 1,996 applications for 4,242 units to be registered, issuing 3,324 registrations, with the remaining processed as refunds after being incomplete or ineligible for registration. The program also renewed 7,001 registrations bringing the

total registrations issued to 10,325 in 2016. Additionally, staff reissued 1,058 updated or replacement registrations and handled more than 2,045 non-fee administrative actions as requested by the regulated community.

When CARB adopted the ATCM in 2004 the rulemaking relied on several assumptions about developing new technologies as the basis for establishing stringent fleet emission standards. The costs presumed an abundance of Tier 4 engines would be available for fleet owners to purchase at reasonable prices; these purchases could be made well before the emissions standards were required, and where Tier 4 engines were not yet available, the current engines could be retrofit to comply with the standards. In reality, the costs were much higher than anticipated, Tier 4 engines were not available as early as anticipated, and retrofits were not available for nearly all engine categories. CARB projects that only 10 percent of regulated fleets will meet the 2020 emissions standards in the current ATCM. As a result, in 2016 CARB committed to amending regulatory requirements to ensure the program can be implemented in an economically feasible manner. During 2016, staff conducted eight public workshops and five workgroup meetings to discuss regulatory concepts and draft language. Staff anticipates taking the portable regulatory amendments to the Board in the fall of 2017.

The portable equipment registration program is self-funded through registration fees. 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 net amount of fees received related to renewal activity was $3,854,604 while the amount of money received related to all other types of activity during the 2016 calendar year was $2,396,643. The total non-reconciled net fee revenue for the 2016 calendar year was $6,251,247. Because these funding levels are not sufficient to fully staff the program appropriately, staff will propose a fee increase as part of the upcoming PERP regulatory amendments.

The portable equipment registration program is dependent upon data management systems to facilitate registration processing. In 2016, CARB staff migrated the program from a legacy system developed in the 1990s to a new system. The system is used not only by CARB staff but also by more than 300 staff in each of California's 35 air districts that enforce the program. The migration was successfully completed in 2016.

Assessing Compliance to Prioritize Enforcement Efforts

The goal of CARB enforcement efforts is to achieve compliance across the broad array of regulatory programs designed to achieve clean air. In order to maintain a strong and effective enforcement program, enforcement efforts should focus limited staff resources in more non-compliant programs, while maintaining compliance in programs with high compliance rates. To achieve this goal, in 2016 staff estimated compliance rates in several key programs. Our plan is to track compliance rates over time as a measure of overall program success, and to identify areas where additional focus is needed.

Statewide Truck and Bus Regulation

In the 2015 annual report, staff estimated that of the million heavy trucks operating in California about 30 percent, or 300,000 trucks, were not compliant with the Statewide Truck and Bus Regulation. This analysis was completed using data analysis conducted to develop the smart audit process, including 50-state vehicle registration data and compliance reporting data. In early 2017, staff repeated this analysis and the results are shown in Table 3, below. Appendix I shows the method used for the calculations.

In this analysis, staff looked at three types of vehicle registration: 1) California registration, 2) vehicles registered with the International Registration Plan (IRP) that are based in California, and 3) vehicles registered with IRP that are based in all other states. IRP is a registration reciprocity agreement between the contiguous United States and Canadian provinces, which provides apportioned payments of registration fees, based on the total distance operated in participating jurisdictions. For California registered trucks (California registration and California based IRP) compliance rates are calculated based on fleet size. The lowest compliance rates, 50 percent, were found in the California registration for small fleets with 1 to 3 trucks. Compliance rates ranged from 50 to 90 percent depending on fleet size and registration type. The overall compliance rate for all trucks that travel in California is about 70 percent.

Additionally, based on the total number of vehicle fleets investigated compared to fleets found to be noncompliant, staff estimates an overall compliance rate of 50 percent with requirements to perform smoke opacity testing as required by the Periodic Smoke Inspection Program.

Enforcement Division and other CARB efforts plan to improve the efficiency of audit procedures, to link vehicle registration to a demonstration of Truck and Bus compliance, and eventually use a new heavy-duty inspection and maintenance program. Over time, compliance rates will improve. Tracking compliance rates will allow us to evaluate and demonstrate this improvement over time.

Table 3 – Truck and Bus Compliance Rate for Heavy Trucks* by Registration Type and Fleet Size

Registration Type	Fleet Size	Total	Compliant	Percent Compliant
CA Registered In-State	1 to 3	58,181	29,211	50%
	4 to 20	51,590	31,628	61%
	21 to 100	38,341	25,685	67%
	> 100	43,045	27,970	65%
Subtotal CA Registered Intrastate		***191,157***	***114,494***	***60%***
CA Registered Interstate	1 to 3	27,545	21,463	78%
	4 to 20	21,486	18,392	86%
	21 to 100	13,785	12,343	90%
	> 100	9,154	8,080	88%
Subtotal CA Registered Interstate		***71,970***	***60,278***	***84%***
Total CA Registered		**263,127**	**174,772**	**66%**
Registered Outside of CA and Operating in CA		**965,029**	**677,686**	**70%**
Totals		**1,228,156**	**852,458**	**69%**

* Greater than 26,000 pounds gross vehicle rated weight.

In-Use Off-Road Vehicle and Equipment Rule

The In-Use Off-Road Diesel Vehicle Regulation requires reporting of all off-road diesel equipment into CARB's Diesel Off-road Online Reporting System (DOORS). To date, a total of 12,380 fleets of all sizes are reported in the system, representing 175,646 individual off-road engines. DOORS data can be used to determine the percentage of fleets that are reported compliant with regulation requirements. Results are shown in Table 4 and indicate an initial self-reported compliance rate estimate of greater than 90 percent in large and medium fleets.

To estimate the number of equipment that have not been reported into DOORS, staff in March 2017 conducted random inspections of diesel-fueled off-road equipment operating throughout California. Of the 1,358 off-road engines inspected, 144, or 11 percent, were found to have not been reported into DOORS.

These analyses show that nearly 90 percent of off-road fleets have reported into DOORS, and nearly 95 percent of large and medium sized fleets that have reported into DOORS are reported compliant with regulation requirements. Taken together, these results suggest an overall compliance rate of 85 percent. With the high level of compliance in this program, CARB is adequately staffed to ensure that the emission reductions envisioned by the Board are achieved from this source category.

Table 4 – Summary of Off-road Fleets* Reporting to CARB

	Large Fleets	Medium Fleets	Small Fleets
Number of Fleets Reporting	877	578	10,925
Percent of fleets reporting compliance	93%	95%	---

* Large fleet deadline to meet performance requirements was January 1, 2014. Medium fleet deadline to meet performance requirements was January 1, 2017. Small fleet deadline to meet performance requirements is January 1, 2019.

Transport Refrigeration Units

The Transport Refrigeration Unit (TRU) Air Toxic Control Measure requires owners of California-based TRUs and TRU gen sets to report equipment and compliance information into CARB's Equipment Registration (ARBER) database. ARBER data can be used to determine the percentage of equipment that is reported compliant with regulation requirements. To date, 166,911 TRUs and TRU gen sets are reported in the ARBER database, of which 31,032 are identified as non-compliant. This shows a reported compliance rate of 81 percent.

In addition to the reported compliance rate, field inspection data can be used to estimate a lower-bound compliance rate that accounts for equipment not registered in ARBER, including both California-based and non-California-based equipment. During 2016, CARB staff conducted a total of 2,314 TRU inspections through which 947 TRUs were identified as non-compliant. This analysis indicates a lower-bound compliance rate of about 60 percent.

Regulations at Ports

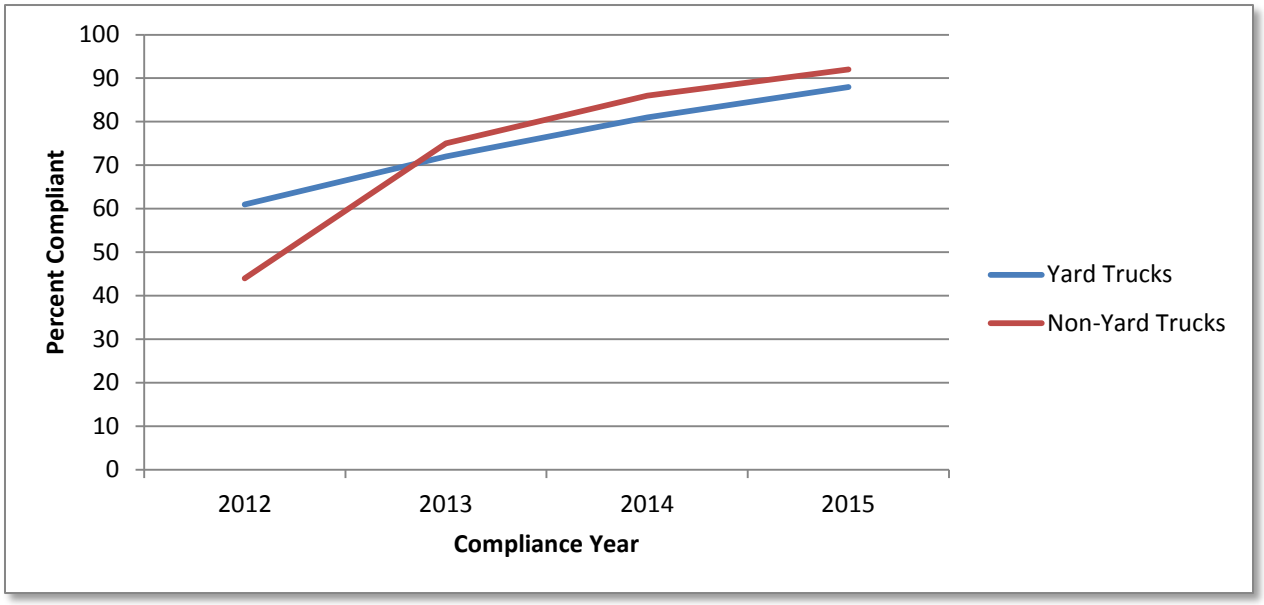
Achieving compliance at California's ports is particularly important not only because of the magnitude of emissions, but also because of the proximity of these sources to disadvantaged communities. Overall, results show high compliance rates with most programs.

Cargo Handling Equipment

Prior to regulation, Cargo Handling Equipment (CHE) was identified in a 2002 CARB Port of Los Angeles and Port of Long Beach Diesel Particulate Exposure Study as being the second largest

contributor to near source cancer risks for port communities. CARB's Cargo Handling Equipment regulation required regulated facilities to report their CHE fleets and to retrofit, retire, or replace all diesel powered engines to clean up older, dirty diesel engines. CARB staff aggressively enforced the regulation after receiving the U.S. EPA approval in 2012 and inspected all regulated facilities for compliance. Inspections of regulated facilities resulted in over 11 cases being developed against facilities that were not complying with the reporting and/or in-use engine standard. The CHE compliance rate since 2011 is shown in Figure 4, below:

Figure 4 – Cargo Handling Equipment Compliance Since 2012



Compliance numbers are based on annual reports submitted through January 2015, and any follow-up communication. There are approximately 95 regulated entities and 5,000 pieces of equipment subject to this regulation; the compliance rates indicate the total number of pieces of equipment brought into compliance as of December 31, 2015. Enforcement since 2012 has resulted in an increased compliance for yard trucks from 61 percent in 2012 to 89 percent by the end of 2015, and 44 percent compliance in 2012, to 92 percent compliance in 2015 for non-yard trucks. Enforcement efforts to bring remaining non-compliant fleets into compliance are on-going and active. The four remaining CHE cases were closed in the first half of 2017, and with the closure of those cases, the industry is close to 100 percent compliant with the in-use engine standard of their 2007 reported fleets. Looking forward, staff will be focusing enforcement of engine opacity standards outlined in the 2011 regulatory amendments.

Ocean Going Vessel Fuel Requirements

In 2008, CARB adopted the Ocean Going Vessel fuel sulfur regulation to reduce emissions of oxides of nitrogen, particulate matter, and sulfur oxides from ocean going vessels. The regulation requires ships to switch to cleaner burning distillate fuels prior to entering the 24 nautical mile regulated zone. In 2016, 897 inspections were conducted on 8,224 vessel visits to California ports with 13 notices of violation being issued. This represents a nearly 99 percent compliance rate with the Ocean Going Vessel fuel sulfur regulation.

The work done by the Railroad and Marine Enforcement Section (RMES) inspectors has helped create a robust OGV enforcement program that is recognized around the world. ARB is the leader in this field. One staff person, Alex Barber, was invited to China and Mexico to help the Chinese Maritime Safety Administration and the Mexican Navy better understand how to conduct ship inspections in Emission Control Area's (ECA's) around Mexico and China. To further develop ship enforcement, RMES staff participated in an In-Situ Ship Emission Study (ISET) led by the ARB Research Division that successfully developed and tested an on-board measurement technique for fuel sulfur ship emissions. This study was done to assist the United States Coast Guard in developing a more robust enforcement program for enforcement of the fuel sulfur standard in the Emission Control Areas in the United States, including California.

Ocean Going Vessel Shore Power Requirements

The "Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port" Regulation, commonly referred to as the At-Berth Regulation applies to container-ship and refrigerated-cargo ship fleets that visit a regulated California port 25 or more times annually, and passenger-ship fleets that visit a regulated California port five times or more annually. Beginning January 1, 2014, vessel fleets were required to reduce their emissions by turning off their auxiliary engines and plugging in to shore-based electrical power to run shipboard operations while at berth, or using equivalent alternatives. For calendar years 2014-2016:

- At least 50 percent of a fleet's visits to a regulated California port must connect to shore power, and
- The fleet's diesel engine power generation must be reduced by at least 50 percent from the fleet's baseline power generation.

The power reductions and fleet visit requirements are phased in are phased in over-time requiring 50 percent by 2014, 70 percent by 2017, and 80 percent by 2020.

CARB released two Regulatory Advisories in December 2013 and March 2015 to assist fleet owners who have made good faith efforts to comply, but, for reasons beyond their control, were not able to make necessary shore power connections. The purpose of the advisories was to offer various scenarios where compliance relief would be offered if vessel operators' documented events beyond their control.

Staff conducted a preliminary compliance assessment using information reported to CARB by each fleet pursuant to regulatory requirements. Table 5 and Table 6, on the following page, summarize the results of CARB's preliminary assessment for 2014 at the Ports of Los Angeles and Long Beach, the Port of Oakland, and other ports. The tables provide two metrics: the actual percentage of shore power visits and power reduction, without consideration of relief offered in the regulatory advisories; and the compliance rate by Port across fleets when the compliance relief from the advisories is considered. The actual emission reductions achieved are represented by the metric that does not consider the compliance relief offered from the scenarios in the advisories. Because the assessment is preliminary and full enforcement investigations are not completed, information is summarized at the Port level.

Results show fleets did had difficulty making the necessary connections in 2014, but when reasons beyond fleet's control are considered consistent with the compliance advisories; generally the intent of the regulation was met in all Ports except in Oakland. Not all fleets met regulatory compliance requirements, with some fleets exceeding requirements, and other fleets falling short of requirements.

CARB has conducted 45 audits and is investigating fleets that did not appear to have met the regulatory requirements in 2014. Audits consisted of a detailed review of each visit reported by fleets to check the data quality and to determine whether sufficient documentation existed for all compliance relief offered in the 2013 and 2015 advisories. Investigations were opened on those fleets that failed to meet the 50 percent power and visit reduction requirements. To date, CARB has issued three notices of violation, and is investigating the reasons for non-compliance. Staff is currently working to resolve these enforcement actions, and analyzing 2015 and 2016 compliance data.

Table 5 – 2014 Aggregated Fleet Compliance with Shore Power Visit Requirement[1]

Port	Regulated Fleets	Vessel Visits	Average Percent Shore Power Visits by Port	
			Achieved	Compliance Using Advisory
LA/LB[2]	22	2,495	50%	58%
Oakland	16	1,535	39%	49%
Other[3]	7	305	33%	67%
Total	**45**	**4,335**	**45%**	**56%**

Table 6 – 2014 Aggregated Fleet Compliance with Power Reduction Requirement[1]

Port	Regulated Fleets	Baseline Fleet Power Generation (MWh)	Average Percent Power Reduction by Port[4]	
			Achieved	Compliance Using Advisory
LA/LB[2]	22	388,000	45%	57%
Oakland	16	93,000	34%	42%
Other[3]	7	23,000	37%	68%
Total	**45**	**504,000**	**42%**	**55%**

[1] Numbers are subject to change as detailed fleet evaluations progress
[2] Port of Los Angeles and Port of Long Beach considered as one port under the regulation
[3] Other includes the Port of Hueneme, Port of San Francisco, and Port of San Diego
[4] Fleets complying under the equivalent emission reduction option were aggregated into reduced onboard power generation.

Clean Fuel Regulations

CARB's reformulated fuel programs are mature, and maintain compliance rates greater than 90 percent each year. In 2016, about 15 billion gallons of gasoline and 4 billion gallons of diesel were produced and distributed into commerce in California. A total of 390 inspections (1600 samples collected) were conducted to represent the 13 production centers (refineries), about 100 distribution nodes (terminals and bulk plants), and about 10,000 retail gasoline stations throughout California. Refineries, Terminals, and Imports were found to respectively have 96, 99, and 100 percent compliance rates with California Reformulated Gasoline-3 regulations. The fuel samples collected are representative of about 17 percent of the gasoline and diesel sold in California on an annual basis. FES received and reviewed 3,745 formulation reports submitted by producers and importers of gasoline and diesel with a 100 percent compliance rate for CaRFG3 reporting requirements.

Staff is continuing to enforce reformulated gasoline requirements, and is also transitioning to enforcing new fuels programs including the Low Carbon Fuel Standard. The LCFS enforcement team has completed in person audits and sampling of every biodiesel producer in California and has issued multiple NOV's and Notice of Credit

Adjustments for reporting and fuel violations. 2016 marks the first year of implementing the newly developed LCFS enforcement audit program, and will serve as a baseline to determine compliance rate trends for future years.

Staff also enforces regulatory requirements on cargo tanks, which must meet evaporative emission control requirements. CARB staff inspects approximately 5 percent of 5,676 cargo tanks registered with CARB each year. In 2016, staff inspected a total of 328 cargo tanks, 100 percent were found to be in compliance with maintaining proper certifications. Staff conducted 113 pressure tests at loading racks throughout California, identifying a compliance rate of 92 percent; staff assessed $4,500 in penalties for violations of these requirements. CARB staff observed and verified 18 annual certification tests conducted by certified testers.

Consumer Product Regulations

The Consumer Products Regulation limits the volatile organic and toxic air contaminant content of over 26,000 products in over 160 regulated categories. Given this diversity and market scale, an overall assessment of compliance is difficult to achieve. However, staff has used several techniques to better understand compliance.

In general, most consumer products sold in California comply with the regulation. It is therefore imperative that the program utilize a diverse and multipronged sampling scheme to assess non-compliance. By using various sampling strategies, CARB is able to cover the wide spectrum of products sold and regulated entities in the supply chain.

Top Selling Products Sampling

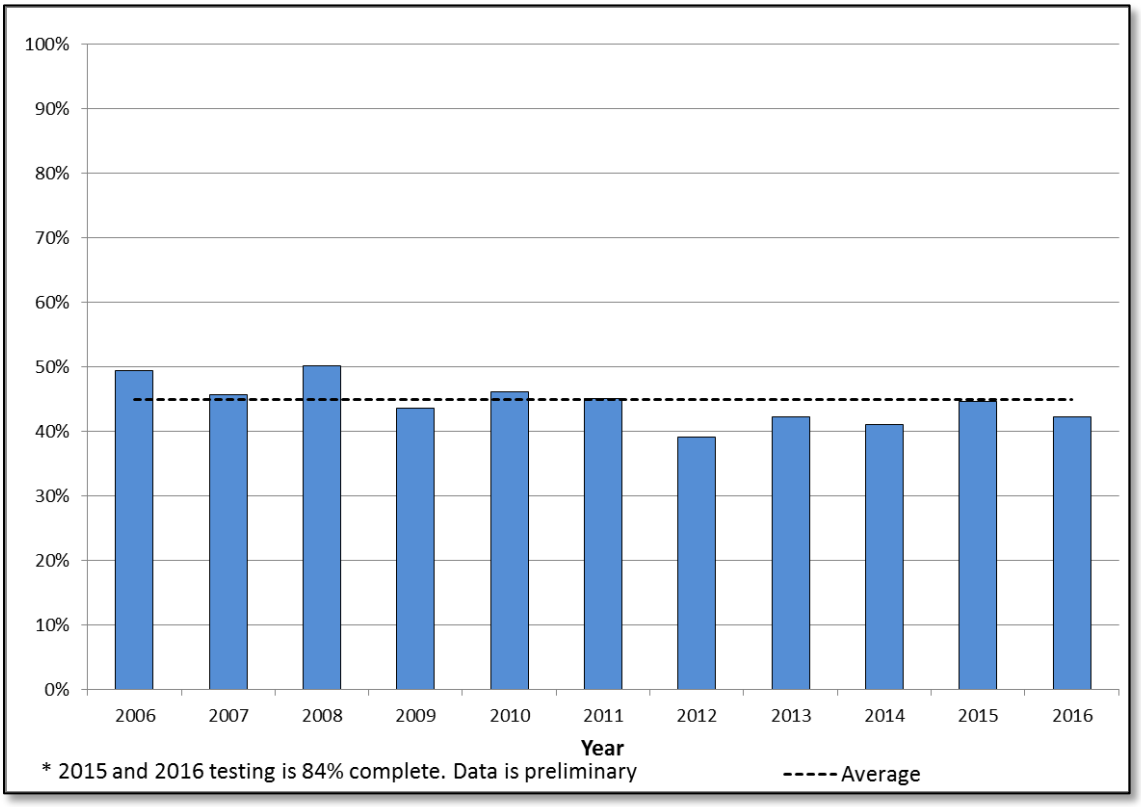
CARB collects data on products that are high contributors to the overall VOC emissions by use of a survey. The data collected enables CARB to calculate a VOC emissions inventory that forms the basis for the statewide emission reduction plan. It is imperative that these products comply with the regulation; so inspectors conduct routine sampling to verify compliance. In 2016, inspectors sampled over 50 of the highest emitting products and verified compliance for close to 90 percent of these products.

Statewide Sampling

The consumer products marketplace in California is extremely diverse and almost every retail establishment sells some type of regulated product. The methods in which these products are distributed through the supply chain and into the retail market are just as diverse, and can lead to violations that are regional in nature and not necessarily discoverable unless inspections are performed throughout California.

The Consumer Products Enforcement Program maintains a routine inspection program that sends inspectors to retailers throughout California in search of non-compliant products. Inspectors utilize their specialized knowledge of the regulation to identify and purchase products expected to be non-compliant. On average, of the products purchased through these targeted inspections, about 45 percent are found to be non-compliant, see Figure 5.

Figure 5 – Percent Non-Compliance of Consumer Products Sampled

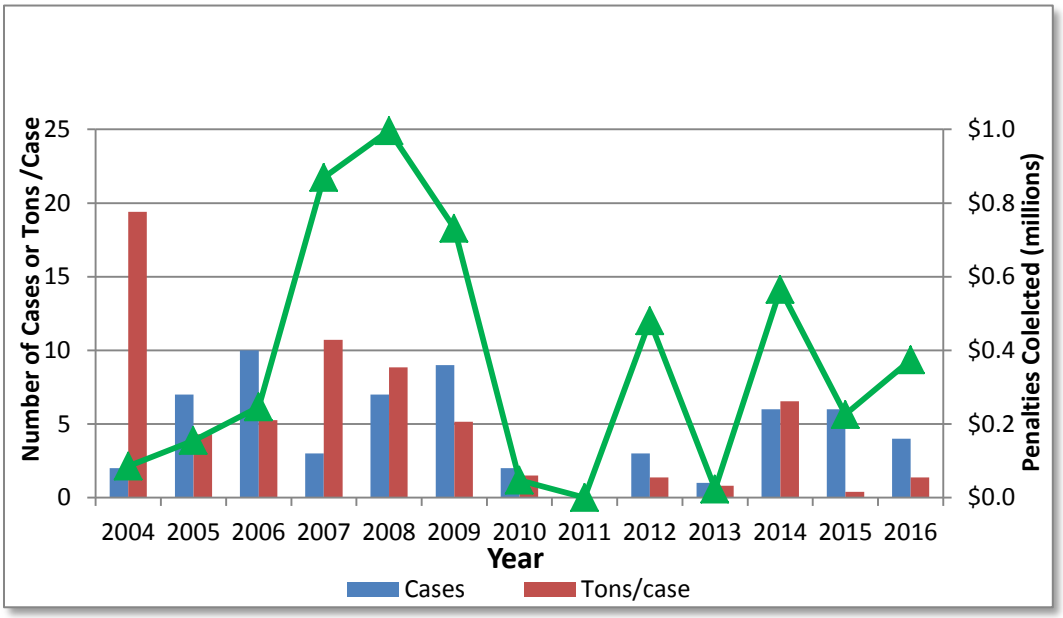


Staff collects product samples in environmental justice areas throughout the State. In 2015 staff conducted focused inspections of 14 retail outlets in Pacoima and Boyle Heights areas. Though inspections occurred in 2015, the compliance results were not available until 2016. Inspections were focused on products containing toxic air contaminates (TACs), which are more hazardous to human health, and products with potential VOC concerns as well. Staff purchased 30 samples, in a wide range of categories and found 90 percent of the products purchased were compliant, and none of the products contained a TAC. Investigations of these potential VOC violations were initiated in 2016. Two investigations are currently ongoing, and the other investigation was resolved without taking an enforcement action. In 2016 staff's routine inspections included environmental justice areas in the San Joaquin Valley, East Bay and Los Angeles; results from these inspections are still pending.

The program began taking a focused approach to windshield washer fluid violations in 2004, after a trend was observed showing an increasing frequency of violations. Staff began routinely inspecting for non-compliant windshield washer fluid products wherever they performed inspections. Between 2004 and 2010, the program resolved 40 cases involving windshield washer fluid products averaging 7.9 tons per case, and collected over $3.1 million in penalties. Due to the large emissions impact of these cases staff increased inspections, focused on high risk retailers and modified the potential violation notification procedure to limit the emissions impact of the violation by reducing product sold.

After a delay in 2011 caused by the implementation of Health and Safety Code section 39619.7, staff resumed enforcement of windshield washer fluid cases with a focus on deterrence for repeat violators by assessing enhanced penalties. Between 2012 and 2016, another 20 cases were resolved and $1.6 million in penalties were collected, averaging 2.1 tons per case. Staff's efforts seemed to have had an effect and despite the enhanced inspection efforts during this time period there were fewer violations and lower emissions per violation. See Figure 6, below.

Figure 6 – Windshield Washer Fluid Case History*



* In 2011, no windshield washer fluid cases were settled due to delays caused by the implementation of Health and Safety Code section 39619.7.

CARB staff will continue to focus on windshield washer fluid through continuing inspections of this product category and identifying noncompliant product quickly to prevent sales before large VOC emission violations can occur. Strong deterrence, by assessing higher penalties for repeat violators, appears to be effective.

Improving Efficiency to Achieve Compliance

The mission of the enforcement program is to protect the environment and public health and provide safe, clean air to all Californians by reducing emissions of air contaminants through the fair, consistent and comprehensive enforcement of air pollution laws, and by providing training and compliance assistance. Our goal is to achieve compliance across all CARB programs.

Achieving comprehensive compliance is a challenge because of the large number and diversity of regulated companies, large and small, across the wide range of industries that CARB regulates. Achieving this goal requires a prioritization of key programs to increase compliance, a prioritization of key areas in which to focus compliance for maximum public health benefit, and a focus on internal staff efficiency.

Last year we initiated this approach in diesel programs enforcement through the Smart Audit process. We used large scale data sources to prioritize compliance and then developed streamlined auditing procedures to achieve a more rapid resolution to each case. We are fully implementing these new procedures and working to measure program improvement in 2017.

Looking forward, staff is working to standardize enforcement procedures, ensure each regulation CARB adopts is designed for enforceability, and update enforcement policies.

Internally, staff is working to standardize enforcement procedures. In 2016 staff developed new on-boarding procedures designed to provide every new staff person in Enforcement Division with the tools they need to be effective in targeting and pursuing enforcement cases. Moving into 2017 new classes are being developed that train and/or refresh staff on evidence collection and case documentation. Beyond on-boarding procedures, we are training staff to a standard investigation process. Creating consistency in enforcement across each enforcement program will enable the movement of staff between programs, making staff more flexible to address prioritized compliance challenges in key programs as they occur, and improving consistency between enforcement programs. A key part of this effort is migrating every enforcement program to a standard information management system. This allows not only improved information management, but also more rapid responses to internal and external requests for information and standard case management file structures. This will also allow improved tracking to increase productivity.

In 2016, staff led a Board-wide effort to review CARB's general approach to developing and implementing regulations. This was done in response to concerns that a growing number of competing policy demands was challenging CARB's ability to implement and enforce adopted regulations effectively. After the review, staff developed agency-wide internal procedures to ensure enforceability of regulatory programs. CARB is currently implementing these enhanced procedures in key programs across several divisions.

Finally**,** we are currently undertaking a public process to transition our current penalty policy into a broader Enforcement Policy. The initial purpose in facilitating this process is to implement AB 1685 (2016), which increases mobile source certification penalties from $5,000 per vehicle to $37,500 per vehicle and clarifies that penalties apply per violation per vehicle. In early 2017 staff held two workshops, and convened a stakeholder working group to provide detailed comments and suggestions. Staff received many useful suggestions, and has gained a greater appreciation for industry concerns regarding the new and higher penalties. Staff is now working to address these concerns and anticipates several public meetings in advance of presenting of the revised policy to the Board in fall 2017.

Throughout 2017 and beyond, CARB staff is improving its enforcement processes to ensure that violations of California's air quality regulations are resolved quickly and efficiently. This process involves internal program improvements to leverage staff and technology, external transparency initiatives to ensure that responsible parties and the California residents understand CARB's enforcement process, and shifting focus to the communities that bear the most significant burden of air pollution. Future enforcement reports will document these initiatives as well as CARB's ongoing work in ensuring that all Californians have clean, healthful air to breathe, and that California reaches its commitments to reduce its greenhouse gas emissions and their contribution to global warming.

Appendices

Appendix A
2016 Enforcement Programs Statistics

Appendix A – 2016 Enforcement Program Statistics

Program Category	Total Closed Enforcement Actions	Penalties Assessed *a*		Total Penalties Assessed
		Judgments	Settlements	
Enforcement Cases From Appendix H				
Certifications				
Indoor Air Cleaners	1	$ -	$ 24,000	$ 24,000
Vehicles b	1	$ -	$ 1,037,100	$ 1,037,100
Engines	3	$ -	$ 76,225	$ 76,225
Parts c	7	$ -	$ 1,358,853	$ 1,358,853
Portable Fuel Containers	2	$ -	$ 541,372	$ 541,372
Fuels				
Fuels Specifications	2	$ -	$ 245,000	$ 245,000
Stationary Sources				
Asbestos	4	$ -	$ 72,000	$ 72,000
Consumer and Aerosol Coating Products	37	$ -	$ 1,315,583	$ 1,315,583
Composite Wood Products	1	$ -	$ 2,500,000	$ 2,500,000
Refrigerant Management	5	$ -	$ 252,750	$ 252,750
Sulfur Hexafloride Gas Insulated Switchgear	-	$ -	$ -	$ -
Landfill Methane Control	1	$ -	$ 70,000	$ 70,000
Diesel				
Diesel Fleet Investigations	131	$ -	$ 4,256,001	$ 4,256,001
Ports and Marine	17	$ -	$ 165,000	$ 165,000
Mandatory Reporting Requirements				
Mandatory Reporting Requirements	8	$ -	$ 1,382,617	$ 1,382,617
Subtotal of Enforcement Cases	**220**	**-**	**13,296,501**	**$ 13,296,501**
Citation/NOV Programs From Appendix B				
Citation/NOV Programs				
Cargo Tank	8	$ -	$ 4,500	$ 4,500
Dealer and Fleet Citations (Tampering)	4	$ -	$ 3,000	$ 3,000
Recreational Marine Engines (watercraft)	8	$ -	$ 8,000	$ 8,000
Vehicles	17	$ -	$ 66,000	$ 66,000
Heavy-duty Diesel Inspection	2,863	$ -	$ 2,776,417	$ 2,776,417
Subtotal of Enforcement Citations	**2,900**	**$ -**	**$ 2,857,917**	**$ 2,857,917**
Total Enforcement Actions	**3,120**	**$ -**	**$ 16,154,418**	**$ 16,154,418**

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 Program Category Vehicles include Off-Highway Recreational Vehicle Program.

c 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.

Appendix B
2016 Citation/NOV Programs Statistics

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

Program Category		Inspection Activity			Pending Citations And NOVs on 01 Jan 2016	Citation and NOV Dispositions			Pending Citations and NOVs on 31 Dec. 2016	Penalties Assessed
		Product Samples Tested	Inspections Completed	Citations and NOVs Issued		Rescinded, Compliant, or NFA	Closed	Total		
Marine	Ocean-going Vessel Fuel Sulfur Program		897							Note 1.
	Commercial Harbor Craft Program		-							Note 1.
	Shore Power Program		197							Note 1.
	Cargo Handling Equipment Program		197							Note 1.
	Drayage		4							Note 1.
	Broker Audits		-							Note 1.
	Total - Marine Programs	**-**	**1,295**	**-**	**-**	**-**	**-**	**-**	**-**	**$ -**
Vehicle, Parts & Consumer Products	Vehicles		231	15	36	3	17	20	31	$ 66,000
	Dealer and Fleet Citations (Tampering)		102	4	26	19	4	23	7	$ 3,000
	Engines	-	318	5	-	-	-	-	5	$ -
	Parts	-	-	-	-	-	-	-	-	$ -
	Do-it-yourself Canned Refrigerants	-	137	-	-	-	-	-	-	$ -
	Portable Fuel Containers	14	123	-	-	-	-	-	-	$ -
	Recreational Marine Engines (watercraft)		39	6	2	-	8	8	-	$ 8,000
	Total - Certifications Programs	**14**	**950**	**30**	**64**	**22**	**29**	**51**	**43**	**$ 77,000**
Motor Vehicle Fuels Programs	Refineries	479	72	3	8	-	-	-	11	$ -
	Terminals	660	133	1	1	-	-	-	2	$ -
	Service Stations	134	39	-	-	-	-	-	-	$ -
	Marine Vessels (Fuel Imports)	46	4	-	1	-	-	-	1	$ -
	Railcars (Fuel Imports)	6	5	-	-	-	-	-	-	$ -
	RFG Certifications		3,740	-	-	-	-	-	-	$ -
	Red-Dyed Diesel Fuel[a]		4,343							
	Other	275	137	-	-	-	-	-	-	$ -
	Total - Fuels Programs	**1,600**	**8,473**	**4**	**10**	**-**	**-**	-	**14**	**$ -**
Cargo Tank Programs	Cargo Tank Inspection Program		328	-	-	-	-	-	-	$ -
	Cargo Tank Pressure Test Program		113	9	6	3	8	11	4	$ 4,500
	Annual Test Observation Program		18	-	-	-	-	-	-	$ -
	Total - Cargo Tank Programs		**459**	**9**	**6**	**3**	**8**	**11**	**4**	**$ 4,500**
LCFS Programs	LCFS Site Audits	6	8	-	2	-	-	-	2	$ -
	LCFS Paper Audits	-	10	-	-	-	-	-	-	$ -
	Total-LCFS Programs	**6**	**18**	**-**	**2**	**-**	**-**	-	**2**	**$ -**
Total –Marine, Consumer Products,Fuels, & Cargo, Programs		**1,620**	**11,195**	**43**	**82**	**25**	**37**	**62**	**63**	**$ 81,500**

Note 1. Handled as enforcement cases and reported in Appedix H.

Appendix B
2016 Citation/NOV Programs Statistics (continued)

Table B-2. Heavy-duty Diesel Program Field Inspections

Program Category		Inspection Activity			Pending Citations on 01 Jan. 2016	Citations Dispositions			Pending Citations on 31 Dec. 2016	Penalties Collected
		Inspections Completed	Citations Issued	Ratio of Citations to Inspections		Rescinded, Compliant, NFA	Closed	Total		
Heavy-duty Diesel Inspection Programs	Heavy-duty Vehicle Inspection Program	5,700	130	2%	134	4	121	125	139	$ 60,300
	Emission Control Label Program	5,971	337	6%	686	3	344	347	676	$ 161,863
	Commercial Vehicle Idling Program	4,965	421	8%	1,083	9	363	372	1,132	$ 112,975
	Solid Waste Collection Vehicle Program	43	-	0%	23	1	7	8	15	$ 10,000
	Truck and Bus Program	7,599	2,311	30%	2,568	81	1,288	1,369	3,510	$ 1,808,709
	Tractor-Trailer (GHG) (SmartWay®) Program	284	29	10%	-	2	4	6	23	$ 7,800
	Drayage Truck Regulation Program	890	67	8%	296	1	61	62	301	$ 41,200
	Transport Refrigeration Unit Program	2,314	980	42%	2,417	33	455	488	2,909	$ 446,570
	Off-road Diesel Vehicle Program	1,368	456	33%	340	26	215	241	555	$ 123,000
	Diesel Exhaust Fluid /Selective Catalytic Reduction	319	-	0%	-	-	-	-	-	$ -
	School Bus Idling Program	-	-	-	-	-	-	-	-	$ -
	Other Programs	4	7	175%	10	1	5	6	11	$ 4,000
	Total – Heavy-duty Diesel Field Program Inspections	**29,457**	**4,738**	16%	**7,557**	**161**	**2,863**	**3,024**	**9,271**	**$ 2,776,417**
Total- Heavy-duty Diesel Inspection Programs		**29,457**	**4,738**	16%	**7,557**	**161**	**2,863**	**3,024**	**9,271**	**$ 2,776,417**

Table B-3. On-road Diesel Vehicles Inspected

Total California Vehicles Inspected	**10,392**
Total Out-of-State Vehicles Inspected	**6,184**
Total Number of Vehicles Inspected	**16,576**

Appendix C
2016 Complaint Program Statistics

Appendix C – 2016 Complaint Program Statistics

CalEPA and ARB Hotline Services 2016	Complaints Received	Complaints Referred to Air District	Investigated By ARB	Other Dispositions[a]	Total Complaints Resolved
Stationary Source Complaints	881	881	0	0	881
Vapor Recovery Complaints	365	365	0	0	365
School Bus Idling Complaints	82	0	82	0	82
Commercial Vehicle Idling Complaints	236	0	236	0	236
Smoking Vehicle Complaints	11,968	0	11,968	0	11,968
Heavy Duty Diesel Program Complaints	558	0	558	0	558
All Other Complaints[b]	623	0	211	412	623
Total Complaints	14,713	1,246	13,055	412	14,713

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
2016 Portable Equipment Registration Program Statistics

Table D-1. PORTABLE REGISTRATION – NEW APPLICATIONS					
(January 1, 2016 - December 31, 2016)					
	Application Count	Registration Unit Count	Unit Count By		
			Engine	Equipment	TSE[a]
Received	1,996	4,242	3,686	555	1
Issued	1,548	3,324	2,876	444	4
Deemed Incomplete [b]	318	602	520	82	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				
(January 1, 2016 - December 31, 2016)				
	Application Count	Registration Unit Count	Unit Count By	
			Engine	Equipment
Invoices Mailed	5,469	10,107	8,834	1,273
Issued[a]	3,895	7,001	6,102	899
Not Renewed[b]	1,970	3,529	3,026	503
Deemed Incomplete	153	258	209	49
TSE Annual Reporting[c]	69	69	3,703	0

[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 12/31/15 (end of previous calendar year).

Renewal Activity Net Fees	**$3,854,604.40**
All Other Activity Net Fees	**$2,396,642.75**
Total Net Revenue	**$6,251,247.15**

Appendix E
2016 Stationary Source Enforcement Support Statistics

Table E-1 Air District Hearing Board Programs	
Variances Received and Reviewed	280
Notices Reviewed	
Abatement Orders Received and Reviewed	35

Table E-2 Federal Data Reporting Services	
Full Compliance Evaluation (FCE) Reports Received and Reviewed	57
FCE Reports Entered	47
Federally Enforceable Violation Reports Received and Reviewed	119
Federally Enforceable Violation Reports Entered into U.S. EPA Database	102

Table E-3 Perchloroethylene Program Services	
Inspections Completed	0
Investigations Completed	0
Violations resolved	0

Table E-4 Other Stationary Source and Equipment Inspections	
Stationary Source Inspections and Investigations	20
Other Airborne Toxic Control Measure Inspectiosn/Investigations	0

Table E-5 Asbestos National Emissions Standard for Hazardous Air Pollutants Program	
Renovation and Demolition Notifications Received and Reviewed	391
Inspections Completed	36
Violations Resolved	3
Task Force Workshops Conducted	2

Table E-6 Landfill Methane Gas Program Services	
Inspections Completed	1
Investigations Completed	1
Violations Resolved	1

Table E-7 Refrigerant Management Program	
Inspections Completed	25
Investigations Completed	3
Violations Resolved	5

Table E-8 Sulfur Hexafluoride Regulation Programs	
Inspections Completed	1
Investigations Completed	4
Violations Resolved	0

Appendix F
2016 Training Program Statistics

Training Programs	Number of Classes	Students Per Class		
		Classroom	Online	Total
100 Series Courses				
100A - Fundamentals of Enforcement - Visible Emissions Evaluation Online Training	1	---	601	601
100B - Fundamentals of Enforcement - Visible Emissions Evaluation Field Training	7	145	---	145
100.1 - Visible Emissions Evaluation (Day) Certification	37	1,580	---	1,580
100.2 - Visible Emissions Evaluation (Night) Certification	5	106	---	106
102 - Air Quality Training Program (AQTP) (Online)*	1	---	556	556
190 - Air Academy Online Training (AAOT) (Online)*	1	---	298	298
197 - Basics of New Source Review (NSR) and Title V Permitting	4	67	---	67
200 Series Courses				
202 - Health and Safety for Air Pollution Control Professionals	3	29	---	29
215 - Particulate Matter (PM) Control Technology	4	71	---	71
216 - Volatile Organic Compounds (VOCs) Control Technology	4	73	---	73
217 - Oxides of Nitrogen (NOx) & Carbon Monoxide (CO) Control Technologies	4	84	---	84
250 - Asbestos Demolitions & Renovations for Contractors	2	29	---	29
251 - Asbestos Demolition and Renovation - Regulator Training	2	12	---	12
260 - Oil and Gas Extraction and Processing	3	23	---	23
261 - Plastic Composites Manufacturing	1	8	---	8
267 - In-Station Diagnostics	1	6	---	6
268 - Aboveground Gasoline Storage Tanks	1	41	---	41
272 - Stationary Gas Turbines & Power Plants	8	163	---	163
273 - Industrial Boilers	7	136	---	136
285 - Landfill Gas Control Facilities	4	89	---	89
290.7 - Chrome Plating ATCM: Certification (Recorded)*	1	---	76	76
296 - Health Risk Assessments & Dispersion Modeling	2	36	---	36
300 Series Courses				
300 - Fundamental Inspector Course (FIC) (Online)*	1	---	631	631
310 - Cal/EPA Basic Inspector Academy	9	238	---	238
321 - Variance/Hearing Board Workshop	1	23	---	23
340 - Gasoline Facilities Phase I and II Seminar	1	9	---	9
340.2 - Enhanced Vapor Recovery (EVR) Testing	2	13	---	13
396 - HARP2	4	39	---	39
397 - Advanced New Source Review & Title V	4	44	---	44
400 Series Courses				
401 - Comprehensive Continuous Emissions Monitoring	9	204	---	204
FOE (100A) TOTAL	1	---	601	601
FOE (100B)/VEE TOTAL	49	1,831	---	1,831
ONLINE TOTAL	4	---	1561	1561
TOTAL (Excluding Online & BIA)	71	1199	---	1199
Totals (Excluding BIA)	**125**	**3,030**	**2,162**	**5,192**

Appendix F
2016 Training Program Statistics
(continued)

Training Programs	Number of Classes	Students Per Class		
		Classroom	Online	Total
500 Series Courses				
504 - In-Use Off-Road Diesel Vehicle Regulation	8	211	---	211
505 - Large Spark Ignition (LSI) Fleet Regulation	1	54	---	54
511.2 - Diesel Particulate Filter Operation & Maintenance	3	54	---	54
515 - Maintenance Worker Regulatory Overview	18	440	---	440
520.S - Cómo Cumplir con los Reglamentos Diésel de CARB	7	76	---	76
521.6: CARB Diesel Truck Rules - Compliance Options and Reporting Requirements for 2016	20	260	300	560
521.7: CARB Diesel Truck Rules - Compliance Options and Reporting Requirements for 2017	17	247	---	247
525: Compliance Overview : Truck & Bus Rule, Off-Road Regulation, and Portable Equipmen	5	30	51	81
530: One-Stop Truck Events	4	333	---	333
540: Customized Training on Diesel Regulations and Controls	10	173	---	173
500 SERIES ONLINE TOTAL	**12**	---	**351**	
500 SERIES TOTALS	**93**	**1,878**	**351**	**2,229**
CUMULATIVE TOTAL	**227**	**5,146**	**2,513**	**7,659**

Appendix G
Cal/EPA Eligible Supplemental Environmental Projects

SEP Name	Location	Project Summary
Asthma Impact Model	Kern County	This SEP aims to improve the lives of asthma sufferers by helping them identify asthma triggers, and providing medical care to individuals who have little or no access to quality health care.
Asthma Impact Model	Merced County	See Asthma Impact Model – Kern County
Community Diesel Education and Emissions Reduction Project (DEEP)	Kettleman City and Bayview Hunters Point	This SEP provides funding for community members to distribute outreach materials to truckers, and bus drivers describing the health and environmental impacts of illegal diesel idling.
Healthy Air Neighborhoods	Fresno	This SEP provides funding to deliver outreach material to community members about San Joaquin Valley Air District's Residential Wood Burning Rule, as well as other clean air incentive programs.
Healthy Air Neighborhoods	Modesto	See Healthy Air Neighborhoods - Fresno
Healthy Air Neighborhoods	Porterville	See Healthy Air Neighborhoods – Fresno
The Northern County BreathMobile	Alameda County	This project would use SEP Funds to increase services provided by the BreathMobile. The BreathMobile is a mobile clinic with the capability to perform pulmonary function studies, provide medical services, and asthma education services to local school children.
Installation of Air Filtration Systems in Schools	South Coast Air Basin	This SEP will install, and maintain high-performance air filtration systems in schools within communities most impacted by toxic air contaminants.
Marine Vessel Speed Reduction Incentive Program	Ventura County	This SEP will establish an incentive program to encourage Ocean Going Vessel Speed Reduction (VSR), resulting in a reduction of ozone forming NOx particles.
Ground Truthing	Los Angeles	Community members will place air monitoring sensors throughout the city to locate, and map facilities that could be potentially hazardous. Once hazardous sites have been identified, California Safe Schools would relay the data to ARB and the SCAQMD for follow-up action.
Fresno TREES	Fresno	This project will strategically place green barriers downwind of major sources of pollution, and use air monitors to evaluate how effective green barriers are at protecting people from exposure to air pollution. It also aims to reduce greenhouse gases by sequestering carbon.
PM Sensor Network	East San Francisco	The project would install approximately 30 sensors to measure particulate matter, wind speed, temperature, and relative humidity. The air quality data gathered from the sensor network would be available to the community online.

Appendix H
2016 Enforcement Settlement Agreements

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Certifications	Engine	Generac Power Systems, Inc.	$ -	$ 55,100	$ 55,100	$ -	$ -	$ -
		Mitsubishi Engine North America	$ -	$ 20,625	$ 20,625	$ -	$ -	$ -
		Mitsubishi Engine North	$ -	$ 500	$ 500	$ -	$ -	$ -
	Indoor Air Cleaners	Atlas California Trading	$ -	$ 24,000	$ 24,000	$ -	$ -	$ -
	Parts	BuyAutoParts, Inc.	$ -	$ 31,763	$ 31,763	$ -	$ -	$ -
		California Environmental	$ -	$ 5,000	$ 5,000	$ -	$ -	$ -
		Competition Specialties, Inc.	$ -	$ 138,000	$ 103,500	$ -	$ -	$ 34,500
		Derive Systems, Inc.	$ -	$ 281,840	$ 211,380	$ -	$ -	$ 70,460
		Greentec Environmental, Inc.	$ -	$ 50,000	$ 50,000	$ -	$ -	$ -
		Hypertech, Inc.	$ -	$ 225,000	$ 225,000	$ -	$ -	$ -
		LeMans Corporation	$ -	$ 627,250	$ 470,438	$ -	$ -	$ 156,813
	Portable Fuel	Midwest Can Company	$ -	$ 400,000	$ 300,000	$ -	$ -	$ 100,000
		The Plastics Group	$ -	$ 141,372	$ 106,029	$ -	$ 35,343	$ -
	Off-Highway	American Honda Motor Corp	$ -	$ 1,037,100	$ 777,825	$ -	$ -	$ 259,275
Diesel	Diesel Fleet	152 Transport Inc.	$ -	$ 8,725	$ 6,544	$ 2,181	$ -	$ -
		A.N. Trucking	$ -	$ 6,000	$ 4,500	$ 1,500	$ -	$ -
		Agricola Baja Best	$ -	$ 19,875	$ 14,910	$ 4,965	$ -	$ -
		Agro-Jal Farming Enterprises, Inc.	$ -	$ 23,931	$ 17,948	$ 5,983	$ -	$ -
		Alexandre Dairy	$ -	$ 9,300	$ 6,975	$ 2,325	$ -	$ -
		Alien Transport, LLC	$ -	$ 6,700	$ 5,025	$ 1,675	$ -	$ -
		All Cartage Transportation, Inc.	$ -	$ 39,379	$ 29,534	$ 9,845	$ -	$ -
		All Valley Environmental, Inc.	$ -	$ 140,050	$ 105,037	$ -	$ -	$ 35,013
		Alvand Transportation Corp.	$ -	$ 25,000	$ 18,750	$ 6,250	$ -	$ -
		American Golf Corporation	$ -	$ 13,350	$ 10,013	$ 3,337	$ -	$ -
		Ardwin, Inc.	$ -	$ 20,000	$ 15,000	$ 5,000	$ -	$ -

Appendix H
2016 Enforcement Settlement Agreements *(continued)*

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Diesel	Diesel Fleet	Arnaudo Brothers Transport	$ -	$ 35,700	$ 26,775	$ 8,925	$ -	$ -
		Arrow Sign Company	$ -	$ 5,250	$ 3,938	$ 1,312	$ -	$ -
		Arrow Transit Mix, Inc	$ -	$ 141,600	$ 106,200	$ 35,400	$ -	$ -
		Arroyos Transport	$ -	$ 10,500	$ 7,875	$ 2,625	$ -	$ -
		Basra Trucking, Inc.	$ -	$ 9,300	$ 6,975	$ 2,325	$ -	$ -
		BC Rincon, Inc.	$ -	$ 24,500	$ 18,375	$ 6,125	$ -	$ -
		Bon Suisse, Inc.	$ -	$ 19,500	$ 14,625	$ 4,875	$ -	$ -
		Boyd Special Commodities, Inc.	$ -	$ 7,500	$ 5,625	$ 1,875	$ -	$ -
		Bridgeport Transportation and Warehousing Inc.	$ -	$ 10,875	$ 8,156	$ 2,719	$ -	$ -
		Camacho Brokers, Inc.	$ -	$ 37,104	$ 27,828	$ 9,276	$ -	$ -
		City-Wide Fibers, Inc.	$ -	$ 8,250	$ 6,187	$ -	$ -	$ 2,063
		Classic Cold Lines, LLC	$ -	$ 25,000	$ 18,750	$ -	$ -	$ 6,250
		CMD Trucking	$ -	$ 22,875	$ 17,156	$ 5,719	$ -	$ -
		Coffman Specialties, Inc.	$ -	$ 95,225	$ 71,419	$ 23,806	$ -	$ -
		Crown Xpress Transport / Transportes LGA	$ -	$ 1,500	$ 1,125	$ 375	$ -	$ -
		Cruz Industrial Truck, Inc.	$ -	$ 2,000	$ 1,500	$ 500	$ -	$ -
		CSW Transportation Services, Inc.	$ -	$ 2,000	$ 1,500	$ 500	$ -	$ -
		Curtis National LLC.	$ -	$ 14,700	$ 11,025	$ -	$ -	$ 3,675
		D Hill Trucking, Inc.	$ -	$ 6,000	$ 4,500	$ 1,500	$ -	$ -
		D O C Transportation, Inc. and C DO Express Diversified, Inc.	$ -	$ 25,375	$ 19,031	$ 6,344	$ -	$ -
		D.D. Tours Co., Inc.	$ -	$ 39,250	$ 29,438	$ 9,812	$ -	$ -
		Dart Container Corporation	$ -	$ 19,500	$ 14,625	$ -	$ -	$ 4,875
		Destiny Freight, Inc.	$ -	$ 6,600	$ 4,950	$ 1,650	$ -	$ -
		DVBE Trucking and Construction Company	$ -	$ 10,990	$ 8,243	$ -	$ -	$ 2,747

Appendix H
2016 Enforcement Settlement Agreements *(continued)*

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Diesel	Diesel Fleet	Eastgate Trans, Inc.	$ -	$ 6,925	$ 5,194	$ 1,731	$ -	$ -
		Ebmeyer Charter and Tour, Inc.	$ -	$ 3,600	$ 2,700	$ 900	$ -	$ -
		Eduardo Palacios	$ -	$ 6,000	$ 4,500	$ 1,500	$ -	$ -
		El Paso - Los Angeles Limousine Express, Inc.	$ -	$ 52,000	$ 39,000	$ -	$ -	$ 13,000
		Emmett's Excavation Incorporated	$ -	$ 4,000	$ 3,000	$ 1,000	$ -	$ -
		ESW Technologies	$ -	$ 60,000	$ 45,000	$ -	$ -	$ 15,000
		EZH Inc.	$ -	$ 4,500	$ 3,375	$ 1,125	$ -	$ -
		F3 Systems, Inc.	$ -	$ 8,600	$ 6,450	$ -	$ -	$ 2,150
		FedEx Freight, Inc.	$ -	$ 92,000	$ 69,000	$ 23,000	$ -	$ -
		Flying Food Group LLC	$ -	$ 62,250	$ 46,687	$ -	$ -	$ 15,563
		Foster Poultry Farms	$ -	$ 10,125	$ 7,594	$ -	$ -	$ 2,531
		G. B. Services, Inc.	$ -	$ 18,375	$ 13,785	$ 4,590	$ -	$ -
		Gold Metal Transport	$ -	$ 3,088	$ 2,316	$ 772	$ -	$ -
		Golden Bridge Holiday, Inc.	$ -	$ 22,500	$ 16,876	$ -	$ -	$ 5,624
		Golden Seven Trucking,Inc.	$ -	$ 11,186	$ 8,390	$ 2,796	$ -	$ -
		Gorditos Transportation, Inc.	$ -	$ 15,300	$ 11,475	$ 3,825	$ -	$ -
		Growers Transplanting, Inc.	$ -	$ 13,265	$ 10,219	$ 3,046	$ -	$ -
		Hertz Equipment Rental Corp.	$ -	$ 12,525	$ 9,395	$ 3,130	$ -	$ -
		HNOS Macana, Inc.	$ -	$ 8,250	$ 6,188	$ 2,062	$ -	$ -
		IDL Logistics LLC	$ -	$ 3,750	$ 2,813	$ 937	$ -	$ -
		Imperial Valley Foods	$ -	$ 36,000	$ 27,000	$ -	$ -	$ 9,000
		J. Marchini and Son, Inc.	$ -	$ 14,400	$ 10,800	$ 3,600	$ -	$ -
		J. Torres Co., Inc.	$ -	$ 16,500	$ 12,375	$ 4,125	$ -	$ -
		JFK Transportation Co., Inc.	$ -	$ 59,750	$ 44,812	$ -	$ -	$ 14,938

Appendix H
2016 Enforcement Settlement Agreements *(continued)*

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Diesel	Diesel Fleet	JIB United Transport	$ -	$ 24,410	$ 18,306	$ 6,104	$ -	$ -
		Jorge Soto Trucking	$ -	$ 17,800	$ 14,575	$ 3,225	$ -	$ -
		JVT Company	$ -	$ 12,813	$ 9,610	$ 3,203	$ -	$ -
		Kamal Trucking Corporation	$ -	$ 1,125	$ 844	$ 281	$ -	$ -
		Liberty Auto Transport	$ -	$ 2,000	$ 1,500	$ -	$ -	$ 500
		Limon Trucking, Inc.	$ -	$ 3,100	$ 2,325	$ 775	$ -	$ -
		Lincoln Transportation Services	$ -	$ 8,500	$ 6,375	$ 2,125	$ -	$ -
		London Transport, Inc.	$ -	$ 35,575	$ 26,681	$ 8,894	$ -	$ -
		Lujan Transport Inc.	$ -	$ 3,000	$ 2,250	$ 750	$ -	$ -
		Marquez Brothers International, Inc.	$ -	$ 48,250	$ 48,250	$ -	$ -	$ -
		Marvin E. Wright Trucking, Inc.	$ -	$ 17,100	$ 12,825	$ 4,275	$ -	$ -
		Mather Bros., Inc.	$ -	$ 25,000	$ 18,750	$ 6,250	$ -	$ -
		McLaughlin Engineering & Mining, Inc.	$ -	$ 12,000	$ 9,000	$ 3,000	$ -	$ -
		Miracle Transportation, Inc.	$ -	$ 75,200	$ 56,400	$ 18,800	$ -	$ -
		Mitch Brown Construction, Inc.	$ -	$ 16,225	$ 12,169	$ 4,056	$ -	$ -
		MP Environmental Services, Inc.	$ -	$ 9,250	$ 6,938	$ -	$ -	$ 2,312
		M&S Trucking, inc.	$ -	$ 10,450	$ 7,838	$ -	$ -	$ 2,612
		Nationwide Trans, Inc.	$ -	$ 396,000	$ 303,750	$ -	$ -	$ 92,250
		NewStar Fresh Foods LLC	$ -	$ 10,000	$ 7,500	$ 2,500	$ -	$ -
		Nunez Transport, Inc. Rodolfo Valdez Nunez	$ -	$ 48,200	$ 36,150	$ 12,050	$ -	$ -
		Otay Mesa Sales, Inc.	$ -	$ 4,000	$ 3,000	$ 1,000	$ -	$ -
		P. S. Carrier, Inc.	$ -	$ 25,000	$ 18,750	$ 6,250	$ -	$ -
		Pacific Express	$ -	$ 5,000	$ 3,750	$ 1,250	$ -	$ -
		Pai Tour and Bus, Inc.	$ -	$ 15,000	$ 11,250	$ 3,750	$ -	$ -

Appendix H
2016 Enforcement Settlement Agreements *(continued)*

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Diesel	Diesel Fleet	Paul's Express, LLC	$ -	$ 89,700	$ 67,275	$ 22,425	$ -	$ -
		Penske Trucking Leasing Co., L.P.	$ -	$ 532,875	$ 399,656	$ 133,219	$ -	$ -
		Piazza Trucking, Inc.	$ -	$ 221,750	$ 166,312	$ 55,438	$ -	$ -
		Potter Trucking	$ -	$12,000 (suspended)	$ -	$ -	$ -	$ -
		Pruner Enterprises, Inc.	$ -	$ 9,000	$ 6,750	$ -	$ -	$ 2,250
		Quality 1st Produce Inc./Young Trucking LLC/Forever Young Transport LLC	$ -	$ 100,000	$ 75,000	$ 25,000	$ -	$ -
		Ramiro G. Cabrero	$ -	$ 28,500	$ 21,375	$ 7,125	$ -	$ -
		Rapid Logistics LLC	$ -	$ 14,000	$ 10,500	$ 3,500	$ -	$ -
		RARA Trucking, Inc	$ -	$ 10,200	$ 7,650	$ 2,550	$ -	$ -
		Robledo Transport Logistics, Inc.	$ -	$ 5,150	$ 3,862	$ 1,288	$ -	$ -
		Rocha Brothers Farms LLC	$ -	$ 11,625	$ 8,719	$ -	$ -	$ 2,906
		Ross Stores, Inc.	$ -	$ 38,250	$ 28,688	$ -	$ -	$ 9,562
		Royal American Tours	$ -	$ 10,000	$ 7,500	$ 2,500	$ -	$ -
		RS Bus Line, Inc.	$ -	$ 30,000	$ 30,000	$ -	$ -	$ -
		Rust and Sons Trucking, Inc.	$ -	$ 22,000	$ 16,500	$ 5,500	$ -	$ -
		S. S. Skikos Trucking, Inc.	$ -	$ 3,800	$ 2,850	$ 950	$ -	$ -
		San Francisco Municipal Transportation Agency	$ -	$ 221,500	$ 166,375	$ 55,125	$ -	$ -
		Sandslide Materials Corporation	$ -	$ 8,500	$ 6,375	$ 2,125	$ -	$ -
		Shaffs Construction	$ -	$ 6,100	$ 4,575	$ 1,525	$ -	$ -
		Shuttle Bus Leasing/G4S Secure Solutions USA Inc.	$ -	$ 7,275	$ 5,456	$ 1,819	$ -	$ -
		Silva Contractors, Inc.	$ -	$ 14,600	$ 10,950	$ 3,650	$ -	$ -
		Skanska Traylor Shea Joint Venture	$ -	$21,000 (suspended)	$ -	$ -	$ -	$ -
		Skyline Coach, Inc.	$ -	$ 10,375	$ 7,781	$ -	$ -	$ 2,594
		Skyline Transportation, Inc.	$ -	$ 38,400	$ 28,800	$ 9,600	$ -	$ -

Appendix H
2016 Enforcement Settlement Agreements *(continued)*

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Diesel	Diesel Fleet	Southern Counties Oil Company	$ -	$ 10,950	$ 8,214	$ 2,736	$ -	$ -
		Southwest Boulder and Stone, Inc.	$ -	$ 51,025	$ 38,269	$ -	$ -	$ 12,756
		Southwest Trails	$ -	$ 3,750	$ 2,812	$ -	$ -	$ 938
		Square Transportation, Inc.	$ -	$ 22,300	$ 16,726	$ 5,574	$ -	$ -
		SSI Refrigerated Express, Inc.	$ -	$ 31,312	$ 23,484	$ 7,828	$ -	$ -
		Steve's Oilfield Service, Inc.	$ -	$ 9,575	$ 7,181	$ -	$ -	$ 2,394
		Steve Wills Trucking and Logging, Inc.	$ -	$ 22,125	$ 16,594	$ 5,531	$ -	$ -
		Sunstate Equipment Co., LLC	$ -	$ 30,000	$ 22,500	$ 7,500	$ -	$ -
		Superior Sod	$ -	$ 22,300	$ 16,700	$ 5,600	$ -	$ -
		Superior Truck Lines, Inc.	$ -	$ 87,250	$ 65,500	$ -	$ -	$ 21,750
		Superior Truck Services, Inc.	$ -	$ 7,375	$ 5,531	$ -	$ -	$ 1,844
		Swift Transportation Co. of Arizona, LLC	$ -	$ 32,250	$ 32,250	$ -	$ -	$ -
		Tanimura & Antle, Inc.	$ -	$ 6,300	$ 4,725	$ 1,575	$ -	$ -
		TCH Trucking, Inc.	$ -	$ 6,000	$ 4,500	$ 1,500	$ -	$ -
		Tom's Equipment Rental	$ -	$ 6,000	$ 4,500	$ 1,500	$ -	$ -
		Trafficanda Egg Ranches, Inc.	$ -	$ 45,698	$ 34,274	$ 11,424	$ -	$ -
		Trimac Transportation Inc.	$ -	$ 33,400	$ 25,050	$ 8,350	$ -	$ -
		Ulloas Trucking	$ -	$ 17,350	$ 13,012	$ 4,338	$ -	$ -
		United Coach Tours, Inc.	$ -	$ 13,250	$ 9,938	$ 3,312	$ -	$ -
		United States Cold Storage	$ -	$ 21,750	$ 16,313	$ -	$ -	$ 5,437
		Vicco Incorported, DBA Platinum Enterprises	$ -	$ 5,000	$ 3,750	$ 1,250	$ -	$ -
		West Central Produce, Inc.	$ -	$ 23,400	$ 17,550	$ 5,850	$ -	$ -
		West Coast Casing LLC	$ -	$ 34,750	$ 26,063	$ -	$ -	$ 8,688
		Zanotti S.P.A.	$ -	$ 16,000	$ 3,000	$ -	$ -	$ 13,000

Appendix H
2016 Enforcement Settlement Agreements *(continued)*

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Diesel	Ports and Marine	Carisbrooke Shipping Ltd./ Long Beach	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Costamare / Long Beach	$ -	$ 10,000	$ 10,000	$ -	$ -	$ -
		Eastern Pacific Shipping / Los Angeles	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Eastern Pacific Shipping / Los Angeles	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Evergreen Shipping Agency (America) Corporation	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Gearbulk / Los Angeles	$ -	$ 10,000	$ 10,000	$ -	$ -	$ -
		Hanjin Shipping / Long Beach	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Heayoung Maritime Services/ San Diego	$ -	$ 10,000	$ 10,000	$ -	$ -	$ -
		Hoegh Fleet Services AS/ San Diego	$ -	$ 10,000	$ 10,000	$ -	$ -	$ -
		Maersk Line A/S/ Los Angeles	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Nordbulk Shipping UK Ltd/ Los Angeles	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		OSM Ship Management PTE Ltd.	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		P&F Marine / Los Angeles	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Seaspan / Los Angeles	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Synergy Marine/ Long Beach	$ -	$ 10,000	$ 10,000	$ -	$ -	$ -
		Univan / Los Angeles	$ -	$ 30,000	$ 30,000	$ -	$ -	$ -
		Yang Ming Marine Transport / Los Angeles	$ -	$ 10,000	$ 10,000	$ -	$ -	$ -
Fuels	Fuels Specifications	ExxonMobil	$ -	$ 50,000	$ 37,500	$ -	$ -	$ 12,500
		Shell Martinez	$ -	$ 195,000	$ 146,250	$ -	$ -	$ 48,750
Stationary Sources	Asbestos	Aztec Construction/Benson Roofing	$ -	$ 40,000	$ 40,000	--	--	--
		City of Calexico	$ -	$ 10,000	$ 10,000	--	--	--
		Imperial Valley Commecial properties/Oakview Constructors	$ -	$ 14,000	$ 14,000	--	--	--
		Sierra Foothills Construction/Sierra Central Credit Union/C&D Construction	$ -	$ 8,000	$ 8,000	--	--	--
	Landfill Methane Control	L and D Landfill Limited Partnership	$ -	$ 70,000	$ 70,000	--	--	--

Appendix H
2016 Enforcement Settlement Agreements *(continued)*

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Stationary Sources	Refrigeration Management	Consolidated Container Company	$ -	$ 25,000	$ 25,000	--	--	--
		Expo Fresh	$ -	$ 25,000	$ 25,000	--	--	--
		Sysco Central California, Inc.	$ -	$ 60,000	$ 60,000	--	--	--
		Valley Fine Foods Inc	$ -	$ 65,000	$ 65,000	--	--	--
		Whole Foods Market California, Inc., and Mrs. Gooch's Natural Food Markets, Inc.	$ -	$ 77,750	$ 77,750	--	--	--
	Composite Wood	Lumber Liquidators, Inc.	$ -	$ 2,500,000	$ 2,500,000	$ -	$ -	$ -
	Consumer Products	26 California Wholesale	$ -	$ 9,750	$ 9,750	$ -	$ -	$ -
		A.G. Professional Hair Care Products	$ -	$ 4,900	$ 4,900	$ -	$ -	$ -
		A.P. Deauville, LLC	$ -	$ 36,000	$ 36,000	$ -	$ -	$ -
		Agradora Investments	$ -	$ 3,350	$ 3,350	$ -	$ -	$ -
		Big Lots Stores, Inc. and PNS Stores, Inc.	$ -	$ 250,000	$ 187,500	$ -	$ -	$ 62,500
		Bombardier Recreational Products	$ -	$ 6,500	$ 6,500	$ -	$ -	$ -
		Cali Chem, Inc.	$ -	$ 10,000	$ 10,000	$ -	$ -	$ -
		Champion Chemical Company	$ -	$ 33,000	$ 33,000	$ -	$ -	$ -
		Creative Art Materials LLC	$ -	$ 3,000	$ 3,000	$ -	$ -	$ -
		Cutex Brands	$ -	$ 19,400	$ 19,400	$ -	$ -	$ -
		Cutex Brands	$ -	$ 4,500	$ 4,500	$ -	$ -	$ -
		DYK Automotive, LLC	$ -	$ 5,500	$ 5,500	$ -	$ -	$ -
		Federal Process Corporation	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Filo America	$ -	$ 20,000	$ 20,000	$ -	$ -	$ -
		High Ridge Brands	$ -	$ 127,050	$ 127,050	$ -	$ -	$ -
		Hot Topic, Inc.	$ -	$ 5,600	$ 5,600	$ -	$ -	$ -
		Imex Model Company, Inc.	$ -	$ 15,558	$ 15,558	$ -	$ -	$ -
		JM Products-Isoplus LLC	$ -	$ 60,450	$ 60,450	$ -	$ -	$ -

Appendix H
2016 Enforcement Settlement Agreements *(continued)*

Program Category	Subprograms	Company Name	Total Assessed Judgement	Total Assessed Settlement	Amount Assessed to ARB	Amount to SEP		
						CCDET	SORE	School Bus
Stationary Sources	Consumer Products	Loew-Cornell	$ -	$ 4,200	$ 4,200	$ -	$ -	$ -
		Nailtiques Cosmetic Corp.	$ -	$ 6,000	$ 6,000	$ -	$ -	$ -
		Odif USA	$ -	$ 3,000	$ 3,000	$ -	$ -	$ -
		Ojas Naturals	$ -	$ 4,000	$ 4,000	$ -	$ -	$ -
		Prym Consumer USA, Inc. and Odif USA	$ -	$ 12,500	$ 12,500	$ -	$ -	$ -
		Rain Africa USA	$ -	$ 7,500	$ 7,500	$ -	$ -	$ -
		Regis Corporation	$ -	$ 19,200	$ 19,200	$ -	$ -	$ -
		Selective Imports Corporation	$ -	$ 16,000	$ 16,000	$ -	$ -	$ -
		Shield Packaging of California, Inc.	$ -	$ 7,125	$ 7,125	$ -	$ -	$ -
		Shye Worldwide	$ -	$ 3,000	$ 3,000	$ -	$ -	$ -
		Simoniz USA, Inc.	$ -	$ 8,800	$ 8,800	$ -	$ -	$ -
		Talk Town Polish Company Ltd.	$ -	$ 3,000	$ 3,000	$ -	$ -	$ -
		Target Corp	$ -	$ 58,300	$ 58,300	$ -	$ -	$ -
		TR Industries	$ -	$ 50,000	$ 50,000	$ -	$ -	$ -
		True Value Company	$ -	$ 15,500	$ 15,500	$ -	$ -	$ -
		Unilever	$ -	$ 199,500	$ 199,500	$ -	$ -	$ -
		Vi-Jon, Inc, Rite Aid Corporation, CVS Longs Drug Stores California, L.L.C and Garfield Beach CVS, L.L.C.	$ -	$ 199,500	$ 199,500	$ -	$ -	$ -
		Wal-Mart Stores and Moeller Contract Packaging, Inc.	$ -	$ 26,400	$ 26,400	$ -	$ -	$ -
		Walmart Stores, Inc.	$ -	$ 50,000	$ 50,000	$ -	$ -	$ -
Mandatory Reporting Requirements	Mandatory Reporting Requirements	Tesoro Refining and Manufacturing Company LLC	$ -	$ 509,600	$ 509,600	$ -	$ -	$ -
		Imperial Irrigation District	$ -	$ 35,000	$ 35,000	$ -	$ -	$ -
		Shell Oil Products US	$ -	$ 223,000	$ 223,000	$ -	$ -	$ -
		Constellation New Energy	$ -	$ 149,017	$ 149,017	$ -	$ -	$ -
		Eagle Petroleum LLC	$ -	$ 131,000	$ 131,000	$ -	$ -	$ -
		Carlton Forge Works	$ -	$ 130,000	$ 130,000	$ -	$ -	$ -
		Freeport McMoRan Oil & Gas	$ -	$ 40,000	$ 40,000	$ -	$ -	$ -
		Self Serve Petroleum	$ -	$ 165,000	$ 165,000	$ -	$ -	$ -

Appendix I
2016 Diesel Programs Compliance Calculations

In February 2017, CARB staff estimated Truck and Bus regulation compliance rates for all heavy vehicles with a gross vehicle weight rating (GVWR) greater than 26,000 pounds. Lighter vehicles with a GVWR of 26,000 pounds or less were not included because their compliance requirements are more recent.

To calculate the compliance rate for heavy trucks, staff first looked at three types of vehicle registration: (1) vehicles registered with California Department of Motor Vehicles (DMV), (2) vehicles registered with the International Registration Plan (IRP) that are based in California, and (3) vehicles registered with IRP that are based in all other states. IRP is a registration reciprocity agreement between the contiguous United States and Canadian provinces, which provides apportioned payments of registration fees, based on the total distance operated in participating jurisdictions, to them. CARB obtains data on vehicles registered with California DMV twice per year, and on vehicles registered with IRP every month. The vehicle registration data used for this analysis was from April 2016. The vehicle registration data includes the make and model of the vehicle, the vehicle model year, and information about the registered owner of each vehicle.

For vehicles registered with California DMV and vehicles registered with IRP that are based in California, staff used Accuzip software to standardize the address of each registered owner. Standardized addresses allowed for the grouping of vehicles by registration address in order to determine fleet size. Once vehicles were grouped by address, fleet size was determined by counting the number of vehicles registered to a particular address.

Within each fleet, staff identified all vehicles with a chassis model year 2007 and older, which are potentially noncompliant. In general, vehicles are equipped with an engine that is one year older than the chassis model year. For example, a 2007 model year chassis is most likely equipped with a 2006 model year engine. All engines 2006 and older must be equipped with a diesel particulate filter or be reported into CARB's Truck Regulation Upload, Compliance and Reporting System (TRUCRS) to use a flexibility option, extension, or exemption. The vehicle identification numbers (VIN) of any potentially noncompliant vehicles were cross-referenced with TRUCRS to determine whether that vehicle was reported compliant.

For vehicles registered with IRP that are based in a state other than California, staff also identified all vehicles with a chassis model year 2007 and older and cross-referenced their VINs with TRUCRS to determine whether that vehicle was reported compliant. Table I-1 below summarizes the vehicles reported as using a flexibility option, extension, or exemption to comply.

Tables I-2, I-3, and I-4 below summarize, by vehicle registration type, vehicle counts per engine model year group corresponding to the Engine Model Year Compliance Schedule.

Once the noncompliant vehicles were identified, staff compared these numbers with the overall population of vehicles to arrive at various compliance rates depending on fleet size and registration type. These results are summarized in Table I-5 in Appendix I, and show a range of compliance from 50 to 90 percent.

[See Tables next page.]

Appendix I
2016 Diesel Programs Compliance Calculations *(continued)*

Summary of TRUCRS data [(a)]

Table I-1

Retrofits	Ag 15K	Ag 20K	Ag 25K	Ag Specialty	Low NOx	Work Truck	Low Use	Log Truck	Total
22,970	2,166	1,605	256	1,660	2,509	3,211	22,263	587	57,227

[(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.

Table I-2

California Registered Heavier[(a)] Diesel Truck Counts	
GVWR > 26,000 (excludes IRP[b])	
Pre-1995MY	25,682
MY1995 – MY1996	9,609
MY1997 – MY2000	24,966
MY2001 – MY2005	27,262
MY2006 – MY2007	17,397
MY2008 – MY2010	30,678
MY2011 +	55,563
Total All MY's	191,157
Pre-2008MY Total	104,916

Table I-3

California IRP Registered Heavier Diesel Truck Counts	
GVWR > 26,000	
Pre-1995MY	576
MY1995 – MY1996	770
MY1997 – MY2000	4,049
MY2001 – MY2005	6,140
MY2006 – MY2007	6,125
MY2008 – MY2010	18,744
MY2011 +	35,566
Total All MY's	71,970
Pre-2008MY Total	17,660

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

Table I-4

IRP (excluding California) Registered Heavier Diesel Truck Counts	
GVWR > 26,000	
Pre-1995MY	11,277
MY1995 – MY1996	9,540
MY1997 – MY2000	50,654
MY2001 – MY2005	96,716
MY2006 – MY2007	123,108
MY2008 – MY2010	85,513
MY2011 +	588,221
Total All MY's	965,029
Pre-2008MY Total	291,295

Appendix I
2016 Diesel Programs Compliance Calculations *(continued)*

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.

Table I-5 Heavier Truck Compliance Rates

			Total Heavies	Total Heavies	*Total Heavies	*Total Heavies	*Total Heavies	
	Total	Total Heavies	Pre 2008	Pre 2008	Pre 2008 in a	Pre 2008 in a Non	Pre 2008 in	Compliance
Reg. Type	Heavies	Pre 2008	Not in TRUCRS	In TRUCRS	Compliant Fleet	Compliant Fleet	Unknown Status	Rate (%)
CA Reg. Fleet Size 1-3	58,181	36,217	28,085	8,132	4,670	885	2,577	50
CA Reg. Fleet Size 4-20	51,590	29,947	18,040	11,907	5,727	1,922	4,258	61
CA Reg. Fleet Size 21-100	38,341	19,474	10,793	8,681	4,091	1,863	2,727	67
CA Reg. Fleet Size > 100	43,045	19,278	13,604	5,674	3,933	1,471	270	65
CA Reg. In-State Totals	**191,157**	**104,916**	**70,522**	**34,394**	**18,421**	**6,141**	**9,832**	**60**
CA IRP Fleet Size 1-3	27,545	8,321	5,921	2,400	1,242	161	997	78
CA IRP Fleet Size 4-20	21,486	5,075	2,873	2,202	1,020	221	961	86
CA IRP Fleet Size 21-100	13,785	2,524	1,104	1,420	806	338	276	90
CA IRP Fleet Size > 100	9,154	1,740	971	769	214	103	452	88
CA IRP Totals	**71,970**	**17,660**	**10,869**	**6,791**	**3,282**	**823**	**2,686**	**84**
Totals In state and IRP	**263,127**	**122,576**	**81,391**	**41,185**	**21,703**	**6,964**	**12,518**	**66**
IRP (not including CA)	**965,029**	**291,339**	**286,225**	**5,114**	**2,686**	**1,118**	**1,310**	**70**
Grand Totals	**1,228,156**	**413,915**	**367,616**	**46,299**	**24,389**	**8,082**	**13,828**	**69**

Appendix J
Cargo Handling Equipment

As of December 31, 2015

Compliance Statistics for Equipment that was In-Use January 1, 2007

Table J-1 Yard Trucks

	Yard Trucks							
	Compliance on January 6, 2012		Compliance on November 26, 2013		Compliance on December 24, 2014		Compliance on December 31, 2015	
Total Inventory	2497		2497		2497		2497	
Non-Compliant	971	39%	703	28%	465	19%	284	11%
Compliant	1526	61%	1794	72%	2032	81%	2213	89%

Table J-2 Non Yard Trucks

	Non -Yard Trucks							
	Compliance on January 6, 2012		Compliance on November 26, 2013		Compliance on December 24, 2014		Compliance on December 31, 2015	
Total Inventory	2081		2127		2140		2144	
Non-Compliant	1170	56%	540	25%	299	14%	173	8%
Compliant	911	44%	1587	75%	1841	86%	1971	92%

Note: Numbers are based on annual reports submitted January 2015 and any follow-up communication

Note: Inventory numbers continue to increase each year as more businesses are brought into the program.

Note: The past 5 years have also seen 25 terminals close and at least 2 are idle. (Approximately 100 CHE terminals submit annual reports each year)