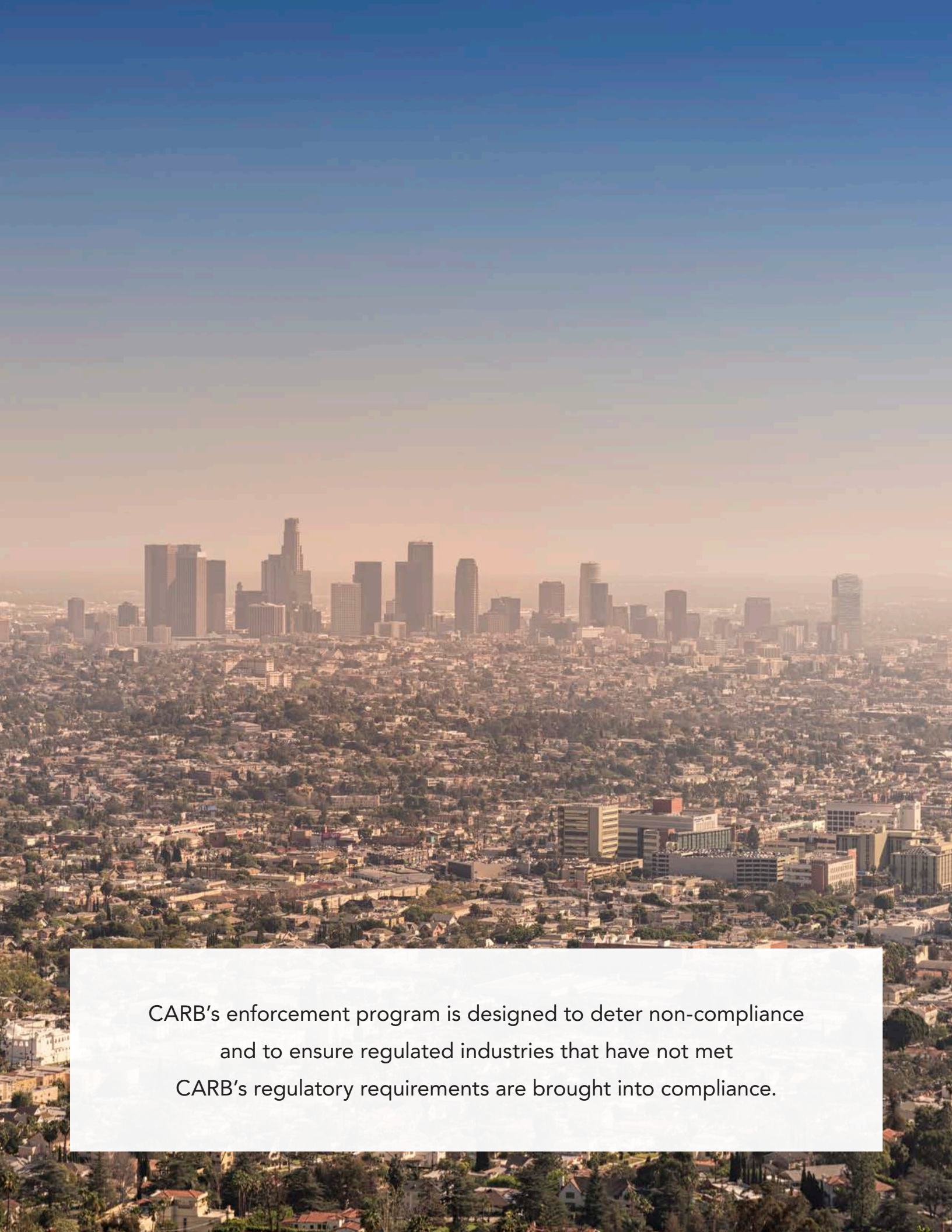




2019 Annual Enforcement Report



An aerial photograph of Los Angeles, California, showing the dense urban landscape of the city. The foreground is filled with residential neighborhoods, characterized by small houses and trees. In the middle ground, the city's grid pattern is visible, with various commercial and industrial buildings. The background features the Los Angeles skyline, with several prominent skyscrapers rising above the haze. The sky is a clear, deep blue, and the overall atmosphere is bright and sunny.

CARB's enforcement program is designed to deter non-compliance and to ensure regulated industries that have not met CARB's regulatory requirements are brought into compliance.

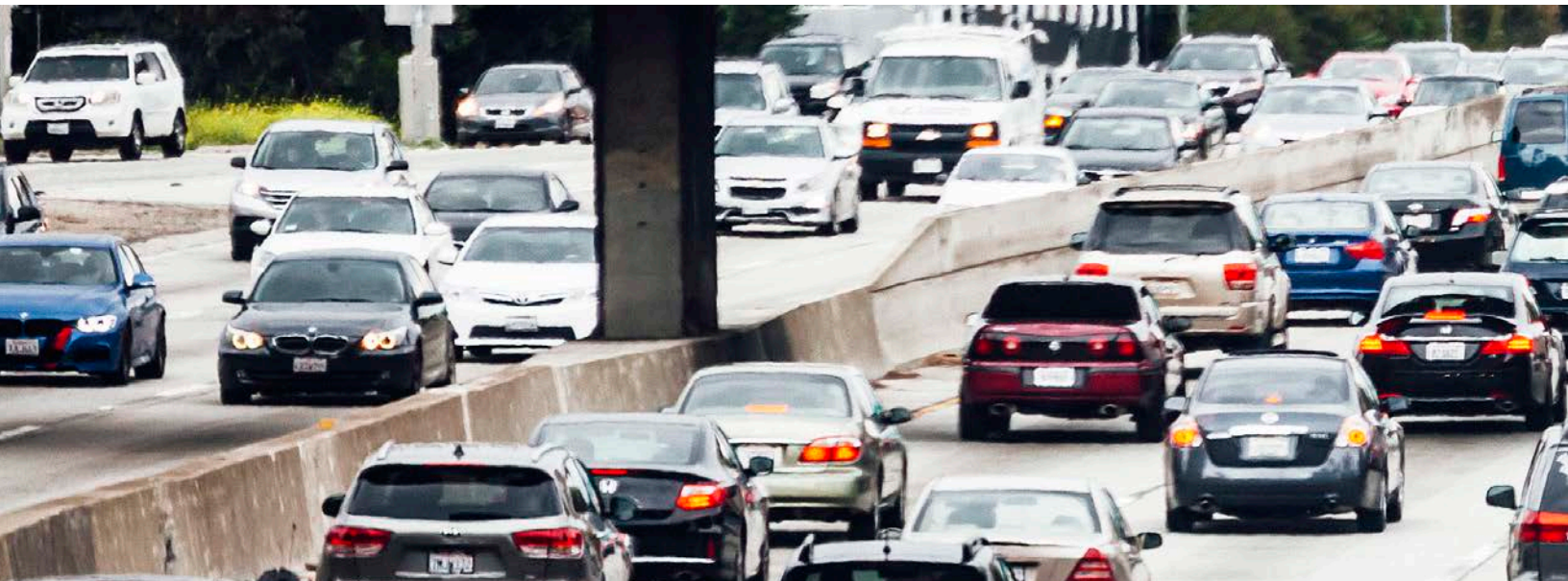
Contents

Acronyms	vi
Forward	viii
Executive Summary & Introduction	2
Compliance	3
Deterrence	4
Program Development	4
Compliance	6
Marine Enforcement	6
Heavy-Duty Diesel Truck Enforcement	10
Transport Refrigeration Units	13
In-Use Off-Road Diesel Equipment	14
Deterrence	16
Vehicle, Engine, and Aftermarket Parts	16
Consumer Products	18
Fuels	20
Program Development	24
Enforcement Policy Update	24
Supporting the Community Air Protection Program	26
Focusing Enforcement Efforts to Promote Environmental Justice	27
Supplemental Environmental Projects (SEP) Program Updates	29
Cargo Tank Vapor Recovery Program (CTVRP)	32
Portable Equipment Registration Program (PERP)	33
Public Safety Power Shutoffs (PSPS)	34
Improving Stationary Source Enforcement Programs	34
Conclusions	38
Appendices	40

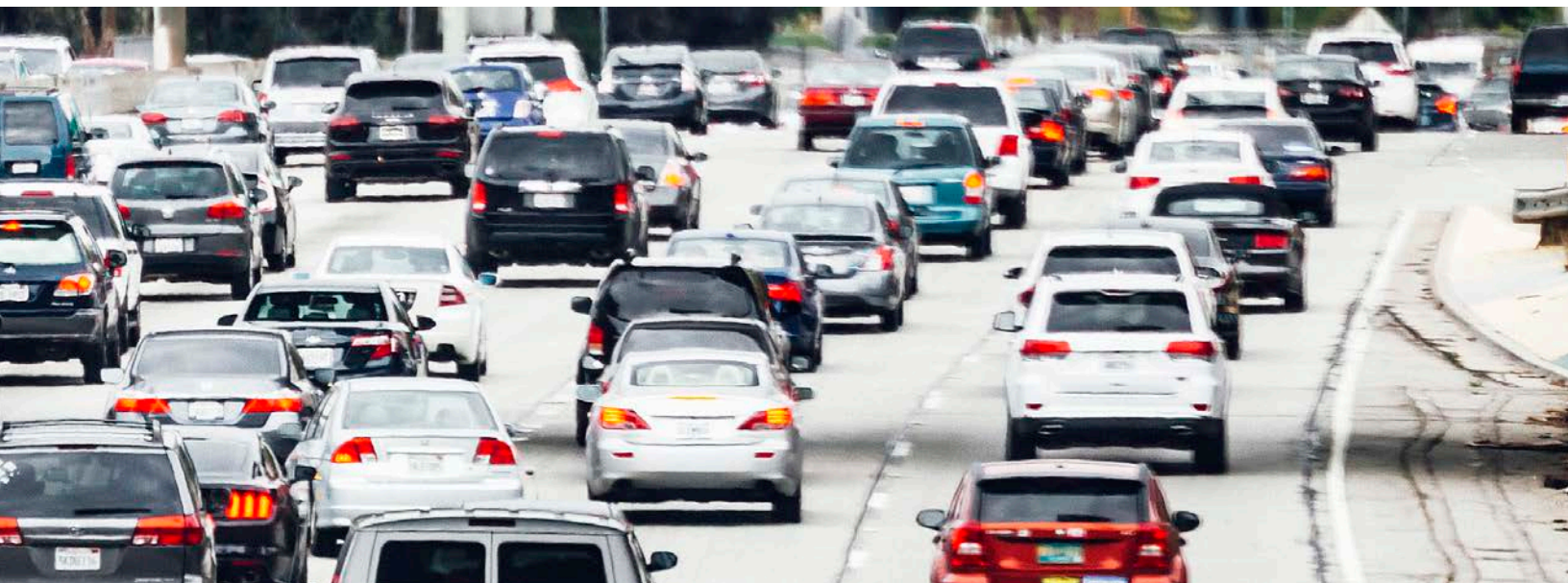


Acronyms

AB 617	Assembly Bill 617
AECD	auxiliary emission control device
AIM	Asthma Impact Model
APCD	Air Pollution Control District
ATCM	Airborne Toxic Control Measure
CalEPA	California Environmental Protection Agency
CAP	Compliance Assistance Program
CAPCOA	California Air Pollution Control Officers Association
CAPP	Community Air Protection Program
CARB	California Air Resources Board
CA DMV	California Department of Motor Vehicles
CCR	California Code of Regulations
COVID-19	Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)
CTVRP	Cargo Tank Vapor Recovery Program
DEF	diesel emission fluid
DPF	diesel particulate filter
DTSC	Department of Toxic Substances Control
EJ	Environmental Justice
EJ Task Force	CalEPA Environmental Justice Task Force
ERC	emission reduction credit
GHG	greenhouse gas
HDVIP	Heavy-Duty Vehicle Inspection Program
ICAPCD	Imperial County Air Pollution Control District
LA	Los Angeles, California
LB	Long Beach, California



LCFS	Low Carbon Fuel Standard
LMR	Landfill Methane Regulation
MLD	Monitoring and Laboratory Division of CARB
MOU	memoranda of understanding
MRR	Mandatory Reporting of Greenhouse Gas Emissions
MY	model year
NOV	Notice of Violation
NO _x	oxides of nitrogen
NTE	not-to-exceed
PEAQs	Portable Emissions Acquisition System
PERP	Portable Equipment Registration Program
PM	particulate matter
PSIP	Periodic Smoke Inspection Program
RD	Research Division of CARB
RMP	Refrigerant Management Program
SAE	Society of Automotive Engineers
SCAQMD	South Coast Air Quality Management District
SDAPCD	San Diego Air Pollution Control District
STEP	Streamlined Truck Enforcement Process
SCR	selective catalytic reduction (system)
SEP	supplemental environmental project
SJVAPCD	San Joaquin Valley Air Pollution Control District
SORE	small off-road engine
SWCV	solid waste collection vehicle
TAC	toxic air contaminants
TRU	transport refrigeration unit
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compound



Forward

The COVID-19 pandemic has had a major impact on California. On March 21, 2020, the Governor issued a stay at home order to protect the health and well-being of all Californians and to establish consistency across the state in order to slow the spread of COVID-19. During this order, environmental compliance is considered essential. CARB's regulations continue to be in effect and deadlines apply.

CARB staff has quickly reorganized to be able to work remotely. New technologies and work techniques were deployed rapidly, making a near-complete transition to teleworking. Today the vast majority of CARB staff are working from home, and the work of CARB is continuing. This includes CARB enforcement programs.

Field inspections were temporarily curtailed in March as staff assessed how to prioritize inspections and ensure the health and safety of inspectors working in the field. Staff resumed selected field operations in May and will ramp up inspections to ensure compliance. The vast majority of CARB enforcement programs do not rely solely on inspections to be effective. Our use of databases, virtual inspections, and information requests enables the collection of evidence to identify and prosecute non-compliance. Therefore, our work continues and remains effective. Enforcement efforts are especially focused on disadvantaged communities. Recent studies¹ demonstrate people in communities most impacted by air pollution are also more susceptible to the COVID-19 virus. Now more than ever, CARB's work to control air pollution sources in these communities is vitally important.

During this emergency, CARB expects industry to comply with CARB regulatory programs. However, we realize the unique circumstances that the pandemic and associated response has imposed on industry, and we are providing enforcement discretion to individual responsible parties when proven necessary. Our expectation is industry will do whatever it can to comply, and, in exchange, where compliance is simply beyond reasonable control due to situations brought on by the pandemic, CARB will work to find a reasonable resolution to the issue.

¹ Expanded Health Analysis of CARB's Air Quality and Climate Programs, Presented to CARB on April 23, 2020. Presentation available at ww3.arb.ca.gov/board/books/2020/042320/20-4-1pres.pdf. COVID-19 discussion begins on slide 15.



Executive Summary & Introduction

Over the past 50 years, California has been the world leader in efforts to reduce air pollution. Once frequent and severe smog events that caused widespread health impacts and discolored our skies are now for many a distant memory. As our skies have cleared, California has grown into a diverse and vibrant population of 40 million people creating the fifth largest economy in the world. Today, California feeds, entertains, and provides the technologies that are a cornerstone of the worldwide economy, while continuing to work effectively towards a healthy environment.



While we have made substantial progress in avoiding the most severe air pollution episodes, CARB's work is far from complete. Large portions of the State do not meet federal air quality standards, and the South Coast (Los Angeles area) and San Joaquin Valley regions of the State continue to experience the worst air quality in the nation. California, like the United States and the rest of the planet, is warming. This warming is caused by greenhouse gases, which trap heat and increase the severity of wildfires and droughts in California.

Many communities across the state are located near air pollution sources and continue to experience health impacts from air pollution at a local level. These communities are often both our most diverse, and our most economically disadvantaged. We now know that the concentration of air pollution sources in our most diverse communities was no accident—driven by policies put in place long ago that continue to create an unfair legacy today.

Today CARB is focused on creating and implementing policies to address these problems. Programs like California's landmark Community Air Protection Program are designed to empower communities and to focus air pollution reduction efforts where they are needed most. California's automobile emissions standards are encouraging the creation of the cleanest vehicles in the world, including zero-emission vehicles. California's goods movement programs are focused on cleaning up our ports and freight transport that heavily impact nearby communities. California's climate program is focused on reducing greenhouse gas emissions to disconnect our economy's reliance on fossil fuels in all areas from electricity to housing to transportation.

CARB's policies are designed to leverage the creativity of California's population and economy to reduce emissions. Californians develop and adopt new cleaner technologies every day, and often make significant investments to do so. Ideally, everyone would comply with applicable requirements created by these policies, but that is not always the case. California's air quality and climate programs are only effective when regulated parties comply, and when a regulated party does not comply, they may profit at the expense of the compliant, and undermine the environmental and public health goals Californians are working so hard to achieve.

CARB's Enforcement Program focuses on ensuring compliance, and maintaining a level playing field across industry. We do so by efficiently targeting enforcement efforts, bringing violators into

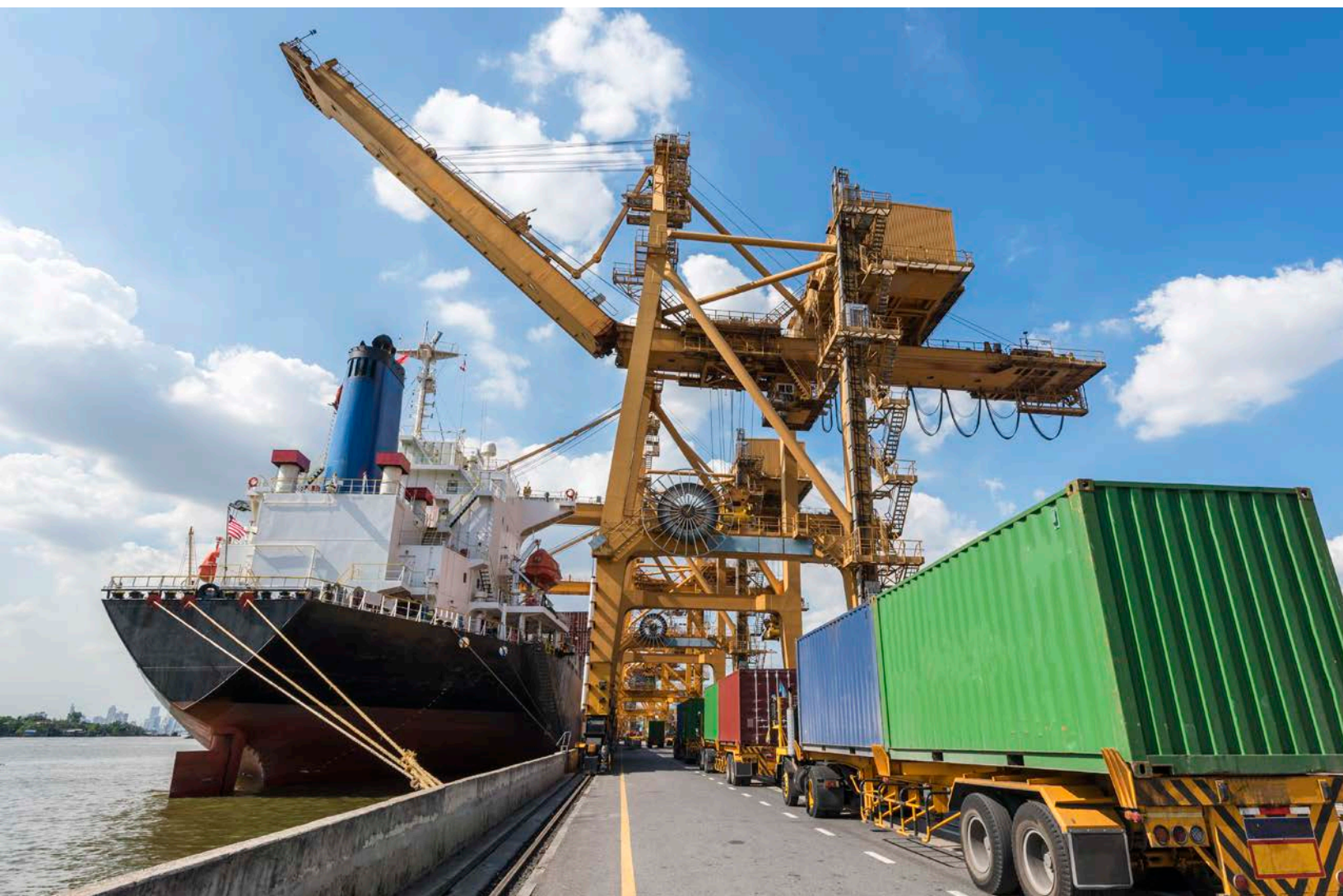
compliance, and assessing penalties that serve as a deterrent to non-compliance in the future. This report documents our progress during 2019 in three areas: compliance, deterrence, and program development.

Compliance

California's Truck and Bus Regulation is perhaps CARB's most important regulation for reducing smog forming pollutants, protecting disadvantaged communities from toxic diesel particulate emissions, and achieving ambient ozone air quality standards. For years, compliance rates were only 70 to 80 percent, leaving hundreds of thousands of non-compliant trucks operating in California. However, through streamlined enforcement efforts over the past two years staff has ensured compliance of more than 22,000 trucks while barring registration of nearly 24,000 additional non-compliant trucks and has collected more than \$5 million in penalties that goes toward reducing air pollution. With a new program implemented in 2020 designed to automatically block registration of non-compliant trucks, pursuant to Senate Bill 1, we expect to see substantial improvement in compliance rates over the next several years.

California's ocean-going vessel shore power regulation is designed to reduce diesel particulate in communities surrounding California's ports. Overall, the regulation has been successful with fleets improving their power reductions and associated pollutants every year, from 51 percent in 2015 to 77 percent in 2018, resulting in substantial air quality improvements surrounding ports in the Bay Area and Los Angeles region in particular. Despite non-compliance in a few fleets that are the subject of CARB enforcement efforts, industry overall is meeting or exceeding regulatory requirements.

Both of these programs are an example of how a focus on program improvement combined with enforcement, can lead to significant improvements in compliance rates and therefore air quality.



Deterrence

In 2019, through CARB's Enforcement Program, staff completed 3,570 enforcement actions totaling \$24.4 million in assessed penalties. These cases were focused in areas where violations continue to be prevalent—certification requirements in the areas of vehicles, aftermarket vehicle and engine parts, and consumer products. At some level there will always be enforcement focused on these programs because there are many regulated entities and many products that are sold in the market.

Enforcement programs are designed to punish and deter non-compliance as well as help the violator come into compliance. For example, in early 2020, we settled a case with Kohler, Co., a company that manufactured small off-road engines and large spark ignited engines. CARB alleges that Kohler failed to comply with the regulatory requirements, and in some cases, contained a defeat device. A defeat device is undisclosed software or a physical device that undermines the functioning of emissions controls. CARB was part of a national settlement developed in collaboration with the United States Environmental Protection Agency and Department of Justice that assessed a total penalty of \$22 million. Of that, CARB's assessed penalty was \$6 million and included a mitigation project that provided solar powered generators to low-income Californians in areas that are subject to public safety power shutoffs. Penalties would have been much higher had Kohler not submitted a voluntarily self-disclosure, agreed to several injunctive measures to address non-compliance, and cooperated with the agencies toward settlement.

In 2019, we settled a case with W. M. Barr & Company of Memphis, Tennessee, for violating CARB's auto body primer standards. CARB's investigation revealed that the violation resulted in excess emissions of 81.7 tons of VOC, 8.4 tons of aromatic compounds, and 5.2 tons of ozone-forming compounds into the atmosphere. CARB assessed a \$600,000 penalty, and also required W. M. Barr to cease selling any non-compliant products and to modify other products to CARB standards.

Certification requirements are straightforward. Starting with the Volkswagen case in 2015, we have ramped up our investigation and discovery of vehicles sold with undisclosed software that is designed to undermine emissions controls. Our efforts to hold manufacturers accountable continue.

Program Development

To achieve compliance by the most effective and efficient means possible, our enforcement programs must evolve every year. We continually evaluate the functioning of our enforcement programs, and work to target and expand our efforts as necessary. In 2019, new enforcement programs were developed as part of the newly created Community Air Protection Program² that targets air pollution in in AB 617 disadvantaged communities, expanded our Supplemental Environmental Projects program, and developed and started implementation of a re-invigorated District oversight program.

² Health & Saf. Code § 44391.2 (AB 617, C. Garcia, Ch. 136, Stats. of 2017).



Compliance

The goal of CARB's enforcement program is to ensure compliance with every regulation. Our programs work best when they are designed to achieve comprehensive compliance, and enforcement staff can measure and prosecute those few who fall out of compliance.

When our programs regulate hundreds of thousands of individual companies, achieving industry-wide compliance can be challenging. In these cases staff measures compliance, and then works towards both strengthening the program and applying enforcement in ways that maximize compliance rate improvements. As presented in more detail below, CARB's marine fuel and shore power enforcement programs are examples of the implementation of this approach to develop successfully designed and implemented programs.

The evolution of the implementation of CARB's Truck and Bus Regulation is an example of how a program can be strengthened to increase compliance rates. Other diesel programs are going through a similar process where compliance rates have been assessed, and now staff are working to focus on improving compliance rates by strengthening the program and targeting enforcement efforts.

Applying these principles, measuring industry-wide compliance and targeting enforcement action to maximize compliance rates helps create a level playing field across regulated industries, so that no company can benefit from non-compliance at the expense of another.

Marine Enforcement

California's ports connect California and the United States to the world, but also rely on diesel engines that power the ships and equipment that drive this commerce. These engines are among the State's largest sources of NO_x emissions, which drive regional smog formation, and diesel PM that pollutes surrounding local communities. In the late 2000's, CARB adopted a series of landmark regulations designed to dramatically reduce emissions from off-road equipment, trucks, and ships.

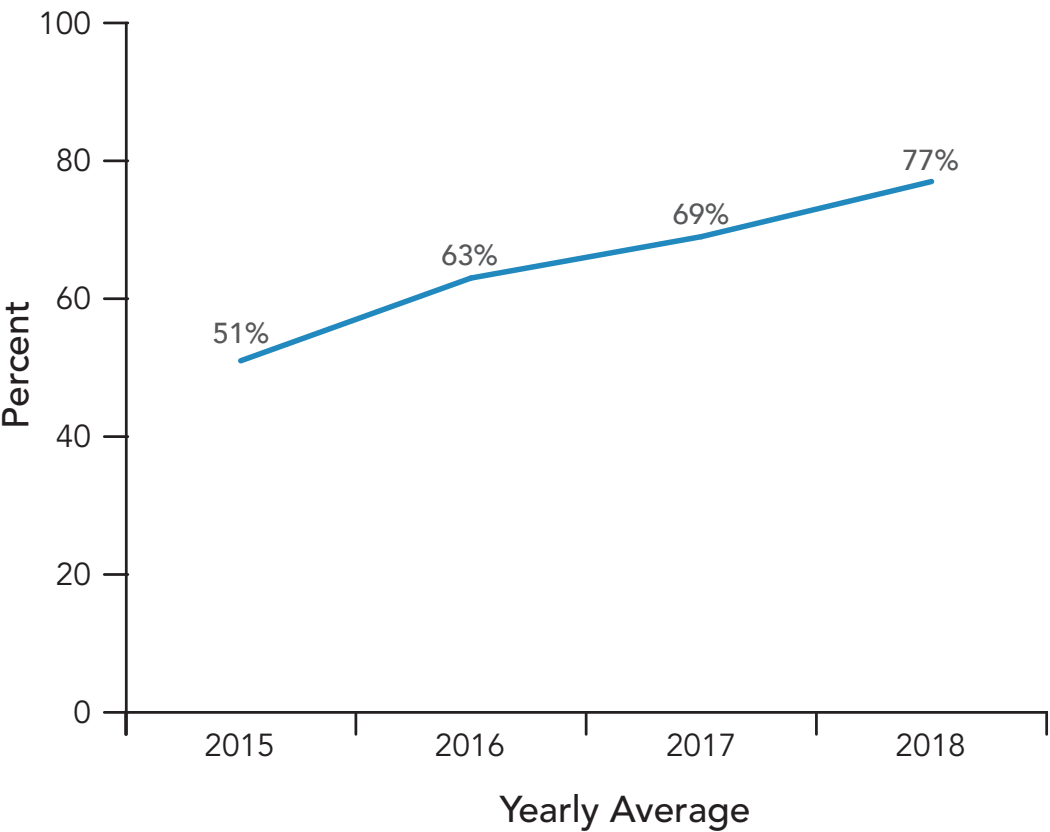
Effective program design and implementation, coupled with successful industry investments and CARB enforcement efforts have resulted in a compliant fleet of cargo handling equipment and drayage trucks operating at California's ports. CARB ocean-going vessel programs have been similarly successful. In 2007, CARB adopted the At-Berth Regulation, which requires vessels to reduce their emissions while in port by turning off their diesel engines and plugging in to the electrical grid for power while berthed at California ports. Staff uses an audit-based approach to measure compliance, and to identify non-compliant fleets for enforcement. The audits typically involve an official investigation of a fleet or company for compliance with regulatory requirements.

Between 2014 and 2016, the regulation required fleets to plug into shore power for at least 50 percent of their visits and reduce their diesel engine use by at least 50 percent. In 2017, this requirement increased to 70 percent, and in 2020, the requirement increased to 80 percent. Staff's analysis shows that industry as a whole met these requirements, as shown in Figure 1. In fact, in 2018 industry as a whole achieved a 77 percent reduction in diesel engine use, on target for 2020.



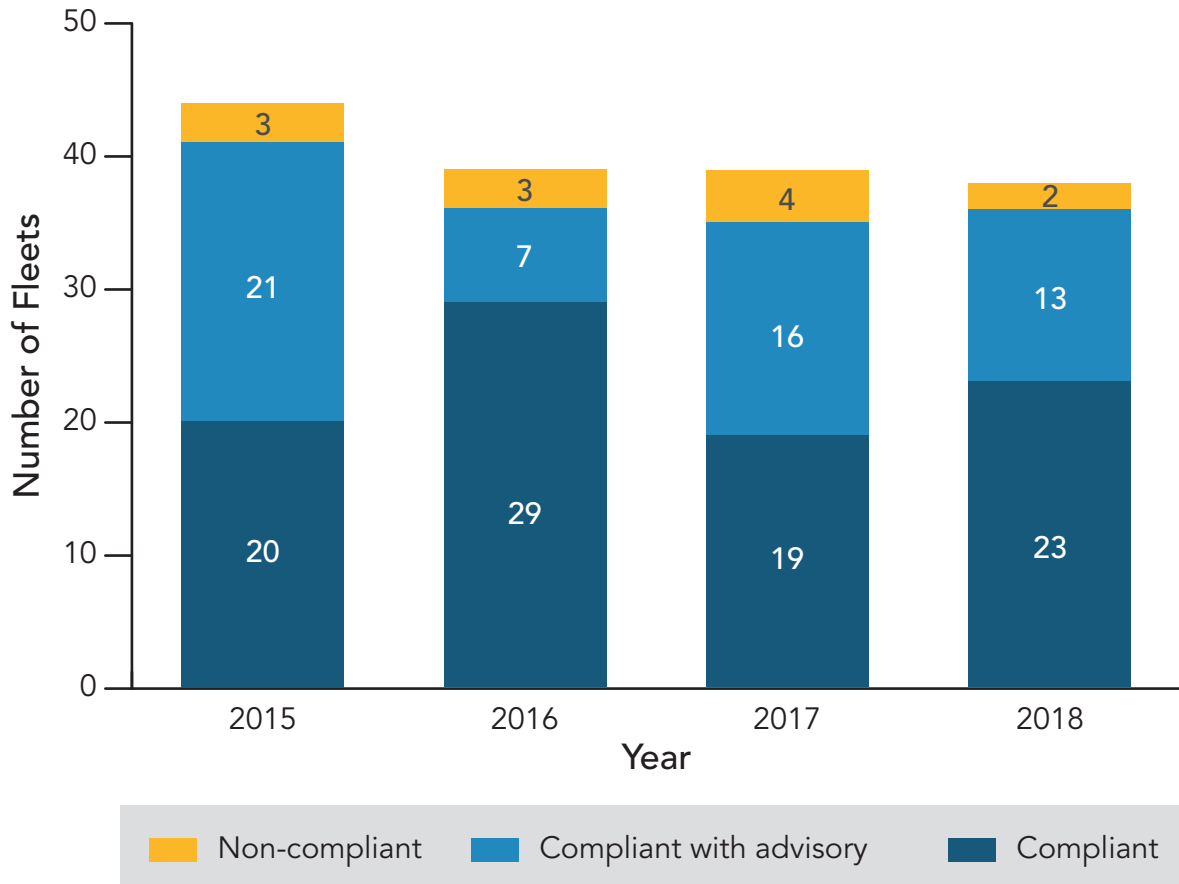
Bulk cargo vessel unloading at the Port of Long Beach

FIGURE 1: PERCENTAGE REDUCTION IN OCEAN-GOING VESSEL DIESEL ENGINE USE WHILE AT BERTH IN CALIFORNIA, MEASURED IN MEGA-WATT HOURS



CARB enforcement staff audits every fleet annually to determine compliance with the requirements. In 2019, enforcement staff completed audits of all 38 regulated fleets, representing over 3,900 visits. Results are shown in Figure 2, and indicate that 95 percent of the fleets were found to comply with the power reduction requirements for the 2018 compliance year. Figure 2 shows fleets able to comply with applicable requirements, fleets that took advantage of compliance flexibility provisions documented in CARB issued advisories in order to attain compliance, and non-compliant fleets. CARB realized flexibility was necessary and provided advisories for interim compliance alternatives. Fleets using flexibility provisions made significant efforts to comply, but had problems connecting to shore power for reasons beyond their control. These requests are reviewed on a case-by-case basis during the audit process and approved requests are applied to fleet compliance.

FIGURE 2: DISTRIBUTION OF STATEWIDE AT-BERTH COMPLIANCE STATUS FOR POWER REDUCTION REQUIREMENT 2015–2018



As shown in the graph above, the number of fleets complying without the need for advisory relief (dark blue) increased from 2017 to 2018 while the number of fleets requiring the use of advisory relief (light blue) and number of noncompliant fleets (yellow) decreased from 2017 to 2018. Our analysis suggests this improvement is caused by fleets adapting to the increased stringency that occurred in 2017 from 50 percent to 70 percent visit and power reductions. The same trend is seen between 2015 and 2016 as fleet compliance without the use of advisory relief increased after the initial implementation of the regulation. A Notice of Violation has been issued to each fleet determined to be noncompliant in 2018. These companies are currently working with CARB staff to resolve their enforcement cases.

In 2019, CARB settled two cases with fleets that did not meet compliance requirements in previous years. In October, CARB settled a case with COSCO Container Lines, Co., Ltd. (COSCO) for violations of COSCO’s 2014–2017 Port of Los Angeles/Port of Long Beach (LA/LB) and Port of Oakland vessel fleet visits. The investigation revealed that from 2014 to 2017, COSCO’s shore power fleets exceeded the operational time limits, and did not reduce the auxiliary engine power generation as required. COSCO agreed to a \$965,300 penalty and to comply with CARB regulations.



Cosco container in ship yard

In settling this case, CARB increased penalties for each year the company did not meet regulatory requirements. Our expectation is that this penalty structure creates a strong incentive to comply, because penalties increase with both the number of violations and the length of non-compliance. CARB's settled cases have set a strong precedent for fair and consistent enforcement of the At-Berth Regulation as well as a strong deterrent for multi-year violations.

CARB's audits have also identified that many fleets (13 in 2018) demonstrated compliance in part using regulatory advisories. These fleets did not meet regulatory requirements due to reasons beyond their control. If the regulation is to be successful, these fleets will ultimately need to connect to shore power. For the past year, enforcement staff has been consulting with regulatory program staff who are developing a proposed regulation to expand the scope of the at-berth rule to achieve reductions from additional ports and vessel types. The proposal will also move the rule from a fleet based requirement to a per vessel visit requirement, with compliance responsibility shared between the parties necessary to reduce vessel emissions including the vessel, the terminal, the port, and operators of emission control systems.

These changes to the rule structure will help ensure that fleets currently determined to be in compliance through use of the advisory, shown in light blue in Figure 2 above, will ultimately connect to shore power and reduce emissions. The proposed regulation was presented to the Board for the first time in December 2019. Staff will take the proposed regulation back to the Board in 2020 for adoption.

CARB adopted the Ocean-Going Vessel Fuel Sulfur Regulation (OGV Fuel Rule) in 2008, which requires ships to switch to a cleaner burning low sulfur distillate fuel when entering Regulated California Waters (RCW) (within 24 nautical miles of the shore). Our enforcement efforts reveal very high compliance rates—staff issued six notices of violation based on 536 inspections—for a compliance rate of about 99 percent on a visit-by-visit basis. In 2019, CARB settled six violations of the OGV Fuel Rule for \$172,500 in penalties. One violation of the regulation occurred aboard the vessel Powan, which had operated on noncompliant/contaminated fuel inside RCW for a period of approximately eight days on one voyage into California.

When CARB inspects a ship, we review ship logs, and sample fuel within the fueling system as close to the engine as possible. Violations may occur when a ship fails to switch to a compliant fuel or when a ship operates on non-compliant fuel because it did not properly conduct a fuel switch. CARB inspections are conducted in RCW and determine the compliance of marine vessels in transit to California.

On January 1, 2020, the International Maritime Organization implemented a new regulation for a 0.50 percent global sulfur cap for marine fuels.

Under the new limit, ships are required to use marine fuels with a sulfur content of less than 0.50 percent. This fuel standard replaced the previous limit of 3.5 percent sulfur in international waters worldwide. With this new sulfur limit comes a level of uncertainty with regard to both fuel supplies worldwide, and compliance among the numerous ship management companies. The North America Emission Control Areas remain at the 2015 standard of 0.1 percent sulfur content, and Regulated California Waters remain at 0.1 percent sulfur, applicable to distillate fuel use only.

CARB's enforcement program is currently working to improve inspection techniques. Remote monitoring is a promising tool that can help both CARB and federal enforcement agencies screen vessels for further enforcement inspections, and limit excess emissions in communities in and around ports. CARB is working with California universities to develop and demonstrate new remote



Ocean-going vessel docked at port

emissions monitoring techniques, which could be used in the future to expand ship fuel enforcement in California. CARB is also researching analytical techniques that can distinguish between low sulfur heavy fuel oil and low sulfur distillate fuel. By developing and implementing new enforcement technologies and approaches, we can better hold fleets accountable, and ensure emissions reduction goals are being met.

Heavy-Duty Diesel Enforcement

CARB has made a priority of developing enforcement programs that are effective in holding violators accountable for compliance. These efforts are currently demonstrated by various mobile source programs such as the Truck and Bus Regulation, the Heavy-Duty Vehicle Inspection Program, and the Periodic Smoke Inspection Program.

In 2008, CARB adopted the Truck and Bus Regulation requiring heavy-duty diesel trucks that operate in California to replace older engines with cleaner engines certified to lower PM and NO_x emissions standards on a phased-in schedule based on the model year of the engine.

Initial enforcement of the Truck and Bus Regulation began in 2012 and was performed through a comprehensive audit process, which focused on assessing large penalties to a smaller number of fleets and trucks. CARB assessed compliance rates, however, and found them to be low, with hundreds of thousands of non-compliant trucks operating in California. A new approach was needed.



Heavy-duty vehicles on bridge in Crockett, California

In an effort to increase compliance with the Truck and Bus Regulation enforcement, staff developed a new approach where the focus was switched from deterrence-focused enforcement (fewer high profile cases with higher penalties) to a compliance based approach (more cases with lower per unit penalties in an effort to provide more emissions reductions). CARB initiated the Streamlined Truck Enforcement Process (STEP) in January of 2018 with the goal of bringing the highest polluting diesel-powered vehicles subject to the Truck and Bus Regulation into compliance more efficiently. Our goal was to dramatically increase the efficiency of our enforcement efforts to bring compliance to the industry and remove the highest pollution vehicles from the road.

CARB staff used data from vehicle registration databases, compliance-reporting databases, and inspection databases to identify potentially noncompliant fleets and prioritized them for enforcement action. After investigation by CARB staff, owners of vehicles suspected of being out of compliance were sent a Notice of Non-Compliance and provided an opportunity to demonstrate compliance. If compliance was not demonstrated, a Notice of Violation was issued and penalties and registration holds were placed. In 2018 and 2019, 45,968 vehicles were reviewed for compliance resulting in 35,790 vehicles identified as potentially non-compliant. Of those, 32,293 vehicles were subsequently issued Notices of Violation. Owners of 23,673 of these vehicles were not able to clear their violation and were denied DMV vehicle registration. Staff collected over \$5,000,000 in penalties through the program over a two-year period. In 2019, the compliance rate for California registered vehicles with Gross Vehicle Weight Ratings (GVWR) above 26,000 pounds had increased to 86 percent from 77 percent in 2016.

Prior to the implementation of STEP, CARB staff collaborated with other government and industry stakeholders to develop an improved approach to holding fleets accountable. In 2017, a new law passed requiring, the Department of Motor Vehicles, beginning January 1, 2020, to verify vehicles subject to the Truck and Bus Regulation are compliant with the Regulation prior to issuing

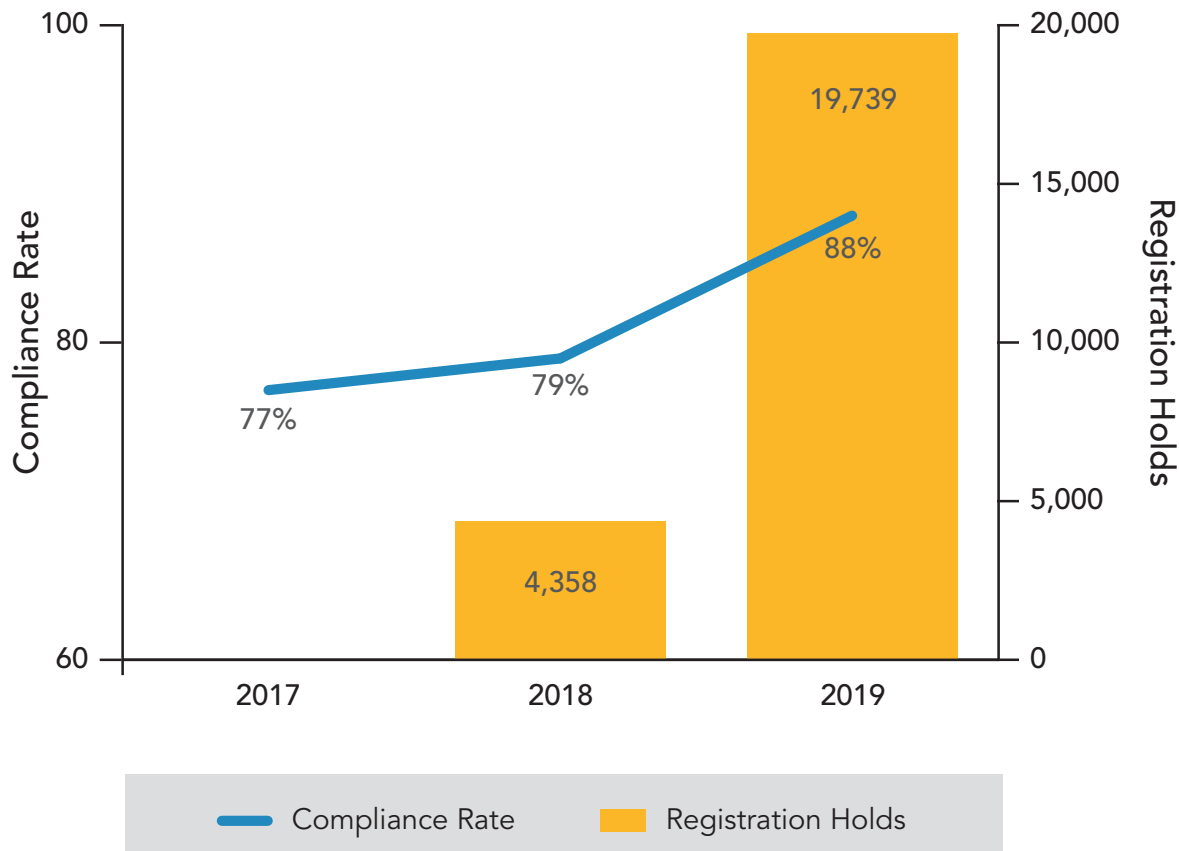
registration. By January 1, 2023, most vehicles subject to the Truck and Bus Regulation will not be able to register in California unless they are equipped with a 2010 or newer engine or have an approved compliance option on record with CARB. To ensure all affected vehicle owners were aware of these new registration requirements, staff sent certified letters to 69,425 vehicle-owners warning them of their current or future non-compliant status and the impacts of vehicle non-compliance on their ability to register. CARB staff also implemented an extensive outreach and media campaign. As a result of these efforts, every current or upcoming non-compliant California registered vehicle in 2020 was either subject to enforcement or issued a warning letter; and no fleet can claim ignorance with the regulation.

Figure 3 below shows the positive impact of this enforcement approach on compliance rates, which increased from 77 percent to 86 percent industry-wide. We believe compliance rates will continue to improve as the new registration requirements are implemented. At the same time, our analysis shows a declining trend in compliance in lighter vehicles from 88 percent in 2017 to 86 percent in 2018. This is driven by compliance dates in the Truck and Bus Regulation, which are now requiring lighter trucks to be upgraded. As the new law is implemented, these trucks will be brought into compliance through the registration process, as almost all lighter trucks operating in California are also registered in California.

With California-registered vehicles now being required to prove compliance before obtaining a DMV registration, CARB enforcement resources can focus on ensuring heavy-duty diesel vehicles registered outside of California are complying with the Truck and Bus Regulation.

Based on International Registration Plan (IRP) registration data, CARB estimates a compliance rate of 86 percent for vehicles registered out of state with a GVWR greater than 26,000 pounds and 97 percent for vehicles with a GVWR between 14,001 to 26,000 pounds, as demonstrated in Appendix I.

FIGURE 3: TRUCK AND BUS COMPLIANCE RATE VS. NUMBER OF REGISTRATION HOLDS



In order to create a level playing field across industry, we are focusing our enforcement on border crossings to identify non-compliant vehicles coming into the state. In addition, International Registration Plan (IRP) registration data and data from inspection databases and compliance reporting databases are being evaluated to identify and prioritize the enforcement of potentially noncompliant fleets registered out-of-state. To expand our enforcement presence, we have also developed a partnership with U.S. EPA Region 9, which conducts investigations of fleets registered out-of-state to ensure compliance with the Truck and Bus Regulation, and we are exploring similar partnerships with others. The partnership has proven successful as demonstrated by the following cases pursued by U.S. EPA, due to CARB referral.

- **The Coca-Cola Company** failed to verify that 63 of the carriers it hired in California from 2015 to 2017 complied with the Truck and Bus Regulation. In addition, the company dispatched drayage trucks (trucks that haul shipping containers from ports and railyards) that did not meet emission standards and failed to verify that their contracted truck owners were registered with CARB's Drayage Truck Registry. The company, headquartered in Atlanta, Georgia, agreed to pay a \$145,000 penalty.
- **Mercer Transportation Company Inc.** failed to verify that their contracted truck owners were registered with CARB's Drayage Truck Registry and failed to maintain records. The company, headquartered in Louisville, Kentucky, failed to comply with CARB's regulation governing drayage moves destined to or from California ports from 2015 to 2017. Mercer Transportation Company agreed to pay a \$46,787 civil penalty.
- **Liquid Transport LLC and Liquid Transport Corp.** operated heavy-duty diesel trucks in California from 2014 to 2017 without the required diesel particulate filters. The companies also failed to verify that 122 of the carriers it hired to transport goods in California complied with the Truck and Bus rule. In addition, the firms owned and dispatched 22 drayage trucks that did not meet emission standards and were not registered with CARB's Drayage Truck Registry. The companies, headquartered in Indianapolis, Indiana, agreed to pay a \$150,000 penalty.
- **Dean Foods Company** operated 14 heavy-duty diesel trucks from 2014 to 2017 without the required diesel particulate filters and failed to maintain records for 40 vehicles. The company, headquartered in Dallas, Texas, agreed to pay a \$30,000 civil penalty and will spend \$90,000 on a supplemental environmental project to install an air filtration system to reduce harmful air pollutants in classrooms in one or more schools in the South Coast Air Basin, which includes Orange County and parts of Los Angeles, Riverside and San Bernardino counties.
- **D&E Transport LLC** operated 26 heavy-duty diesel trucks in California from 2014 to 2017 without the required diesel particulate filters. The company also failed to verify that 104 of the carriers it hired to transport goods in California complied with the Truck and Bus rule. The company, headquartered in Clearwater, Minnesota, agreed to pay a \$55,000 civil penalty.
- **Flat Creek Transportation LLC** operated 24 heavy-duty diesel trucks in California from 2014 to 2018 without the required diesel particulate filters and failed to maintain records for 63 vehicles. The company, headquartered in Kinston, Alabama, agreed to pay a \$71,250 penalty.

Staff is looking to expand our partnerships in 2020 by working with local prosecutors' offices across Southern California.

State anti-tampering laws require vehicle operators to maintain their vehicles and emissions control systems. CARB's Heavy-Duty Vehicle Inspection Program and Periodic Smoke Inspection Program are designed to ensure operators comply with this requirement by meeting a 5 percent opacity limit for trucks equipped with a diesel particulate filter (DPF), measured using a snap-idle test (SAE J1667).

Enforcement of the exhaust opacity standards is currently conducted at the roadside. To supplement this approach, CARB staff has developed, and is now testing, new technologies to better identify trucks operating in California that are non-compliant with opacity standards, Truck and Bus requirements, and Greenhouse Gas requirements. CARB is piloting the use of an unattended

Automated License Plate Reader (ALPR) camera as part of CARB's Portable Emissions Acquisition System (PEAQs) to better identify trucks that may be in non-compliance.

PEAQs is an emission screening system that evaluates the black carbon and CO₂ emissions of heavy-duty diesel vehicles that pass through its detection area. Enforcement staff are using PEAQs to optimize both field enforcement and fleet audits by directing staff to the highest emitting vehicles and/or fleets.

Unattended PEAQs units are designed to be mounted to existing infrastructure that see high volume heavy-duty diesel vehicle traffic. They can operate 24 hours a day, 7 days a week with minimal staff intervention. Vehicles pass through the detection area in the normal course of their operation. Data collected by the continuously running unattended system is further analyzed to guide enforcement actions such as inspections and audits by CARB staff. In August 2019, CARB staff designed and deployed the first unattended PEAQs unit as a pilot. The system has been running continuously since August 2019 and has screened approximately 10,000 heavy-duty diesel vehicles on average per month. Staff has identified a location for the deployment of a second unattended PEAQs. CARB is working on the development of a regulation as directed by Senate Bill 210 (Leyva, 2019) that will require NO_x emissions, in addition to PM, to be minimized through a new heavy-duty inspection and maintenance program. The use and deployment of remote sensing systems, including PEAQs, throughout the State is being considered as one component of that regulation.



Heavy-duty vehicle driving through a PEAQs roadside unit

Transport Refrigeration Units

The Enforcement Division has been working with regulatory program staff for the TRU regulation, to provide new tools that are necessary to provide a level playing field. In 2019, CARB field inspectors conducted 2,064 TRU inspections to ensure compliance with regulatory requirements, and issued 933 citations to owners of non-compliant units.

Enforcement Division staff developed methods to specifically identify and target enforcement on non-compliant TRU equipment by evaluating different data sources and focusing efforts in areas where TRU equipment is typically operated.

The high ratio rate of inspections to citations issued of 55 percent shows that our targeted enforcement methods are improving—though compliance rates must also improve.

Enforcement Division staff will continue developing a more targeted approach to identifying non-compliant TRUs. In 2020, staff have planned targeted field enforcement events during peak harvest time and in areas with high cumulative exposure burdens for criteria air pollutants and toxic air contaminants. In addition, staff will begin assessing compliance by analyzing data from various databases and real-world on-road vehicle emission measurements to identify which fleets to inspect and audit.



Trailers equipped with TRUs, at a loading dock

Moving forward, CARB is currently working to develop the Zero-Emission TRU Regulation to reduce emissions from facilities with TRU activity by transitioning to zero-emission operation where practical in an effort to further reduce emissions from TRU sources. This new measure will help reduce public health risk by reducing toxic air contaminant emissions, criteria pollutant emissions, and GHG emissions near distribution centers and other facilities where TRUs and TRU generator sets congregate. The new measure will also achieve emissions reductions while in transit, especially near the most impacted communities. CARB staff are also taking this opportunity to incorporate additional enforcement tools into the new regulation designed to increase compliance.

In-Use Off-Road Diesel Equipment

In 2019, CARB field inspectors conducted inspections on over 4,291 off-road diesel powered vehicles, of which approximately 11 percent were found to be non-compliant. With some vehicles cited for multiple violations, a total of 454 off-road citations were issued. In addition, CARB issued letters to equipment owners in response to complaints from the public regarding non-compliant off-road equipment, and conducted a targeted on-site inspection in response to one of these complaints.

Moving forward, CARB will increase targeted enforcement of off-road diesel equipment in response to internal investigations, complaints from the public, referrals from local air districts, and other sources. In addition, CARB is streamlining the process for complaints from the public, including regarding off-road equipment.



Off-road equipment at a construction site



Deterrence

Ideally, every enforcement program would be based on a compliance-based approach where compliance rates are measured, programs are focused to achieve compliance, and enforcement staff have the tools necessary to bring every non-compliant entity into compliance. However, in many cases a compliance-based approach is not possible and in these cases, deterrence is the most powerful enforcement tool. In deterrence-focused enforcement, staff identify and investigate violations of requirements, prosecute cases, assess large penalties, and advertise the results. In doing so, industry knows that CARB staff is enforcing, and that while there is no guarantee of being caught, the risk of being caught and paying a high penalty is significant enough to drive compliant behavior.

Staff enforces CARB regulatory requirements that specify characteristics products must have (e.g., vehicles, engines, aftermarket parts that potentially impact an engine's emissions), and the requirements that products must meet, before they can be legally offered for sale or sold in California. These requirements are commonly referred to as certification requirements, since the manufacturer is certifying that the products meet standards before bringing the product to market. There will always be enforcement focused on certification programs due to the complexity of the requirements, the variety of products sold on the market, and the large number of regulated parties. Such enforcement helps ensure a level playing field across industry by deterring non-compliance.

Staff identifies violations when a product does not meet a regulatory requirement, or when it is not in all material respects the same as represented in a CARB-approved certification application. Routine enforcement investigations often reveal when a certification violation has occurred, but there are cases when a manufacturer voluntarily discloses violations to CARB, and those violations qualify for a penalty reduction in accordance with CARB's enforcement policy.

Vehicle, Engine, and Aftermarket Parts

In 2019, CARB staff completed its investigation of Kohler. In a joint complaint, CARB alleges that from 2011 until 2016, Kohler, a manufacturer of SORE and LSI engines, applied for and received certificates of conformity from U.S. EPA and Executive Orders (EOs) from CARB covering roughly 7 million engines nationwide and about 400,000 in California. However, in doing so, CARB alleges Kohler failed to fully comply with all applicable requirements and test procedures, resulting in U.S. EPA revoking certification for five engine categories equipped with a defeat device. Overall, the violations included:

Using an improper test cycle and procedures when testing engines for certification;

- Failing the applicable emission and evaporative emissions limits;
- Using improper emission-related components for deterioration factor testing;
- Failing to disclose auxiliary emission control devices (AECD) and adjustable parameters equipped on the engines;
- Amending its certification applications when it changed the configuration of production engines and not communicating to CARB as required;
- Failing to properly report;
- Failing to comply with production line testing (PLT) requirements; and
- Using an illegal fueling strategy on some engines that reduced emissions of oxides of nitrogen (NO_x) during certification testing when compared to in-use operation.

Different engines were affected by different violations. All major certification violations represent a serious breach of compliance. However, in 2015, Kohler submitted a self-disclosure in response to a letter CARB issued to vehicle and engine manufacturers encouraging them to come forward and

voluntarily self-disclose violations. Kohler was the first manufacturer to come forward and voluntarily disclose violations in response to the letter.

After doing so, Kohler fully cooperated with CARB and U.S. EPA during the investigation and worked to settle the violations as quickly as possible. Kohler made substantial changes to its engine program, modifying its standard operating procedures, ethics hotline, and code of conduct.

The company established an independent environmental regulatory compliance team, and is conducting annual compliance training for engine division employees, implementing and maintaining an employee code of conduct and ethics helpline for employees to report noncompliance, and convening semiannual meetings with all engine division managers and regulatory personnel to discuss compliance with applicable regulatory requirements and the settlement.

Kohler must also conduct annual audits and implement an emissions testing validation plan that includes third-party observation and emissions verification testing. To mitigate excess emissions from the violations, Kohler agreed to forfeit all averaging, banking, and trading credits it earned as a result of the certification violations.

Overall, CARB and U.S. EPA settled with Kohler for \$22 million in penalties. CARB's portion of the overall settlement is \$6 million, of which \$1.8 million will fund a mitigation project to supply solar powered generators to low-income residents in California that are subject to the public safety power shutoffs (PSPS).

CARB reduced penalties by more than 90 percent in this case, in accordance with its Enforcement Policy, because Kohler's voluntarily self-disclosure and because Kohler worked expeditiously to settle the case. Our Enforcement Policy encourages voluntary disclosure as part of ensuring compliance; placing companies on strong compliance-oriented track going forward. Lower penalties for voluntary disclosure, compared to higher penalties for being caught, deter other companies from hiding violations.

In April 2019, CARB settled its on-road vehicle case with Winnebago Industries, Inc. (Winnebago) of Forest City, Iowa. The Winnebago case involved importing, delivering, offering for sale, or sale of uncertified vehicles into California. Winnebago is a U.S. manufacturer of recreational vehicles (RVs), travel trailers, and fifth wheel products. Winnebago "up-fitted" model year 2014 and 2015 gasoline and diesel-fueled Ram ProMaster 3500 cab chassis into RVs beyond the certified curb weight. The investigation found 115 of these uncertified vehicles were brought into California in violation of Health and Safety Code §43150 et seq. Winnebago entered into a settlement agreement with CARB and agreed to pay a total penalty of \$269,531.25, for the uncertified 2014 and 2015 model year vehicles. Winnebago cooperated with CARB in resolving this matter, self-disclosed the facts and circumstances for the vehicles in this case, took corrective action after disclosure, and assisted in the mutual settlement of this case.



Kohler small off-road engine



Kohler solar powered generator

In March 2019, CARB settled its off-road vehicle case with Jordan & Associates Investments, Inc., DBA Sun Buggy Fun Rentals (Sun Buggy) of Grover Beach, California. The Sun Buggy case involved uncertified off-highway vehicles introduced into California for sale, rent, lease, use, and introduction into commerce in California. A complaint initiated CARB's investigation of rental companies in Oceano, California regarding use of uncertified vehicles in their rental fleet. The investigation revealed that Sun Buggy was indeed renting uncertified vehicles to the public in violation of Health and Safety Code §43150 et seq., California Code of Regulations, title 13, section 2410 et seq., and California Vehicle Code §38391. CARB settled with Sun Buggy for a total penalty amount of \$55,000 for 11 violations. In addition to the penalty, CARB conducted a post settlement inspection and found no further violations, thus resolving the case.

Also in March 2019, Fiat Powertrain Technologies Industrial S.p.A (FPT) resolved its case with the agency for \$6,415,000. FPT, a manufacturer of both on- and off-road diesel engines for use in industrial vehicles, self-disclosed back in 2015 that it had, among other violations, implemented unapproved modifications and used incorrect certification emission data, respectively, on these engines. The modifications were especially troubling since they illegally altered the certified emission configurations of the engines without CARB's advance verification of their effectiveness and reliability. Overall, this issue has also been found to be a concern in many of CARB's other programs.

FPT's violations affected almost 2,000 of its on- and off-road engines in California. As part of its settlement with CARB, the company paid \$2,000,000 of the total penalty to a Supplemental Environmental Project (SEP) to install advanced air filtration systems in sensitive state facilities, such as schools, hospitals, and senior centers. It also implemented a full recall of vehicles equipped with the on-road engines in order to return the vehicles to the certified configuration, and a one-year warranty for the replaced parts. Lastly, FPT was required to conduct additional in-use testing and on-board diagnostic testing on several repaired vehicles, and submit the data to CARB.

Beyond vehicle and engine manufacturers, CARB enforcement staff continued their efforts this year in pursuing cases against aftermarket part manufacturers, wholesalers, and retailers that violated California's anti-tampering laws. Many of the cases that reached resolution in 2019 involved companies that offered for sale and sold parts through a variety of online avenues, including Craigslist and eBay. Two of those settlements are highlighted below.

CNS Motors, Inc. advertised, sold, and offered for sale, aftermarket vehicle parts without legal exemptions to California's anti-tampering laws. Many of these sales occurred through its eBay store. Such parts replace or modify vital original emission components and manufacturer-specified engine-operating conditions, and thus must be evaluated by CARB to demonstrate the vehicle's continued emissions compliance, before being offered for sale in California. The resulting settlement required the company to pay a \$343 per unit penalty resulting in a total penalty of \$154,300.

TPS Motorsports advertised, sold, and offered for sale aftermarket vehicle parts, without legal exemptions to California's anti-tampering laws on Craigslist. TPS cooperated with CARB during the agency's investigation, and provided all needed information as requested. TPS agreed to pay a \$250 per unit penalty resulting in a total civil penalty of \$11,750.

Consumer Products

CARB's consumer products enforcement programs reduce smog-forming pollutants, protect public health from exposure to toxic air contaminants (TAC), and reduce GHG emissions. Staff focuses on three main types of consumer products: chemically formulated products, composite wood products, and indoor air cleaning devices. CARB is currently focusing additional resources on consumer products. The summaries below highlight a few significant cases from 2019.

Chemically Formulated Products

California standards ensure that the full range of household and institutional maintenance products, meet strict health-based limits for smog-forming and toxic ingredients. Manufacturers, importers, distributors and retailers all bear a responsibility to ensure the products sold in California comply with the regulation. The three chemically formulated product cases described below illustrate how violations may occur throughout the supply chain.

Walgreen Co. (Walgreens) of Deerfield, Illinois

Walgreens is a retailer for many consumer products. Walgreens sold, supplied, and/or offered for sale in California a multi-purpose lubricant which contained concentrations of VOC that exceeded the standard specified in title 17, CCR, (17 CCR) section 94509. The product label stated, "Not for sale in California." The violation resulted in the excess emission of 0.159 tons of VOC in the atmosphere. With consideration of Walgreens' past violations, the case was settled for \$80,000. To come into compliance, Walgreens ceased sales of the noncompliant multi-purpose lubricant.

W.M. Barr & Company (WM Barr) of Memphis, Tennessee

WM Barr is a manufacturer of automotive and home improvement products that sold, supplied, offered for sale, and/or manufactured for use in California paint thinners and multi-purpose solvents, which contained concentrations of VOC and aromatic compound content that exceeded the standards specified in title 17 CCR section 94509. WM Barr also sold, supplied, offered for sale, and/or manufactured for use in California an aerosol coating product that did not comply with the reactivity limit for Auto Body Primer, as specified in title 17 CCR section 94522. These violations resulted in excess emissions of 81.7 tons of VOC, 8.4 tons of aromatic compounds, and 5.2 tons of ozone-forming compounds into the atmosphere. The case was settled for \$600,000. To come into compliance, WM Barr ceased sales of noncompliant products, and modified other products to meet California regulatory requirements.

Great American Beauty, Inc. of Delray Beach, Florida

Great American Beauty is a distributor for personal care products that supplied, offered for sale, and/or manufactured for use in California personal fragrance products with less than 20 percent fragrance containing concentrations of VOC that exceeded the standards specified in 17 CCR section 94509. The violation resulted in 1.95 tons of excess VOC emissions. The case was settled for \$35,000. To come into compliance, Great American Beauty, Inc. ceased manufacturing and selling personal fragrance deodorant body sprays. Moving forward, Great American Beauty, Inc. is implementing new purchasing practices that ensure future products are compliant with California's Consumer Products Regulations.

Composite Wood

Composite wood products pose a different danger to the public than consumer products like cleaners and hairspray. Unlike consumer products that have a limited lifespan, composite wood products are often permanently installed into households as flooring or cabinets. Non-compliant products can emit formaldehyde over long periods of time. For this reason, these products have been a primary inspection focus.

Investigations of composite wood products involve both emissions testing and auditing to ensure precautions were taken by all entities in the supply chain providing composite wood materials. Staff reviews documentation of the efforts made by the entities to ensure only compliant material



Composite wood samples

is offered for sale and sold in California. This documentation includes verifying the composite wood was produced in a third party certified mill, proper labeling of products and invoices, and various other records provided to CARB. Some companies have chosen to create programs that include extensive emissions testing, tracking core materials, closer oversight of fabricators, and training of personnel. Fortunately, these efforts are working. Since the Lumber Liquidators settlement in 2016, the composite wood industry has overall become more rigorous in their efforts to provide only compliant material.

CY Flooring, Inc. of Anaheim, California

CY Flooring, Inc. sold, supplied, and offered for sale in California flooring that contained non-compliant thin medium density fiberboard. The product, CY Flooring Honey Maple, contained formaldehyde emissions above the limits set forth in 17 CCR section 93120.2. In addition, CY Flooring, Inc. was in violation of 17 CCR section 93120.5 for not taking reasonable and prudent precautions as required by the regulation because CY Flooring, Inc. sold flooring containing composite wood products without documentation from their supplier establishing that the products comply with CARB's emission standards. The case was settled for \$67,000. CY Flooring, Inc. has since discontinued sales of the non-compliant flooring and made improvements to their best management plan to ensure that only compliant composite wood products are sold.

Indoor Air Cleaning

All indoor air cleaning devices sold in California must be certified and labeled as such. This certification ensures that consumers know that the devices they purchase are protective of their health. Preventing the sale of uncertified devices is important for the success of the program.

Molekule, Inc. of San Francisco, California

Molekule, Inc. sold uncertified indoor air cleaning devices in California, in violation of the Regulation for Limiting Ozone Emissions from Indoor Air Cleaning Devices, 17 CCR section 94804. The case was settled for \$149,000. To come into compliance the company ceased sales of the air cleaner until the device was certified by CARB.



Portable indoor air cleaning devices

Fuels

California's reformulated gasoline requirements are designed to reduce emissions from evaporation and burning of gasoline, and are a major part of California's smog control programs.

Reformulated Gasoline

CARB's reformulated fuel enforcement programs provide a powerful deterrent to non-compliance, and help ensure industry continues to take appropriate precautions to comply with regulatory requirements. Three cases for reformulated fuel enforcement are highlighted below.



Octane buttons at gas station

Phillips 66 Company

In the first quarter of 2017, CARB staff conducted routine audits of Phillips 66 Predictive Model (PM) notifications. The investigation revealed violations where values of the alternative specifications reported in the PM of eight separate blends of gasoline failed to meet the applicable reporting procedures.

CARB alleged that between November 11, 2016 and December 14, 2016, Phillips 66 failed to meet the criteria for approval in the California Procedures for Evaluating Alternative Specifications for Phase 3 Reformulated Gasoline Using the California Predictive Model. CARB alleged that Phillips 66 was liable for 8 violations of CCR § 2265(a) as a result of using an outdated version of the PM. To resolve its violations, Phillips 66 agreed to pay \$150,000 in penalties.

Tesoro Refining & Marketing Company

In April 2017, CARB staff conducted routine sampling at the Tesoro Vinvale Terminal. CARB analyzed and discovered a sample exceeding the Reid Vapor pressure (RVP) cap limit. CARB alleged that between April 27, 2017 and May 2, 2017, Tesoro supplied non-compliant California gasoline and that Tesoro was liable for 7 total violations of CCR § 2262.4 and 2268.

To resolve its violation, Tesoro agreed to pay \$66,500 to the California Air Pollution Control Fund and \$66,500 to a SEP implemented by the South Coast Air Quality Management District, for a total of \$133,000 in penalties.

Tesoro Refining & Marketing Company

In July 2018 during routine sampling at the Tesoro Carson Refinery, CARB obtained a retain sample. A retain sample is typically collected by the refinery and retained or held for later pickup and analysis by Enforcement staff. Analysis of this sample showed that the olefin content of the fuel exceeded the limit reported in the Predictive Model (PM). Based on the sample, CARB alleged that between July 16, 2018 and July 22, 2018, Tesoro supplied the non-compliant California gasoline. CARB alleged that Tesoro was liable for 7 total violations of CCR § 2265(b) and 2268. To resolve its violation, Tesoro agreed to pay \$59,500 to the California Air Pollution Control Fund and \$59,500 to a SEP implemented by the South Coast Air Quality Management District, for a total of \$119,000 in penalties.



Tesoro Carson Refinery

Low Carbon Fuel Standard

CARB's Low Carbon Fuel Standards (LCFS) requirements are designed to reduce GHG emissions by reducing the fossil carbon content of fuels. CARB Enforcement's goal in the Low Carbon Fuel Standard (LCFS) program is to maintain market confidence and ensure that no party can gain an unfair advantage through illicit practices. CARB staff has conducted several audits of high-risk facilities outside of California to ensure GHG reduction credits granted by LCFS are real and compliant. Non-compliant parties stand to benefit financially if CARB cannot maintain an enforcement presence outside its state boundaries. Any non-compliance issues identified as a result of the audits are investigated and companies brought into compliance. Fair and equitable enforcement incentivizes new parties to join the LCFS, and ensures fair and consistent enforcement to parties that are in and out of state. To enforce these programs staff conducts inspections and reviews reporting information. When a violation is identified, staff pursues the enforcement case. A high profile case for LCFS enforcement is highlighted below.

Clean Energy Renewable Fuels LLC

In May 2017, CARB staff conducted an onsite inspection at Clean Energy's Boron liquefaction plant. CARB's investigation identified violations of the LCFS, California Code of Regulations, title 17, section 95480 et seq., where renewable gasoline produced from the plant deviated from the LCFS approved pathways. CARB alleged that from 2012 to 2017, Clean Energy misreported and submitted quarterly LCFS fuel transaction reports using a certified LCFS fuel pathway that deviated from the actual fuel reported. CARB alleged 44 reporting errors during this time.

To resolve its violations, Clean Energy agreed to spend at least \$800,000 to implement a mitigation program in which the company will incentivize the deployment of 20 heavy-duty trucks powered by low-NOX CNG engines that will operate solely on renewable fuel. These near-zero-emission trucks will operate in the South Coast and San Joaquin Valley, providing significant emissions reductions in disadvantaged communities. The company also paid a \$100,000 penalty.



Program Development

Enforcement is a powerful tool, rooted in law, which must be used appropriately. An enforcement program should be reasonably transparent, so that regulated industry understands how the enforcement process works, and so that the people of California understand the enforcement being conducted in their community and across the State. Moreover, an effective enforcement program must evolve—continuously improving to identify and prosecute non-compliance to increase compliance rates and providing appropriate deterrence.

Enforcement Policy Update

In 2019, staff initiated a public process to amend CARB Enforcement Policy to address two specific areas: enforcement of the Renewables Portfolio Standard (RPS) Program, and maximum penalty adjustments based on State law. The amendments also includes minor grammatical edits and updates to webpage links. Sections of the Enforcement Policy that require an annual update, such as the Matrix of Regulations and Corresponding Penalties, have been removed from the Enforcement Policy and will be published in the Annual Enforcement Report each year, starting with this Report (Appendix J). Staff published the updated policy in April 2020.

Renewable Portfolio Standard

Established in SB 1078 (2002, Sher), revised in SB 2 X-1 (2011, Simitian), SB 350 (2015, De León), and SB 100 (2018, De León) RPS requires utilities to serve a portion of electricity sales with renewable energy resources. RPS requires the California Energy Commission to regulate public-owned utilities (POU) by adopting an RPS enforcement regulation and to refer any POUs found to be non-compliant to CARB for penalty assessment. If CARB imposes penalties, the penalties are to be comparable to California Public Utility Commission penalties for non-compliant retail sellers and consistent with Health and Safety Code § 42400 et seq.



Large desert solar array

To develop this process, Enforcement Division held two public workshops and released a draft of the Enforcement Policy to the public for comment. The amended Enforcement Policy includes the procedure CARB will follow for enforcement of RPS.

In 2019, the California Energy Commission found the Port of Stockton to be in violation of the RPS and referred the case to CARB for settlement. This will be our first RPS enforcement case, and will be conducted using the procedures described in amendments to the Enforcement Policy.

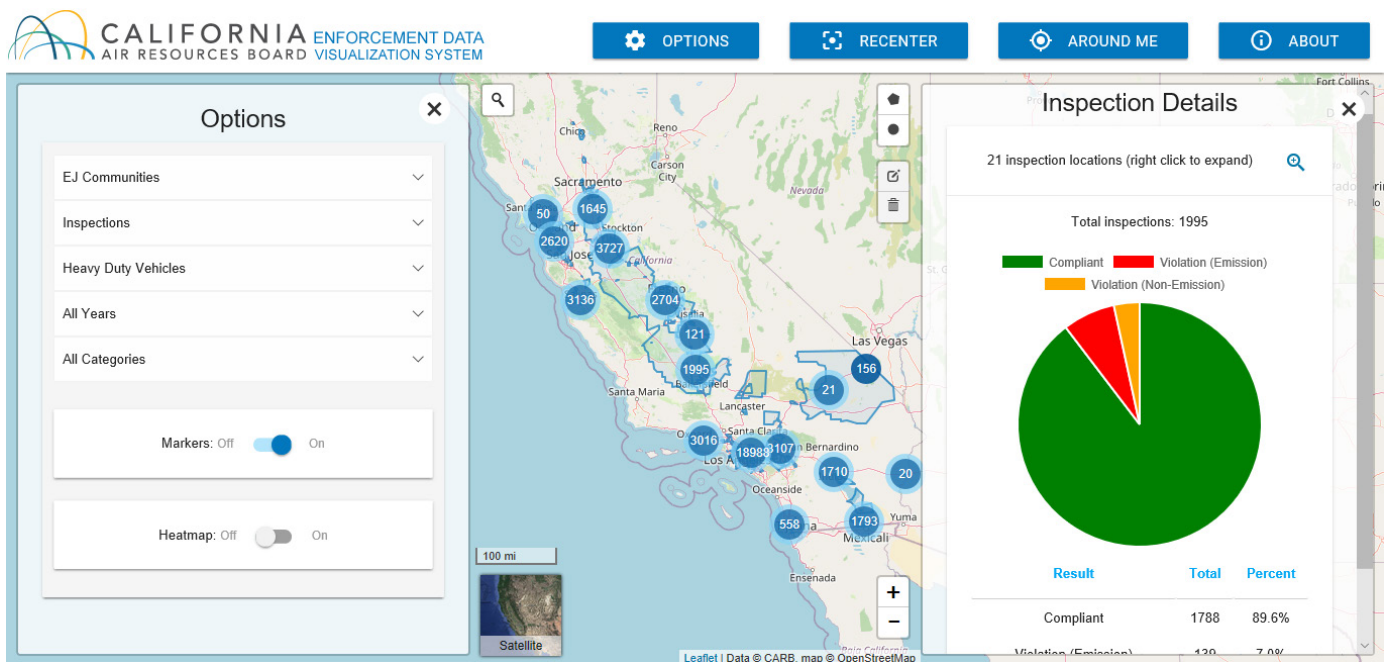
Maximum Penalties

To ensure the deterrent effect of penalties is not diminished by inflation, the California Legislature enacted changes to State law increasing maximum penalties from the levels established in the mid-1970s. Maximum penalties increased for vehicular violations in 2016 (AB 1685, Gomez) and for non-vehicular violations in 2017 (AB 617, Garcia), and are adjusted annually based on annual changes in the California Consumer Price Index as published by the California Department of Industrial Relations. The amended Enforcement Policy reflects these changes. Maximum penalties, adjusted in accordance with state law, will be included each year in the Annual Enforcement Report, and are included for the first time in this report; see Appendix L.

Enforcement Data Visualization System

The Enforcement Data Visualization System (EDVS) is a map-based tool for users to visualize CARB’s enforcement activities throughout the state, including field inspections and case settlements. Users can view inspection results and settlement details for different years, enforcement programs, program categories, and can sort information by regions, including statewide, air districts, designated AB 617 communities, as well as custom-defined areas drawn by users on the map. EDVS can also facilitate tracking enforcement activity in disadvantaged communities, including enforcement components of AB 617 community emission reduction programs, and provide community members a user-friendly way to access CARB’s enforcement information within their communities. The system currently includes enforcement data from year 2015 to 2019, as seen in Figure 4, and will be updated annually when new data is available. EDVS is accessible at webmaps.arb.ca.gov/edvs/.

FIGURE 4: ENFORCEMENT DATA VISUALIZATION SYSTEM



Supporting the Community Air Protection Program

CARB focuses on improving air quality in disadvantaged communities. AB 617 established a new Community Air Protection Program that mandates the state, working together with local pollution control agencies and community-based organizations through community steering committees, to focus on monitoring, enforcement, and regulatory activities of the sources of greatest concern to residents. In our enforcement programs, this means focusing our enforcement efforts to work towards environmental justice, especially in each selected community.

In the program, each community develops a Community Emission Reduction Plan (CERP). Each plan includes enforcement strategies to help ensure regulations achieve their expected reductions. These strategies focus on both stationary and mobile sources. As part of the CERPs, CARB works to understand and address community concerns, and to conduct community-level compliance assistance, outreach, and education related to compliance and enforcement of local and state rules and regulations. CARB will track and report to the Community Steering Committees on the ongoing enforcement activities within each community, share progress in meeting community enforcement measures, and identify potential innovative strategies for increasing compliance with air pollution regulations within the community during regular updates to the Community Steering Committees. Examples are provided below.

Complaints

One concern that community members voiced in many of the Community Steering Committees was how to report a complaint and how to ensure complaints are handled by both CARB and Air Districts. In each of these communities we are working to ensure community members know how to make actionable complaints, tracking complaints closely and working to better report progress on addressing the root cause of the complaint.

Community-Specific Compliance Assessment

To determine a baseline understanding of current enforcement efforts at each source in the community, CARB staff conducted a compliance assessment of the three-year enforcement history within communities where community emissions reduction programs were developed. The purpose was to both identify and provide transparency to enforcement efforts for mobile, stationary, and area-wide sources within the community, and to solicit input on how enforcement programs might be improved or targeted.

Stationary Source Inspections

Another issue staff have worked to address as a result of Community Steering Committee meetings is having additional resources available during Stationary Source inspections.

State law defines CARB's role in reviewing district rules, regulations, and programs applying to stationary sources to ensure they are sufficient to meet ambient air quality standards, and to review enforcement programs to ensure they are reasonable. With this obligation in mind, and to help address local comments and issues, CARB staff will be conducting stationary source inspections with district staff in AB 617 communities.



Staff inspecting an industrial facility

Focusing Enforcement Efforts to Promote Environmental Justice

CARB's Enforcement Policy³ recognizes the need for increased enforcement efforts in disadvantaged communities by ensuring that at least 50 percent of all mobile source inspections occur in such communities. In 2019, CARB conducted 26,498 inspections of diesel vehicles, other vehicle, fuels, ports and marine facilities. Approximately 60 percent of inspections directly benefited disadvantaged communities.

Working to Address Odors in Vallejo

CARB actively supports and participates in meetings and workshops across the state including areas such as San Francisco, Vallejo, and Stockton. Staff worked with Citizen Air Monitoring Network, a local community partner in Vallejo, to hold a meeting January 2020 to address recurring odor issues that have persisted throughout the community during 2019. CARB staff, Bay Area Air Quality Management District staff, a county supervisor, and nine people from the community attended the meeting to discuss the most concerning sources of pollution in their community. As a result, CARB has agreed to coordinate with the Air District, and local communities to identify the types and sources of odor issues in Vallejo. CARB staff are facilitating a follow-up training for the community on the tools available for pollution source identification.

CalEPA Stockton Environmental Justice Initiative

The CalEPA Environmental Justice Task Force is dedicated to improving compliance and enforcement of environmental laws in communities that are disproportionately burdened by multiple sources of pollution and are vulnerable to their effects. In 2019, the Task Force carried out the initiative in Stockton, which focused on strategies to address some of the community's major environmental concerns as identified by residents, city officials, and community partners. The Task Force is comprised of the enforcement staff from CalEPA and each of its five regulatory boards, including CARB, state departments, and federal and local partner agencies.

The EJ Task Force conducts targeted initiatives to address pollution and safety concerns in areas of California with the highest pollution burdens. Staff participated in numerous community-led events, where staff provided updates and results of CARB's response to the community's needs and concerns.⁴

Staff participated in a community-led bus tour of South Stockton and workshops within the community. During the bus tour, CARB staff were shown several areas of environmental concern by community members including truck traffic near sensitive receptors, idling of heavy-duty diesel vehicles (HDDV) near residents and schools (including George Washington Elementary, which is in very close proximity to the Port of Stockton and other industries).

Staff listened to the community and responded by providing the City of Stockton with "NO IDLING" signs at no cost to post at areas of concern as identified by the community, conducting mobile and stationary monitoring at George Washington Elementary, and enforcing CARB's rules and regulations.

As of December 2019, seven signs were posted at locations that have high rates of idling trucks.

In response to concerns learned from the community regarding pollutants from truck traffic and truck idling near sensitive receptors, CARB committed to conduct monitoring in the Boggs Tract community. CARB's Enforcement Division worked in conjunction with both CARB's Research Division (RD) and CARB's Monitoring and Laboratory Division (MLD) to develop a monitoring plan to help



No idling sign

³ Available at ww2.arb.ca.gov/sites/default/files/2019-07/final_enforcement_policy_october2017.pdf.

⁴ For additional information on the CalEPA Task Force and the Stockton initiative, visit calepa.ca.gov/enforcement/environmental-justice-compliance-and-enforcement-task-force/ or view CalEPA's Story Map at calrecycle.maps.arcgis.com/apps/Cascade/index.html?appid=99f5790b860844668bdef48f45dcfa00.

quantify the air pollution burden in the Boggs Tract community with a specific focus on Washington Elementary School. The goal of the study was to characterize the air quality and its spatial pattern around the school and to identify possible sources of pollution. RD collected monitoring data using their Mobile Sampling Platform. In total, RD conducted seven days of sampling between August 15, 2019 to August 30, 2019, collecting 19 rounds of samples from the community and surrounding area. The research team concluded that areas in the vicinity of the school and near the port showed higher levels of PM10 (and other coarser PM), which was observed to be consistent with road dust from unpaved roads.

MLD installed two Aeroqual sensors at the George Washington Elementary School and collected data from July 30, 2019 to August 28, 2019. These sensors measured the PM2.5, ozone, and NO2 concentrations in the community. Initial analysis of the combined monitoring efforts appears to show that the highest concentrations of measured pollutants were lower than both the Federal and State air quality standards.

Successful partnerships depend on the ability to deliver on the commitments made by CARB. The impact of multiple sources on George Washington Elementary and the surrounding community was a major concern raised by the Stockton community. This monitoring effort provides some information to the community about their pollution burden, which is key to providing transparency, and this transparency is fundamental to building relationships within the community, which is one of the major goals of CARB's enforcement program.

CARB Staff performed 377 program inspections on 80 HDDV at six locations in and around the community as part of the initiative. These inspections resulted in the issuance of two citations during the initiative.

CARB staff performed 12 Cargo Tank Vapor Recovery program inspections, and 21 Commercial Harbor Craft inspections on five vessels in the Port of Stockton and the Consumer Products section purchased 62 regulated products from 20 stores. The purchased items were analyzed for Volatile Organic Compounds and Toxic Air Containments. Currently, some of the Consumer Products investigations are still under investigation.

Moving forward in 2020, CARB will participate in CalEPA's newest initiative, which, instead of focusing efforts in a single community, will apply a sector-based approach to selected industry types operating in multiple overburdened communities.



Roadside inspection

Supplemental Environmental Projects (SEP) Program Updates

CARB recognizes that while enforcement through penalties plays an important role in deterring environmental violations, penalties alone do not address the environmental harm that communities suffer because of these violations. One way that CARB addresses environmental harm is through its Supplemental Environmental Projects (SEP) Program. SEPs are community-based projects funded by a portion of penalties received during CARB's settlement of enforcement actions. CARB's SEP Program intends to improve public health, reduce pollution, increase environmental compliance and bring public awareness to neighborhoods most burdened by environmental harm. SEP options are presented to violators who may voluntarily agree to fund a project as part of their penalty for failing to follow CARB's rules and regulations.

CARB's list of eligible projects has grown since it revamped the SEP process in 2017, enabling numerous community groups and local districts across California to gain access to funding from the SEP program. In 2019, CARB approved 26 projects listed as eligible for funding for a total of over \$24.5 million. In 2019, 14 projects have received funding through CARB's SEP Program, of more than \$5.9 million. Projects span across a variety of category types and include projects such as air filtration and monitoring, tree planting, and community education programs.

CARB staff work with community-based organizations throughout the SEP application process to ensure applications are complete and thorough. Proposals can be submitted one of two ways. First is through the CalEPA's SEP website⁵, where each proposal is directed to the correct administering agency. Second, SEP proposals can also be submitted directly to CARB, by emailing sep@arb.ca.gov and requesting CARB's SEP Proposal form, which requires additional air pollution related information about the project.

Once applications are deemed complete, they are reviewed by CARB staff to ensure the proposal meets SEP policy requirements⁶. The project is then presented to CARB Executive Officer for approval. If approved, the SEP is listed as an eligible project on both CARB's and CalEPA's SEP lists and is then added to the SEP list available to violators. While staff encourages every violator to participate in a SEP, it is voluntary. If a violator chooses, up to 50 percent of the penalty can be allocated to the SEP. Funds are transferred directly to the SEP, from the responsible party, for project implementation.

In 2019, companies found in violation funded eighteen projects in California, with \$6,354,998.94 in penalties committed, as shown in Table 1 below. The list of funded SEPs available are kept current and can be found on CalEPA's website⁷. Figure 5 depicts the spatial distribution of funded and eligible approved SEPs.

⁵ Available at calepa.ca.gov/sep-proposal-form/.

⁶ CARB's SEP Policy can be found at ww2.arb.ca.gov/sites/default/files/2020-03/arbseppolicy2016.pdf

⁷ calepa.ca.gov/supplemental-environmental-projects/.

FIGURE 5: 2019 FUNDED AND APPROVED SEPs BY CALIFORNIA AIR QUALITY DISTRICTS

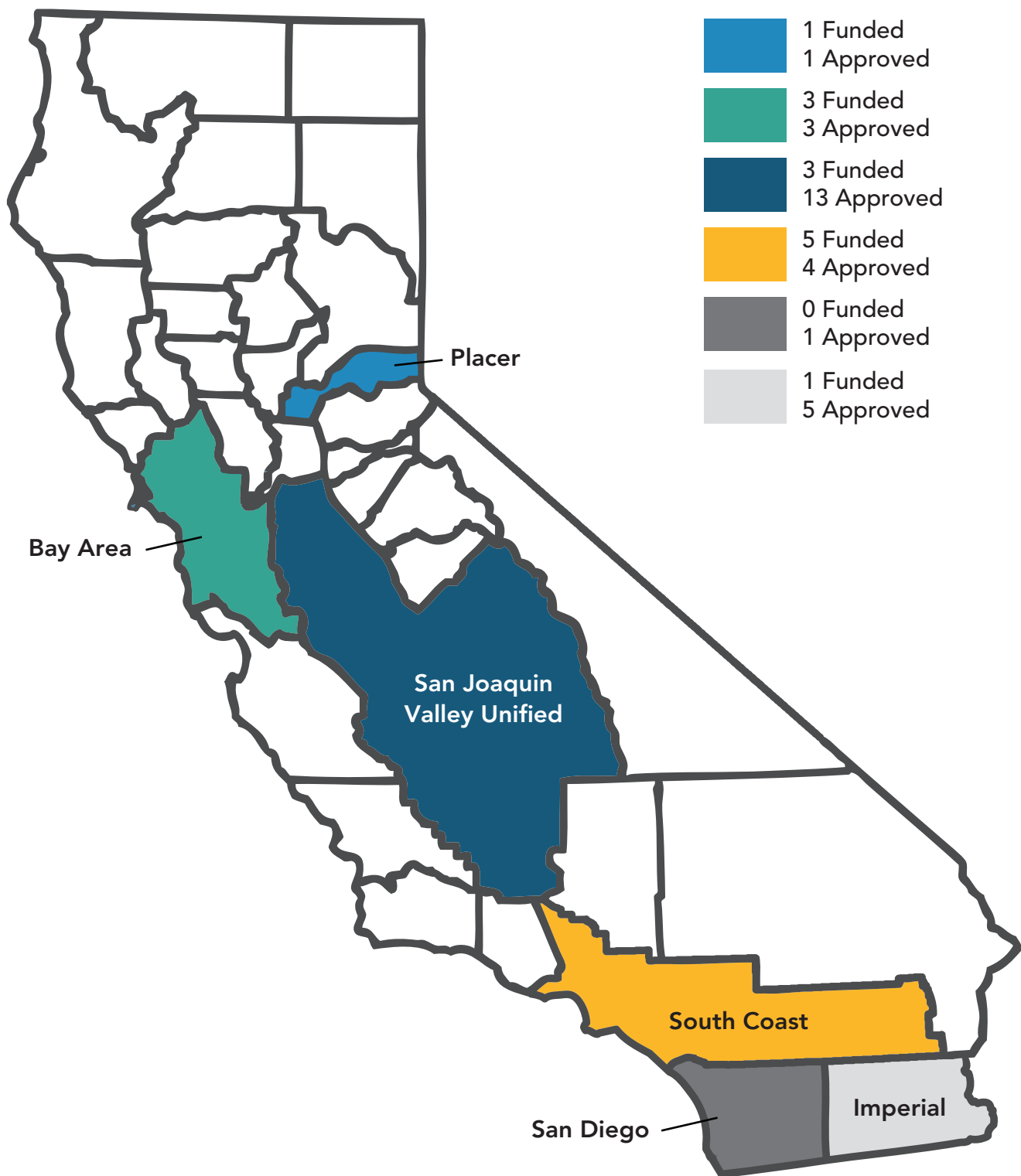


TABLE 1: SEPs FUNDED FROM CASES SETTLED IN 2019

SEP Name	Case Settlements	Total Funds Requested	Total SEP Funds Committed to Project 2019	Total SEP Funds Disbursed to Project 2019	SEP Funds Spent to Date
Coachella Valley Mitigation Project Extension 2018–2023	1	\$4,988,094.31	\$1,893,895.45	\$1,893,895.45	\$0.00
Community Based Monitoring and Assessment Program for Fresno Phase 1	1	\$53,000.00	\$53,000.00	\$0.00	\$0.00
Fresno Trees	2	\$11,015,929.00	\$378,380.90	\$90,125.00	\$90,125.00
Installation of Air Filtration Systems in Schools	2	\$2,306,934.70	\$126,000.00	\$126,000.00	\$0.00
Installation of Air Filtration Systems in Seeley Elementary School	1	\$107,928.36	\$107,928.36	\$107,928.36	\$0.00
Installation of Air Filtration Systems in Sensitive Receptor Facilities in Bay Area CARE Communities	1	\$2,000,000.00	\$2,000,000.00	\$2,000,000.00	\$604,899.43
Installation of Residential Air Filtration Systems	1	\$1,000,000	\$77,150.00	\$0.00	\$0.00
Kettleman City Asthma Intervention Program	1	\$65,000.00	\$65,000.00	\$65,000.00	\$0.00
Kids Making Sense (KMS) Youth Education, Southern California	3	\$148,500.00	\$148,750.00	\$148,750.00	\$39,473.24
Kids Making Sense, Youth Education, Northern California	1	\$74,500	\$74,500.00	\$74,500.00	\$26,371.91
Oakland Unified School District Project 2019–2023	1	\$819,329.69	\$819,329.69	\$819,329.69	\$0.00
Placer County Community Based Air Filtration SEP: Phase 2	1	\$3,675,755.12	\$13,248.00	\$13,248.00	\$0.00
Placer County Community Based SEP Program	2	\$926,704.44	\$172,816.54	\$172,816.54	\$169,815.04
South LA Urban Greening and Community Forestry Project	1	\$682,600.00	\$425,000.00	\$425,000.00	\$3,332.69
Total	18	\$19,801,681.31	\$6,354,998.94	\$5,936,593.04	\$934,017.31

Groups such as the IQAir Foundation have utilized SEP funds to provide direct benefits to disadvantaged communities across the state. Through the SEP Program, IQAir Foundation has installed air filtration systems in 31 schools, benefiting approximately 19,000 elementary, middle, and high school students.

Other projects that received SEP funding in 2019 include Kids Making Sense, a youth education program for schools located in disadvantaged areas throughout California. Funding is used to educate students in grades 6–12 about monitoring and improving air quality in their communities.

Community-inspired and developed projects like these proactively support CARB's mission to improve the quality of life for all Californians. The success of the SEP Program is due in part to the Program's renewed ability to leverage communities' knowledge and experience, while also creating opportunities for violators to right their harmful actions.



Children at Kids Making Sense event

To ensure SEP funds are used appropriately, CARB's proposal process requires a complete scope of work, budget, and implementation timelines. Each SEP has clearly defined goals and a framework to measure outcomes and performance in meeting those goals. Once a project is funded, CARB ensures that project milestones are met and all expenditures are funded according to the proposed budget and timeline. As part of this process, CARB periodically performs site visits to SEP funding recipients to spot check and inspect SEP activities.

CARB also maintains guidance documents for SEP recipients. For example, SEP recipients are required to sign a contract detailing the conditions under which CARB would recover the unused project funds in the event that a project cannot be completed or deviates from the approved plan.

Moving forward, CARB will continue to work with communities to fund as many eligible community projects as possible through the SEP Program. CARB anticipates funding a diverse mix of projects with a continued focus on disadvantaged communities.

Cargo Tank Vapor Recovery Program (CTVRP)

In 2019, CARB amended the fee required for certification of vapor recovery systems on cargo tanks. The amendments were necessary to address an ongoing annual program deficit, which led to an 85 percent decrease of field activities performed from 2007 to 2017. The resulting fee increase allows the program to be revenue neutral—meaning the fees assessed for the Program cover the costs of program implementation. In addition to improving compliance rates, CARB staff is developing a Compliance Assistance Program (CAP).

The CTVRP is a certification program responsible for reviewing and processing applications for certification of vapor recovery systems on cargo tanks. To certify, cargo tanks undergo a certification process that includes the submittal of a 48-hour test notification to CARB, the



Cargo tank unloading fuel at a gas station

completion of the annual test procedure, the submittal of passing test results, and the submittal of a completed certification application.

The vapor recovery system needs to be tested annually to ensure all components are functioning properly to prevent excess Volatile Organic Compound (VOC), and Toxic Air Contaminant (TAC) emissions from venting to atmosphere during the loading or unloading of gasoline. CARB targets VOC emissions because they contribute to the formation of ground level ozone. CARB also targets TACs created during the evaporation of gasoline, including benzene, which is a known carcinogen. In 2019, the CTVRP processed 6,317 certifications, and the data for the application processing in Table 2.

TABLE 2: CARGO TANK CERTIFICATION APPLICATIONS RECEIVED QUARTERLY

Application Status	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	2019 Total
Late	0	1	1	0	2
Denied	12	17	7	6	42
New	125	173	86	136	520
For Certification	1,729	1,741	1,398	1,449	6,317

Looking forward the CTVRP will continue to work with industry to implement a CAP in 2020. CARB is aiming to improve industry compliance rates by offering training opportunities for cargo tank owners and testers in the form of classroom trainings and one-on-one certification witnessing. The trainings will cover two topics: Cargo Tank Self Compliance Testing Procedures and Cargo Tank Certification Testing Procedures. Participation in the self-compliance testing is anticipated to increase compliance rates, as cargo tanks will be periodically tested throughout the year to ensure the cargo tanks are properly maintained. In efforts to determine the effectiveness of the CAP, staff will be closely monitoring compliance rates to track improvements generated by the program over time.

Portable Equipment Registration Program (PERP)

The Portable Equipment Registration Program (PERP), as set in Title 13 California Code of Regulations (CCR), Chapter 9, Article 5, enables owners and operators of portable engines and other types of portable equipment to register their units under a single statewide PERP registration. The statewide registration allows equipment owners to operate portable equipment throughout California without having to obtain individual permits from local air districts. With recent regulatory amendments and an associated fee increase, the PERP now operates as a revenue neutral program.



Portable generator

There were several regulatory deadlines in 2019 that included the January 29, 2019 deadline to request compliance benefits for meeting the prior regulatory 2017 fleet diesel PM standards; the June 30, 2019 deadline for companies owning large fleets to request fleet averaging as their compliance strategy instead of following the tier phase-out schedule; and the July 1, 2019 deadline to designate a Tier 1 engine (older higher emitting engine) as low-use or emergency-use.

Tier 1 engines phased out (removed from service) as of January 1, 2020, except in a few situations specified in the Portable Diesel Engine ATCM. By law, Tier 1 engines can no longer be sold for use in California. Removal of Tier 1 engines will facilitate further reductions of diesel PM emissions in the state. CARB is currently working with local air districts, who enforce the program, to assess compliance with these requirements.

Public Safety Power Shutoffs (PSPS)

Gusty winds and dry conditions driven in part by climate change, and vulnerable electricity distribution infrastructure caused utilities to institute Public Safety Power Shutoffs (PSPS) in order to reduce the risk of wildfires in 2019. When utilities cut power to large segments of the population in California, there are impacts on residents, businesses, and local services such as water supply, sewer treatment, police and fire services, medical care and education (school closures). PSPS events also create air quality impacts. During a prolonged loss of power, commercial energy customers employ backup power provided by diesel engine generators, which emit diesel PM, a known carcinogen, and residential energy customers employ smaller gasoline engine generators to power key equipment such as refrigerators. Operation of these engines can create localized particulate emissions and resultant health impacts.

In response to the PSPS in 2019, CARB issued guidance and enforcement advisories to clarify how backup generation could be used during PSPS events, which are available at ww2.arb.ca.gov/our-work/programs/emergency-backup-generators. While the increased use of diesel backup engines does not align with CARB's air quality and long-term climate goals, CARB understands the need for backup power to provide an emergency response during power outages. The advisories describe the legal use of backup power during the PSPS events. These issues are complicated, because while portable equipment regulations provide exemptions for operation during emergencies under specified conditions, portable engines used at stationary sources may require a local air permit.

In an effort to better understand the emissions impacts from these events, CARB's Air Quality Planning and Science Division (AQPSD) developed an estimate of the emissions associated with the 2019 PSPS events from the use of backup generators. Estimates are available at ww2.arb.ca.gov/sites/default/files/2020-01/Emissions_Inventory_Generator_Demand%20Usage_During_Power_Outage_01_30_20.pdf. It is estimated that 124,774 generators are operated during PSPS, resulting in estimated emissions of 166.4 tons of NO_x, 19.4 tons of PM, and 8.9 tons of diesel PM. This is roughly equivalent to 29,000 heavy-duty trucks operating on California's roadways for one month.

To better coordinate on these issues, CARB convened a workgroup with the California Air Pollution Control Officers Association (CAPCOA) and air districts. The focus of the workgroup is to coordinate on portable equipment and air permitting issues, and encourage use of alternative and cleaner technologies than diesel engines.

To help reduce emissions, CARB's settlement with Kohler, as discussed earlier, is providing \$1.8 million to fund a mitigation project to supply solar powered generators to low-income residents impacted by PSPS events.

Improving Stationary Source Enforcement Programs

State law gives local air districts the primary authority over stationary sources of air pollution, and specifies CARB's role in reviewing district rules and regulations to determine whether they are sufficiently effective to achieve state ambient air quality standards, and district enforcement practices to determine whether reasonable action is being taken to enforce programs, rules, and regulations. For decades, CARB staff conducted permitting and enforcement program reviews and generated reports for local air districts, providing recommendations for program improvement. These programs were de-prioritized in the late 2000s to focus on increased mobile source regulation. From the enforcement perspective, over the past decade CARB staff focused its

stationary source enforcement efforts on providing compliance assistance training, and in providing assistance primarily to smaller air districts in enforcement when requested.

In 2019, permitting and enforcement review programs were consolidated in the Enforcement Division, and staff began the task of rebuilding these review programs. The Enforcement Division created a new Stationary Source Enforcement Branch, with four focus areas: training, enforcement review and support, permitting review and support, and direct enforcement. Over the past several years, the Branch experienced about a 40 percent turnover in staffing primarily due to retirements. As a result, we focused on hiring local air district and private sector staff with experience in district permitting, inspection, and enforcement programs. These hires have greatly enhanced our expertise.

During the year, staff focused on several key assignments: training program development, review of the San Joaquin Valley Emission Reduction Credit Program, review of the Imperial County Air Pollution Control District's Enforcement Program, and facility inspections and enforcement.

Training Program Development

In 2018 and 2019, staff worked with a CAPCOA and district workgroup to determine priorities for the training program, given that five permanently funded staff are dedicated to the program. The resulting plan focuses on enforcement fundamentals, CARB mandated programs, and stationary source technologies. Visible Emissions Evaluation training will be conducted in fewer yet more centralized locations to create a balance between available CARB staff resources to conduct the training, and district resources to send staff outside of the District to receive training. More content will be migrated online both through formal training classes and information repositories accessible to CARB and District staff.



Training class for CARB and District staff

In fact, in 2019, even though CARB staff conducted 22 percent fewer training classes, the number of students trained remained consistent with previous years. This indicates the training program is becoming more efficient. Ensuring effective district programs requires providing the training to district staff necessary to be successful. Staff will need to continue to improve the efficiency in our training program to continue to meet this goal.

San Joaquin Valley Emission Reduction Credit Program Review

In January 2019, the Board directed staff to review the San Joaquin Valley Emission Reduction Credit System. The goal of this project was to review the SJVAPCD ERC system, including the equivalency determination, and explain it in the context of the broader District program for reducing emissions from stationary sources including New Source Review (NSR), permitting, and regulatory requirements. The review identified significant issues that the District and CARB staff are now working to address.

Imperial County Enforcement Program Review

In May 2018, the Air Resources Board directed CARB staff to evaluate enforcement in the Imperial Valley. In response, in 2019 staff observed inspections of 22 facilities, reviewed permits at each of these facilities, and reviewed District enforcement policies. Staff is continuing to work with the District on enforcement issues.

Facility Inspections and Enforcement

In 2019, staff conducted many inspections on a variety of different issues, in many cases resulting in enforcement action. These include:

- **East Oakland Odor Complaints**

For the past three years, CARB staff has been investigating a persistent odor that has occurred frequently across East Oakland for years and has been the subject of many community complaints. After two monitoring campaigns and multiple complaint investigations, staff issued a Notice of Violation for public nuisance caused in part by uncontrolled open-air industrial process emissions at a facility. CARB staff is working collaboratively with District staff to address the odor issue.

- **CARB Landfill Methane Rule**

CARB's Landfill Methane Rule is designed to reduce methane emissions from 191 landfills in California. Twenty-three air districts have signed memoranda of understanding with CARB to enforcement requirements at 174 facilities, leaving CARB to directly enforce at 17 landfills. In 2019, CARB staff joined air district staff on eight inspections of landfills identified by CARB's Research Division as high emitters during aerial methane studies. District staff issued notices of violation to seven of these eight facilities.

- **CARB Mandatory Reporting Program**

CARB's Mandatory Reporting Program requires companies to report greenhouse gas emissions to support the implementation of the Cap-and-Trade Program and AB 32 GHG Inventory. When emission reports are inaccurate, the Cap-and-Trade program may be impacted, as a result, CARB penalties in this program can be substantial. In 2019, CARB settled two cases for erroneously calculated emission reports for a total of \$1.3 million.

- **Asbestos Program**

CARB staff enforce federal toxics requirements for asbestos in air districts that are not delegated by the U.S. EPA to do so and coordinates the enforcement of asbestos requirements across the State. In 2019, staff conducted 39 inspections in Butte, Imperial, Placer, Sutter, and Yuba counties, coordinated two half day workshops attended by asbestos regulators, and hosted a training course in Sacramento.

Overall, as CARB program activities in the area of District program reviews and stationary source enforcement has expanded, we have identified significant issues that need to be addressed to protect public health. Many of these stationary sources are located in and/or impact disadvantaged communities. CARB's enforcement programs are working to assess the extent of these issues to determine the most appropriate responses.



Conclusions

CARB's enforcement programs continue to expand and evolve. Our goal is to achieve comprehensive compliance in every program we enforce. We assess compliance rates, and look to improve the design, implementation, and enforcement of programs to foster higher compliance rates. We focus enforcement efforts in ways that maximize compliance, through higher volume enforcement processes and through deterrence, and ameliorate harm through our SEP program. We focus our enforcement efforts to help foster environmental justice in disadvantage communities, and we work to ensure transparency and accountability in our enforcement programs.

In 2019, CARB staff inspected more than 16,000 trucks and issued more than 3,000 citations. We conducted more than 10,000 inspections in other programs. Approximately 60 percent of inspections directly benefited disadvantaged communities. CARB staff closed 3,570 enforcement actions, assessing \$24.4 million in penalties across a wide array of CARB programs impacting vehicles, fuels, equipment, and consumer products. CARB staff diverted more than \$6 million in penalties to projects that provide direct benefit to disadvantaged communities.



Appendix A

2019 Enforcement Programs Statistics

Program	Category	Total Closed Enforcement Actions	Judgment Penalties Assessed ⁹	Settlement Penalties Assessed ⁸	Total Penalties Assessed
Certifications	Indoor Air Cleaners	5	–	\$218,377	\$218,377
Certifications	Vehicles ⁹	4	–	\$6,231,338	\$6,231,338
Certifications	Engines	7	–	\$205,900	\$205,900
Certifications	Parts ¹⁰	10	–	\$6,681,601	\$6,681,601
Certifications	Portable Fuel Containers	6	–	\$763,336	\$763,336
Fuels	Fuels Specifications	7	–	\$526,000	\$526,000
Fuels	Low Carbon Fuel Standard	1	–	\$100,000	\$100,000
Stationary Sources	Asbestos	–	–	–	–
Stationary Sources	Consumer and Aerosol Coating Products	43	–	\$2,050,315	\$2,050,315
Stationary Sources	Composite Wood Products	8	–	\$187,500	\$187,500
Stationary Sources	Refrigerant Management	–	–	–	–
Stationary Sources	Sulfur Hexafluoride	–	–	–	–
Stationary Sources	Landfill Methane Control	–	–	–	–
Diesel	Diesel Fleet Investigations	15	–	\$518,950	\$518,950
Diesel	Ports and Marine	12	–	\$1,408,925	\$1,408,925
Mandatory Reporting Requirements	Mandatory Reporting Requirements	2	–	\$1,343,500	\$1,343,500
Subtotal	Enforcement Cases	120	–	\$20,235,742	\$20,235,742
Citation Program	Cargo Tank	38	–	\$21,000	\$21,000
Citation Program	STEP	2,381	–	\$3,212,145	\$3,212,145
Citation Program	Dealer and Fleet Tampering	1	–	\$500	\$500
Citation Program	Recreational Marine Engines	–	–	–	–
Citation Program	Vehicle & Parts	12	–	\$37,000	\$37,000
Citation Program	Heavy-Duty Diesel Inspection	1,018	–	\$922,625	\$922,625
Subtotal	Enforcement Citations	3,450	–	\$4,193,270	\$4,193,270
Total	Enforcement Actions	3,570	–	\$24,429,012	\$24,429,012

8 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).

9 Program Category Vehicles include Off-Highway Recreational Vehicle Program.

10 An aftermarket part is issued an Executive Order, providing exemption from California anti-tampering law, if the part satisfies an CARB engineering evaluation. For more information, visit CARB's Aftermarket, Performance, and Add-On Parts Regulations at ww3.arb.ca.gov/msprog/aftermkt/devices/amquery.php.

Appendix A-2

2019 STEP Program Statistics

The STEP program was designed to increase compliance rates through a data-driven, streamlined process. In this process, potentially non-compliant vehicles and fleets were identified using vehicle registration and inspection databases. These fleets were issued a non-compliance letter asking for more information. If additional information was not provided demonstrating compliance, staff issued a notice of violation to the fleet and offered due process in the form of an administrative hearing. After due process, if the fleet operator had not proven compliance, CARB issued a registration hold barring the vehicle from operating in California, collected a penalty, or both.

CARB staff also issued warning letters to all truck operators with a truck that would become non-compliant in 2020, because these vehicles are not eligible for registration in 2020.

As a result, CARB either enforced or warned every non-compliant truck, and every future non-compliant truck in 2020. These vehicles are now barred from registration due to their non-compliant status.

The tables below provide summary statistics for 2019, and for the program as completed in the beginning of 2020.

TABLE A-2.1: STEP ACTIONS TAKEN

Action Taken	Fleets 2019	Vehicles 2019	Fleets as of 4/9/2020	Vehicles as of 4/9/2020
Number of Notice of Non-Compliance Letters Sent	8,196	13,599	19,587	35,790
Number of Notice of Violations Sent	8,811	14,845	17,955	32,293
Number of Registration Holds Placed ¹¹	–	13,458	–	23,673
Number of Warning Letters Sent for Future Non-Compliance	0	0	0	69,425
Demonstrated Compliance	–	10,157	–	22,282
Determined to be Exempt	–	514	–	1,867

TABLE A-2.2: STEP PENALTIES PAID

STEP Penalties Paid in 2019	STEP Penalties Paid as of 4/9/2020
\$3,212,145	\$5,239,578

¹¹ Holds may be removed once penalties are paid and compliance is demonstrated.

Appendix B-1

2019 Field Operations Statistics

Program Category	Product Samples Tested	Inspections Completed	Citations & NOVs Issued	Pending Citations & NOVs on Jan. 1, 2019	Rescinded, Compliant, or NFA Citations & NOVs	Closed Citations & NOVs	Total	Pending Citations & NOVs on Dec. 31 2019	Penalties Assessed
Ocean-Going Vessel Program	–	536	6	3	–	6	6	3	\$172,500
Commercial Harbor Craft Program	–	315	3	5	2	2	4	4	\$143,000
Shore Power Program	–	38	5	2	1	2	3	4	\$997,050
Cargo Handling Equipment Program	–	413	3	–	–	2	2	1	\$96,375
Marine TRU Program (see also Heavy-Duty Diesel Field Inspection Programs)	–	302	–	–	–	–	–	–	–
Total: Marine Programs	–	1,604	17	10	3	12	15	12	\$1,408,925
Vehicles (CNC, Non-CNC, OHRV)	–	255	17	18	–	16	16	19	\$6,268,338
Dealer and Fleet Citations (Tampering)	–	259	4	3	–	1	1	6	\$500
Recreational Marine Engines (Watercraft)	–	16	–	5	–	–	–	5	–
Engines	–	352	2	13	–	7	7	8	\$356,450
Parts	–	–	12	36	1	10	11	37	\$6,531,051
Do-it-Yourself Canned Refrigerants	–	168	–	1	–	–	–	1	–
Portable Fuel Containers	–	239	8	25	1	6	7	26	\$763,336
Total: Vehicle and Parts Programs	–	1,289	43	101	2	40	42	102	\$13,919,675
Consumer and Aerosol Coating Products	594	–	32	23	3	43	46	9	\$2,050,315
Composite Wood Products	46	–	6	6	1	8	9	3	\$187,500
Indoor Air Cleaners	–	–	1	4	–	5	5	–	\$218,377
Total: Consumer Product Programs	640	–	39	33	4	56	60	12	\$2,456,192

Program Category	Product Samples Tested	Inspections Completed	Citations & NOV's Issued	Pending Citations & NOV's on Jan. 1, 2019	Rescinded, Compliant, or NFA Citations & NOV's	Closed Citations & NOV's	Total	Pending Citations & NOV's on Dec. 31 2019	Penalties Assessed
Refineries	515	91	5	2	–	3	3	4	\$329,000
Terminals	248	46	2	3	–	4	4	1	\$197,000
Service Stations	14	10	–	–	–	–	–	–	–
Marine Vessels	105	9	–	–	–	–	–	–	–
Railcars	1	1	–	–	–	–	–	–	–
Other	20	10	–	–	–	–	–	–	–
RFG Certifications	–	4,028	–	–	–	–	–	–	–
Red-Dyed Diesel Fuel	–	3,123	–	–	–	–	–	–	–
Total: Fuels Programs	903	7,318	7	5	–	7	7	5	\$526,000
Site Audits	–	15	1	1	–	1	1	1	\$100,000
Paper Audits	–	9	3	–	–	–	–	3	–
Other	–	–	–	–	–	–	–	–	–
Total: LCFS Programs	–	24	4	1	–	1	1	4	\$100,000
Cargo Tank Inspection Program	–	–	–	–	–	–	–	–	–
Cargo Tank Pressure Test Program	–	–	–	40	2	38	40	–	\$21,000
Annual Test Observation Program	–	–	–	–	–	–	–	–	–
Total: Cargo Tank Programs	–	–	–	40	2	38	40	–	\$21,000
Total: All Programs	1,543	10,235	110	190	11	154	165	135	\$18,431,792

Appendix B-2

2019 Field Operations Statistics Heavy-Duty Diesel Inspection Programs

Program Category	Inspections Completed	Citations Issued	Ratio of Citations to Inspections	Pending Citations on 01 Jan. 2019	Rescinded, Compliant, NFA	Closed	Total Resolved	Pending Citations on 31 Dec. 2019	Penalties Collected
Heavy-Duty Vehicle Inspection Program	6,782	238	4%	199	130	46	176	261	\$85,495.00
Emission Control Label Program	3,813	375	10%	784	159	81	240	919	\$117,005.00
Commercial Vehicle Idling Program	5,111	167	3%	1,409	192	19	211	1,365	\$67,600.00
Solid Waste Collection Vehicle Program	6	1	17%	19	–	–	–	20	\$2,800.00
Truck and Bus Program	5,935	527	9%	4,783	81	669	750	4,560	\$77,200.00
Tractor-Trailer (GHG) (SmartWay®) Program	1,559	320	21%	183	120	35	155	348	\$204,350.00
Drayage Truck Regulation Program	527	17	3%	315	13	10	23	309	\$12,000.00
Transport Refrigeration Unit Program	2,064	933	45%	4,015	280	134	414	4,534	\$332,475.00
Off-road Diesel Vehicle Program	4,291	454	11%	783	66	23	89	1,148	\$23,700.00
Diesel Exhaust Fluid/ Selective Catalytic Reduction	259	–	0%	–	–	–	–	–	–
School Bus Idling Program	8	2	25%	1	–	1	1	2	–
Other Programs	2	–	0%	–	–	–	–	–	–
Total: Heavy-Duty Diesel Field Program Inspections	30,357	3,034	10%	12,491	1,041	1,018	2,059	13,466	\$922.625

TABLE B-2.1: HEAVY-DUTY DIESEL INSPECTION STATISTICS

Inspections in EJ Areas	18,100
Citations in EJ Areas	1,563
Total California Vehicles Inspected	8,169
Total Out-of-State Vehicles Inspected	3,809
Total Off-Road Vehicles Inspected	4,309
Vehicles Inspected in EJ Areas	9,435
Total Number of Vehicles Inspected ¹²	16,287

¹² Each vehicle can be inspected in more than one program.

Appendix C

2019 Complaint Program Statistics

CalEPA & CARB Hotline Services 2019	Complaints Received	Complaints Referred to Air District	Investigated by CARB	Other Dispositions ¹³	Total Complaints Resolved
Stationary Source Complaints	921	921	0	0	921
Vapor Recovery Complaints	69	69	0	0	69
School Bus Idling Complaints	2	0	2	0	2
Commercial Vehicle Idling	259	0	259	0	259
Smoking Vehicle Complaints	7,157	0	7,157	0	7,157
Heavy-Duty Diesel Program	1,686	0	1,285	401	1,686
All Other Complaints ¹⁴	54	0	0	54	54
Total	10,148	990	8,703	455	10,148

¹³ Complaints referred to an external agency or those without enough information to take action.

¹⁴ Includes Weights and Measures complaints and those that fall outside the purview of CARB.

Appendix D

2019 Portable Equipment Registration Program Statistics

TABLE D-1: PORTABLE REGISTRATION - NEW APPLICATIONS (JANUARY 1, 2019 - DECEMBER 31, 2019)

Action	Application Count	Registration Unit Count	Engine Unit Count	Equipment Unit Count	TSE ¹⁵ Unit Count
Received	2,425	6,085	4,561	1,520	4
Issued	1,777	4,556	3,461	1,091	4
Deemed Incomplete ¹⁶	304	423	352	66	5

TABLE D-2: PORTABLE REGISTRATION - RENEWAL APPLICATIONS (JANUARY 1, 2019- DECEMBER 31, 2019)

Action	Application Count	Registration Unit Count	Engine Unit Count	Equipment Unit Count
Issued ¹⁷	1,678	6,427	5,679	748
Not Renewed ¹⁸	130	2,611	2,208	403
Deemed Incomplete	32	209	178	31
TSE Annual Reporting ^{19, 20}	32	32	3,777	N/A

TABLE D-3: PORTABLE REGISTRATION - FEE TOTALS

Renewal Activity Net Fees	\$5,102,819.73
All Other Activity Net Fees	\$4,437,740.50
Total Net Revenue	\$9,540,560.23

¹⁵ Tactical Support Equipment (TSE)

¹⁶ Includes some applications from latter part of previous year—data based on date deemed incomplete.

¹⁷ Multiple unit renewal applications include units that are renewed and those that are not renewed.

¹⁸ See above note.

¹⁹ 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 12/31/16 (end of previous calendar year).

²⁰ Includes only active TSE registrations which may include TSE registrations with 0 units; expired TSE registrations are not included.

Appendix E

2019 Stationary Source Enforcement Support Statistics

TABLE E-1: AIR DISTRICT HEARING BOARD PROGRAMS

Variances Received & Reviewed	86
Notices Reviewed	58
Abatement Orders Received & Reviewed	1

TABLE E-2: LANDFILL METHANE GAS PROGRAM SERVICES

Inspections Completed	9
Investigations Completed	0
Violations Resolved	0

TABLE E-3: ASBESTOS NATIONAL EMISSIONS STANDARD FOR HAZARDOUS AIR POLLUTANTS PROGRAM

Renovation & Demolition Notifications Received & Reviewed	535
Inspections Completed	45
Violations Resolved	1
Task Force Workshops Conducted	2

TABLE E-4: OTHER STATIONARY SOURCE AND EQUIPMENT INSPECTIONS

Stationary Source Inspections and Investigations	39
--	----

TABLE E-5: REFRIGERANT MANAGEMENT PROGRAM

Inspections Completed	15
Investigations Completed	474
Violations Resolved ²¹	254

TABLE E-6: SULFUR HEXAFLUORIDE REGULATION PROGRAMS

Inspections Completed	0
Investigations Completed	15
Violations Resolved	9

²¹ Includes minor violations resolved with no penalty.

Appendix F

2019 Training Program Statistics

TABLE F-1: TOTAL SESSIONS AND STUDENTS

Sessions	Students
85	4,613

TABLE F-2: SUBJECT SUMMARY

Subject	Sessions	Students
Technical (Pollutant, Facility/Process, Pollutant Modeling & Monitoring)	14	223
Visible Emissions Evaluation (Certification)	48	1893
Regulatory (California & Federal)	2	43
Internal Training	4	103
Basic Inspector Academy	17	464
In-Class Training Total	85	2,726

TABLE F-3: ONLINE SUMMARY

Title	District	CARB	Other ²²	Total
AP101 - Air Academy Online Training	80	52	305	437
AP102 - Air Quality Training Program	100	37	170	307
AP106 - CalEPA Fundamental Inspector Course (FIC): Online Training	89	28	344	461
CR103 - Chrome Plating ATCM Certification: Online (Recorded)	11	1	57	69
ED102 - Enforcement Fundamentals: Standard Documentation (Online)	0	187	0	187
MM104 - Visible Emissions Evaluation: Online	95	29	254	378
PS105 - Stationary Control Source Technology (Online)	31	16	1	48
Online Training Total	406	350	1,131	1,887

²² Other students may include regulated industry, environmental regulators, and community members.

TABLE F-4: IN-CLASS TRAINING TOTALS

Category	Title	Sessions	Students
Pollutant Specific	PS101 - Control Technology: Particulate Matter (PM)	1	35
Pollutant Specific	PS102 - Control Technology: Volatile Organic Compounds (VOCs)	1	33
Pollutant Specific	PS103 - Control Technology: Oxides of Nitrogen (NO _x) & Carbon Monoxide (CO)	1	31
Pollutant Specific	PS106 - Control Technology: PM, VOC, NO _x	1	8
Facility/Process Specific	FP101 - Gasoline Dispensing Facilities: Phase I and II Enhanced Vapor Recovery (EVR) Systems	2	23
Facility/Process Specific	FP102 - Gasoline Dispensing Facilities: Enhanced Vapor Recovery (EVR) Testing	0	0
Facility/Process Specific	FP106 - Internal Combustion Engines: Stationary Gas Turbines & Power Plants	0	0
Facility/Process Specific	FP107 - Industrial and Utility Boilers: Natural Gas Fired	2	55
Facility/Process Specific	FP109 - Asbestos Demolitions & Renovations: Contractors & Property Managers	0	0
Facility/Process Specific	FP110 - Asbestos Demolitions & Renovations: Regulatory Staff	0	0
Facility/Process Specific	FP111 - Batching Operations: Aggregate, Concrete & Asphalt	0	0
Facility/Process Specific	FP112 - Batching Operations: Aggregate, Concrete & Asphalt: Webinar	0	0
Facility/Process Specific	FP118 - Methane Leak Detection: Part A	3	24
Facility/Process Specific	FP118 - Methane Leak Detection: Part B	3	14
Pollutant Monitoring and Modeling	MM201 - Continuous Emission Monitoring: Advanced	0	0
Pollutant Monitoring and Modeling	MM102 - Observing Source Tests	0	0
Pollutant Monitoring and Modeling	MM203 - Health Risk Assessments: Advanced	0	0
Pollutant Monitoring and Modeling	MM105 - Visible Emissions Evaluation: In Class	9	209
Pollutant Monitoring and Modeling	MM106 - Visible Emissions Evaluation: Day Certification	35	1573
Pollutant Monitoring and Modeling	MM107 - Visible Emissions Evaluation: Night Certification	4	111
California Regulations	CR101 - Portable Equipment Registration (PERP)/Portable Diesel Engine ATCM	2	43
California Regulations	CR102 - Internal Combustion Engines: Stationary Diesel ATCM	0	0
California Regulations	CR105 - Landfills: Landfill Gas Control Facilities	0	0
Federal Regulations	FR101 - New Source Review & Title V Permitting: Introductory	0	0
Federal Regulations	FR201 - New Source Review & Title V Permitting: Advanced	0	0

Category	Title	Sessions	Students
Federal Regulations	FR102 - Compliance Assurance Monitoring (CAM)	0	0
Other Air Quality Professional Training	AP105 - California Air Pollution Professionals: Health & Safety	1	28
Other Air Quality Professional Training	AP108 - Stationary Source Permitting Overview	1	20
Other Air Quality Professional Training	AP206 - CalEPA Basic Inspector Academy (BIA): In Class	13	373
Other Air Quality Professional Training	ED101 - Enforcement Fundamentals (Internal)	3	57
Other Air Quality Professional Training	ED103 - Legal Essentials	1	46

Appendix G

2019 CalEPA Eligible Supplemental Environmental Projects

Air Quality Network to San Francisco Eastern Neighborhoods

San Francisco CARE Area

Many Labs in collaboration with San Francisco Air Quality Project will build on existing operation of a PM and VOC monitoring network. The SEP proposal encompasses technical initiatives, ongoing community and professional activities, and the presentation of sensor data.

Asthma Impact Model Fresno County

Fresno County

Central California Asthma Collaborative proposes to expand the Asthma Impact Model and include a total of 50 low-income clients. AIM program includes 1) a home assessment 2) asthma education 3) home remediation 4) receive a formal asthma diagnosis 5) see a primary care physician about their asthma and 6) follow-up on proper medication usage.

Asthma Impact Model Kern County

Kern County

Central California Asthma Collaborative proposes to expand the Asthma Impact Model and include a total of 50 low-income clients. AIM program includes 1) a home assessment 2) asthma education 3) home remediation 4) receive a formal asthma diagnosis 5) see a primary care physician about their asthma and 6) follow-up on proper medication usage.

Asthma Impact Model Kings County

Kings County

Central California Asthma Collaborative proposes to expand the Asthma Impact Model and include a total of 50 low-income clients. AIM program includes 1) a home assessment 2) asthma education 3) home remediation 4) receive a formal asthma diagnosis 5) see a primary care physician about their asthma and 6) follow-up on proper medication usage.

Asthma Impact Model Madera County

Madera County

Central California Asthma Collaborative proposes to expand the Asthma Impact Model and include a total of 50 low-income clients. AIM program includes 1) a home assessment 2) asthma education 3) home remediation 4) receive a formal asthma diagnosis 5) see a primary care physician about their asthma and 6) follow-up on proper medication usage.

Asthma Impact Model Merced County

Merced County

Central California Asthma Collaborative proposes to expand the Asthma Impact Model and include a total of 50 low-income clients. AIM program includes 1) a home assessment 2) asthma education 3) home remediation 4) receive a formal asthma diagnosis 5) see a primary care physician about their asthma and 6) follow-up on proper medication usage.

Asthma Impact Model San Joaquin County

San Joaquin County

Central California Asthma Collaborative proposes to expand the Asthma Impact Model and include a total of 50 low-income clients. AIM program includes 1) a home assessment 2) asthma education 3) home remediation 4) receive a formal asthma diagnosis 5) see a primary care physician about their asthma and 6) follow-up on proper medication usage.

Asthma Impact Model Stanislaus County

Stanislaus County

Central California Asthma Collaborative proposes to expand the Asthma Impact Model and include a total of 50 low-income clients. AIM program includes 1) a home assessment 2) asthma education 3) home remediation 4) receive a formal asthma diagnosis 5) see a primary care physician about their asthma and 6) follow-up on proper medication usage.

Asthma Impact Model Tulare County

Tulare County

Central California Asthma Collaborative proposes to expand the Asthma Impact Model and include a total of 50 low-income clients. AIM program includes 1) a home assessment 2) asthma education 3) home remediation 4) receive a formal asthma diagnosis 5) see a primary care physician about their asthma and 6) follow-up on proper medication usage.

Children's Health and Outdoor Activities Restrictions in Fresno County Schools (CHOAR- F)

Fresno County

Central California Asthma Collaborative intends to 1) compare outdoor PM2.5 levels in disadvantaged rural communities vs. urban PM2.5 monitors in Fresno county, 2) assess student outdoor activity restrictions relative to local PM2.5 levels and RAAN (Real Time Air Advisory Network) PM2.5-related alerts, and 3) assess student health at school relative to PM2.5 levels.

Children's Health and Outdoor Activities Restrictions in Kern County Schools (CHOAR- F)

Kern County

Central California Asthma Collaborative intends to 1) compare outdoor PM2.5 levels in disadvantaged rural communities vs. urban PM2.5 monitors in Fresno county, 2) assess student outdoor activity restrictions relative to local PM2.5 levels and RAAN (Real Time Air Advisory Network) PM2.5-related alerts, and 3) assess student health at school relative to PM2.5 levels.

Children's Health and Outdoor Activities Restrictions in Tulare County Schools (CHOAR- F)

Tulare County

Central California Asthma Collaborative intends to 1) compare outdoor PM2.5 levels in disadvantaged rural communities vs. urban PM2.5 monitors in Fresno county, 2) assess student outdoor activity restrictions relative to local PM2.5 levels and RAAN (Real Time Air Advisory Network) PM2.5-related alerts, and 3) assess student health at school relative to PM2.5 levels.

Community Outreach, Education, and Planning

Los Angeles County

Del Amo Action Committee proposes a project to address problems reported by residents in Del Amo Superfund site area in Los Angeles. The project is organized in two modules: Module 1, Community Health Fair held in the community where the superfund site is located. Module 2, Environmental and Community Specific Plan Stakeholder Group consist on implementation of the plan and is expected to aid in reducing future emissions and provide training and air pollution awareness to community members.

Environmental Education and health Connections

Riverside County

El Sol Neighborhood Educational Center proposes to continue and expand ongoing SEP in Coachella Valley region and educate community residents about preventive habits and inform them about environmental related diseases. Proposed activities include: a) Assessments of home environment and remediation, b) Training and education effective ways to address unhealthy living conditions, c) Screening for risk factors and respiratory illness, d) Referrals to health professionals, and e) Case management and follow up by Community Health Workers to continue management of respiratory illness.

Filtration Of Wildfire Smoke in Elementary Schools (FOWSES)

Sanger, CA

Central California Asthma Collaborative proposes a research project to compare the effectiveness of moderate and high efficiency air filters in 5 different school environments in Sanger rural and urban areas. Indoor PM2.5 levels will be compared in intervention and non-intervention classrooms, particularly when outdoor PM2.5 concentrations are high due to wildfire smoke or relevant other factors.

Installation of Air Filtration Systems in Schools Phase 2

SCAQMD

South Coast AQMD proposes to install and maintain air filtration systems in schools located in areas impacted by air pollution and identified as Environmental Justice and/or Disadvantaged Communities.

Installation of Air Filtration Systems La Canada Unified School District

La Canada Flintridge

IQAir Foundation proposes to install and maintain air filtration systems in La Canada Unified District Schools, which is part of an area impacted by air pollution produced by the Devil's Gate Reservoir Restoration project.

Installation of Air Filtration Systems San Ysidro Unified School District

San Ysidro, SD

IQAir Foundation proposes to install and maintain air filtration systems in San Ysidro Unified School District, which is part of an area impacted by air pollution and identified as Environmental Justice and/or Disadvantaged Communities.

Installation of Air Filtration Systems West Contra Costa School District

Richmond, CA (West Contra Costa)

IQAir Foundation proposes to install and maintain air filtration systems in San Ysidro Unified School District, which is part of an area impacted by air pollution and identified as Environmental Justice and/or Disadvantaged Communities.

Installation of Air Filtration System Meadows Elementary School

Imperial County (El Centro)

IQAir Foundation proposes to install and maintain air filtration systems in San Ysidro Unified School District, which is part of an area impacted by air pollution and identified as Environmental Justice and/or Disadvantaged Communities.

Installation of School Air Filtration Systems- Calexico (Imperial County)

Imperial County

IQAir Foundation proposes to install and maintain air filtration systems in San Ysidro Unified School District, which is part of an area impacted by air pollution and identified as Environmental Justice and/or Disadvantaged Communities.

Installation of School Air Filtration Systems- El Centro (Imperial County)

Imperial County

ICAPCD proposes to install and maintain air filtration systems as well as an electronic flag program (enhanced flag program) in Heber schools, which is part of the AB 617 Corridor, El Centro, Heber, and Calexico, an area impacted by air pollution and identified as Environmental Justice and/or Disadvantaged Communities.

Installation of School Air Filtration Systems- Heber (Imperial County)

Imperial County

ICAPCD proposes to install and maintain air filtration systems as well as an electronic flag program (enhanced flag program) in Heber schools, which is part of the AB 617 Corridor, El Centro, Heber, and Calexico, an area impacted by air pollution and identified as Environmental Justice and/or Disadvantaged Communities.

Minimizing Asthma Triggers in the Home and School (MATHS)

Fresno County

Central California Asthma Collaborative proposes to provide higher efficiency HVAC filters to 14 elementary schools, intended to reduce the levels of potential asthma triggers all the classroom. Low cost monitors will be installed in classrooms selected as samples for indoor monitoring. A second component to this project consists on the implementation of Asthma Impact Model program, which will provide children and their families with the tools to control and prevent asthma episodes.

Placer County Community Based SEP Phase 2

Placer County

Placer County APCD proposes to install and maintain air filtration systems in Placer County schools, which is part of an area impacted by air pollution produced by heavy traffic in highways surrounding school areas.

Appendix H

2019 Enforcement Settlement Agreements

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Certifications	Vehicles	Sun Buggy Fun Rentals	–	\$55,000	\$55,000	–
Certifications	Vehicles	Forest River, Inc.	–	\$30,469	\$30,469	–
Certifications	Vehicles	Winnebago Industries, Inc.	–	\$269,531	\$269,531	–
Certifications	Vehicles	Porsche AG-Porsche Cars North America, Inc.	–	\$5,876,338	\$2,946,868	\$2,929,470
Certifications	Engine	Hurst Jaws of Life, Inc.	–	\$3,250	\$3,250	–
Certifications	Engine	Kawasaki Motors Corp., USA	–	\$180,250	\$90,125	\$90,125
Certifications	Engine	Amerisun, Inc.	–	\$575	\$575	–
Certifications	Engine	Coleman Powersports	–	\$16,425	\$16,425	–
Certifications	Engine	OREC America	–	\$500	\$500	–
Certifications	Engine	Mitsubishi Turbocharger and Engine America	–	\$3,750	\$3,750	–
Certifications	Engine	Husqvarna Professional Products, Inc.	–	\$1,150	\$1,150	–
Certifications	Parts	CNS Motors, Inc.	–	\$154,300	\$77,150	\$77,150
Certifications	Parts	VMP Tuning, Inc.	–	\$36,340	\$36,340	–
Certifications	Parts	Poweradder Solutions, Inc.	–	\$14,000	\$14,000	–
Certifications	Parts	Weistec Engineering, Inc.	–	\$6,500	\$6,500	–
Certifications	Parts	AZ Offroad	–	\$10,000	\$10,000	–
Certifications	Parts	TPS Motorsports	–	\$11,750	\$11,750	–
Certifications	Parts	Hellion, Inc.	–	\$6,750	\$6,750	–
Certifications	Engine	Fiat Powertrain Technologies Industrial, S.p.A.	–	\$6,415,000	\$4,415,000	\$2,000,000
Certifications	Parts	Golden State Supply LLC (GSS)	–	\$24,461	\$24,461	–
Certifications	Parts	Ren Motowerks, LLC	–	\$2,500	\$2,500	–
Certifications	Portable Fuel Containers	Midwest Can Company, LLC	–	\$576,512	\$288,256	\$288,256
Certifications	Portable Fuel Containers	TPG Plastics, LLC	–	\$1,568	\$1,568	–

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Certifications	Portable Fuel Containers	Scepter Manufacturing, LLC	–	\$3,960	\$3,960	–
Certifications	Portable Fuel Containers	No Spill	–	\$150,000	\$150,000	–
Certifications	Portable Fuel Containers	Great Outdoor Products LLC	–	\$4,800	\$4,800	–
Certifications	Portable Fuel Containers	Sure Can	–	\$26,496	\$13,248	\$13,248
Fuels	Fuels Specifications	Chevron	–	\$28,000	\$28,000	–
Fuels	Fuels Specifications	Phillips 66	–	\$150,000	\$150,000	–
Fuels	Fuels Specifications	Kinder Morgan	–	\$30,000	\$30,000	–
Fuels	Fuels Specifications	Buckeye	–	\$6,000	\$6,000	–
Fuels	Fuels Specifications	Chevron	–	\$60,000	\$60,000	–
Fuels	Fuels Specifications	Tesoro	–	\$133,000	\$66,500	\$66,500
Fuels	Fuels Specifications	Tesoro	–	\$119,000	\$59,500	\$59,500
Fuels	Low Carbon Fuel Standards	Clean Energy ²³	–	\$100,000	\$100,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Tri-Coastal Design Group Inc.	–	\$3,000	\$3,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Weiman Products, LLC	–	\$40,000	\$40,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Perez Distributing Fresno, Inc.	–	\$11,200	\$11,200	–
Stationary Sources	Consumer and Aerosol Coating Products	Clift Industries	–	\$3,000	\$3,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Rutland Fire Clay Company	–	\$5,000	\$5,000	–

²³ In addition to the assessed penalty, Clean Energy is undertaking a mitigation project, with a minimum expenditure of \$800,000, that will deploy twenty heavy-duty trucks powered by low-NOx CNG engines in California ports or air districts that are in non-attainment.

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Stationary Sources	Consumer and Aerosol Coating Products	Kleen Products Inc.	–	\$65,000	\$65,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Walmart Stores, Inc.	–	\$8,500	\$8,500	–
Stationary Sources	Consumer and Aerosol Coating Products	Colart	–	\$9,000	\$9,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Kleen Concepts/ ShieldMe Products	–	\$3,750	\$3,750	–
Stationary Sources	Consumer and Aerosol Coating Products	National Chemical Company	–	\$3,000	\$3,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Enchante Accessories, Inc.	–	\$6,000	\$6,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Whole Foods Market	–	\$5,250	\$5,250	–
Stationary Sources	Consumer and Aerosol Coating Products	Key Brands International LTD	–	\$3,450	\$3,450	–
Stationary Sources	Consumer and Aerosol Coating Products	3M Automotive Aftermarket Division	–	\$12,000	\$12,000	–
Stationary Sources	Consumer and Aerosol Coating Products	NC Brands Limited Partnership	–	\$8,500	\$8,500	–
Stationary Sources	Consumer and Aerosol Coating Products	Arch Chemicals	–	\$6,580	\$6,580	–
Stationary Sources	Consumer and Aerosol Coating Products	Henkel North America	–	\$3,000	\$3,000	–

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Stationary Sources	Consumer and Aerosol Coating Products	Lenmar/Benjamin Moore	–	\$82,000	\$82,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Synergy Labs	–	\$14,000	\$14,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Garcoa Incorporated	–	\$3,000	\$3,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Walgreen Co.	–	\$80,000	\$80,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Marc Anthony	–	\$49,800	\$49,800	–
Stationary Sources	Consumer and Aerosol Coating Products	Asbury Carbons, Incorporated	–	\$3,000	\$3,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Petruj Chemical	–	\$6,300	\$6,300	–
Stationary Sources	Consumer and Aerosol Coating Products	Arrow Lighter Inc.	–	\$8,000	\$8,000	–
Stationary Sources	Consumer and Aerosol Coating Products	WM Barr	–	\$600,000	\$600,000	–
Stationary Sources	Consumer and Aerosol Coating Products	The TJX Companies	–	\$196,800	\$196,800	–
Stationary Sources	Consumer and Aerosol Coating Products	ESR, LLC	–	\$4,500	\$4,500	–
Stationary Sources	Consumer and Aerosol Coating Products	Heat Makes Sense	–	\$3,800	\$3,800	–

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Stationary Sources	Consumer and Aerosol Coating Products	Sherwin-Williams	–	\$220,000	\$155,000	\$65,000
Stationary Sources	Consumer and Aerosol Coating Products	Cambridge Diagnostics Products, Inc.	–	\$6,000	\$6,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Hatchbeauty Products LLC	–	\$3,000	\$3,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Coghlan’s Ltd.	–	\$8,000	\$8,000	–
Stationary Sources	Consumer and Aerosol Coating Products	I. Marketing Group, LLC (IMG)	–	\$4,155	\$4,155	–
Stationary Sources	Consumer and Aerosol Coating Products	CAD Import, Inc.	–	\$9,380	\$9,380	–
Stationary Sources	Consumer and Aerosol Coating Products	MAAS International, Inc.	–	\$500	\$500	–
Stationary Sources	Consumer and Aerosol Coating Products	Astral del Noroeste/ Garnier Obao	–	\$10,920	\$10,920	–
Stationary Sources	Consumer and Aerosol Coating Products	Titan Laboratories, Inc.	–	\$10,000	\$10,000	–
Stationary Sources	Consumer and Aerosol Coating Products	A.C.C.S. Enterprises, Inc.	–	\$5,580	\$5,580	–
Stationary Sources	Consumer and Aerosol Coating Products	Target Corporation	–	\$221,850	\$221,850	–
Stationary Sources	Consumer and Aerosol Coating Products	Niteo Products, LLC	–	\$160,000	\$80,000	\$80,000

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Stationary Sources	Consumer and Aerosol Coating Products	Permatex	–	\$108,500	\$55,500	\$53,000
Stationary Sources	Consumer and Aerosol Coating Products	Great American Beauty	–	\$35,000	\$35,000	–
Stationary Sources	Indoor Air Cleaners	Air Oasis	–	\$35,000	\$35,000	–
Stationary Sources	Indoor Air Cleaners	BioZone	–	\$8,145	\$8,145	–
Stationary Sources	Indoor Air Cleaners	Prozone	–	\$6,000	\$6,000	–
Stationary Sources	Indoor Air Cleaners	Real Spirit	–	\$20,232	\$20,232	–
Stationary Sources	Indoor Air Cleaners	Molekule Inc.	–	\$149,000	\$74,500	\$74,500
Stationary Sources	Composite Wood	Linco Enterprises, Inc.	–	\$45,000	\$45,000	–
Stationary Sources	Composite Wood	DJJ Cabinets Corporation	–	\$7,500	\$7,500	–
Stationary Sources	Composite Wood	America Top Essential Inc.	–	\$25,000	\$25,000	–
Stationary Sources	Composite Wood	Belmont Carpets & Wood Flooring, Inc.	–	\$10,000	\$10,000	–
Stationary Sources	Composite Wood	Design Within Reach	–	\$25,000	\$25,000	–
Stationary Sources	Composite Wood	A&W Group, Inc. dba Ark Floors	–	\$3,000	\$3,000	–
Stationary Sources	Composite Wood	CY Flooring, Incorporated	–	\$67,000	\$67,000	–
Stationary Sources	Composite Wood	PCTC Cabinetry Inc.	–	\$5,000	\$5,000	–
Diesel	Diesel Fleet	Durham School Services, LP	–	\$129,000	\$64,500	\$64,500
Diesel	Diesel Fleet	Liberty Transport, LLC	–	\$60,000	\$60,000	–
Diesel	Diesel Fleet	Kerr Trucking, Inc.	–	\$15,500	\$15,500	–
Diesel	Diesel Fleet	Gardner Trucking, Inc.	–	\$27,200	\$27,200	–
Diesel	Diesel Fleet	Casas International Brokerage Inc.	–	\$5,000	\$5,000	–
Diesel	Diesel Fleet	Hitchcock Farms, Inc.	–	\$8,000	\$8,000	–
Diesel	Diesel Fleet	Cargo Northwest Forwarders, Inc.	–	\$20,000	\$20,000	–

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Diesel	Diesel Fleet	Nunez Trucking	–	\$12,250	\$12,250	–
Diesel	Diesel Fleet	Anaheim Union School District	–	\$171,000	\$171,000	–
Diesel	Diesel Fleet	JFS Enterprises	–	\$6,000	\$6,000	–
Diesel	Diesel Fleet	Baja Freight Forwarders, Inc.	–	\$5,250	\$5,250	–
Diesel	Diesel Fleet	Richard L Jones Callexico Inc.	–	\$7,000	\$7,000	–
Diesel	Diesel Fleet	San Luis International Freight Services, LLC	–	\$30,000	\$30,000	–
Diesel	Diesel Fleet	Vilore Foods Company, Inc.	–	\$16,250	\$16,250	–
Diesel	Diesel Fleet	Imperial Valley Foods, Inc.	–	\$6,500	\$6,500	–
Port and Marine	Cargo handling Equipment	Fenix Marine Services	–	\$87,750	\$87,750	–
Port and Marine	Cargo handling Equipment	Port of Stockton	–	\$8,625	\$8,625	–
Port and Marine	Commercial Harbor Craft	Chardonnay Sailing Charters, LLC	–	\$5,500	\$5,500	–
Port and Marine	Commercial Harbor Craft	Electra Cruises	–	\$137,500	\$68,750	\$68,750
Port and Marine	Ocean-Going Vessels Fuel Sulfur	Chartworld Shipping Corp.	–	\$15,000	\$15,000	–
Port and Marine	Ocean-Going Vessels Fuel Sulfur	The China Navigation Company, Pte., Ltd.	–	\$80,000	\$80,000	–
Port and Marine	Ocean-Going Vessels Fuel Sulfur	CIDO Shipping (Korea) Co., Ltd.	–	\$8,000	\$8,000	–
Port and Marine	Ocean-Going Vessels Fuel Sulfur	Costamare Shipping Co. S.A.	–	\$30,000	\$30,000	–
Port and Marine	Ocean-Going Vessels Fuel Sulfur	Unison Marine Corp.	–	\$22,500	\$22,500	–
Port and Marine	Ocean-Going Vessels Fuel Sulfur	Yang Ming Marine Transport Corp.	–	\$17,000	\$17,000	–
Port and Marine	Shore Power	COSCO Container Lines, Co., Ltd.	–	\$965,300	\$965,300	–

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Port and Marine	Shore Power	Wan Hai Lines Ltd.	–	\$31,750	\$31,750	–
Mandatory Reporting Requirements	Mandatory Reporting Requirements	Tesoro Refining and Marketing Company LLC	–	\$850,000	\$425,000	\$425,000
Mandatory Reporting Requirements	Mandatory Reporting Requirements	ExxonMobil Oil Corporation	–	\$493,500	\$493,500	–
Total			–	\$20,235,742	\$13,880,743	\$6,354,999

Appendix I

2019 Diesel Programs Compliance Calculations

Methodology for Calculations in Appendix I

In March 2020, 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 and lighter vehicles with a GVWR of 14,000 to 26,000 pounds. To calculate the compliance rate for heavy and light 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 October 2019. 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, 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 heavy vehicles with a chassis model year 2007 and older, which are potentially noncompliant and all light vehicles with a chassis year 2004 and older. 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 heavy vehicles with engines 2006 and older must be equipped with a DPF or be reported into CARB's Truck Regulation Upload, Compliance and Reporting System (TRUCRS) to use a flexibility option, extension, or exemption. All light vehicles with engines 2003 and older must be replaced with newer trucks or be reported in 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 potentially noncompliant heavy and light vehicles and cross-referenced their VINs with TRUCRS to determine whether that vehicle was reported compliant.

Tables I-1 through I-6 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-7 in Appendix I, and show a range of compliance from 59 percent to 98 percent.

TABLE I-1: CALIFORNIA REGISTERED HEAVIER DIESEL TRUCK COUNTS - GVWR >26,000
(EXCLUDES IRP²⁴)

Pre-1995 MY	7,904
MY 1995–MY 1996	2,907
MY 1997–MY 2000	10,003
MY 2001–MY 2005	13,468
MY 2006–MY 2007	9,184
MY 2008–MY 2010	28,694
MY 2011+	98,954
Total All MY's	171,114
Pre-2008 MY Total	43,466

TABLE I-2: CALIFORNIA IRP REGISTERED HEAVIER DIESEL TRUCK COUNTS - GVWR >26,000

Pre-1995MY	281
MY 1995–MY 1996	172
MY 1997–MY 2000	1,628
MY 2001–MY 2005	2,005
MY 2006–MY 2007	1,713
MY 2008–MY 2010	8,723
MY 2011+	65,531
Total All MY's	80,053
Pre-2008 MY Total	5,799

TABLE I-3: IRP (EXCLUDING CALIFORNIA) REGISTERED HEAVIER DIESEL TRUCK COUNTS - GVWR >26,000

Pre-1995MY	8,227
MY 1995–MY 1996	6,443
MY 1997–MY 2000	32,567
MY 2001–MY2005	56,575
MY 2006–MY 2007	70,879
MY 2008–MY 2010	46,000
MY 2011+	979,285
Total All MY's	1,199,976
Pre-2008MY Total	174,691

²⁴ IRP data contain motor carrier registration information for all participating jurisdictions within the U.S.

TABLE I-4: CALIFORNIA REGISTERED LIGHT DIESEL TRUCK COUNTS - GVWR BETWEEN 14,001 AND 26,000

Pre-1998 MY	9,925
1998	2,162
1999	4,625
2000	6,304
2001–2004	23,228
2005–2007	31,582
2008–2010	14,517
2011+	87,784
Total All MY's	180,127
Pre 2001 MY Total	46,244

TABLE I-5: CALIFORNIA IRP REGISTERED LIGHT DIESEL TRUCK COUNTS - GVWR BETWEEN 14,001 AND 26,000

Pre-1998 MY	14
1998	7
1999	20
2000	24
2001–2004	98
2005–2007	172
2008–2010	120
2011+	1,371
Total All MY's	1,826
Pre 2001 MY Total	163

TABLE I-6: IRP (EXCLUDING CALIFORNIA) REGISTERED LIGHT DIESEL TRUCK COUNTS - GVWR BETWEEN 14,001 AND 26,000

Pre-1998 MY	448
1998	188
1999	303
2000	278
2001–2004	1,407
2005–2007	2,919
2008–2010	2,132
2011+	75,081
Total All MY's	82,756
Pre 2001 MY Total	2,624

TABLE I-7: TRUCK COMPLIANCE RATES

Regulation Type	Heavy-Duty ²⁵ : All Model Years	Heavy- Duty: Pre-2008	Heavy-Duty: Pre-2008 Non-Compliant	Heavy-Duty: Compliance Rate	Light-Duty ²⁶ : All Model Years	Light-Duty: Pre-2001	Light-Duty: Pre-2001 Non- Compliant	Light-Duty: Compliance Rate
CA Reg. Fleet Size 1–3	58,622	18,532	12,785	78%	84,363	32,093	30,276	64%
CA Reg. Fleet Size 4–20	47,474	13,697	7,632	84%	45,425	9,732	8,505	81%
CA Reg. Fleet Size 21–100	30,964	6,764	2,866	91%	19,695	2,569	2,125	89%
CA Reg. Fleet Size > 100	34,054	4,473	1,418	96%	30,644	1,850	1,740	94%
CA Reg. In-State Totals	171,114	43,466	24,701	86%	180,127	46,244	42,646	76%
CA IRP Fleet Size 1–3	31,148	2,906	2,411	92%	541	49	47	91%
CA IRP Fleet Size 4–20	25,530	1,568	1,106	96%	810	74	63	92%
CA IRP Fleet Size 21–100	15,676	813	417	97%	372	15	13	97%
CA IRP Fleet Size > 100	7,699	512	317	96%	103	25	7	93%
CA IRP Totals	80,053	5,799	4,251	95%	1,826	163	130	93%
OS IRP Fleet Size 1–3	101,539	42,183	41,965	59%	3,351	365	364	89%
OS IRP Fleet Size 4–20	94,794	26,486	26,306	72%	3,118	383	381	88%
OS IRP Fleet Size 21–100	152,524	28,435	28,177	82%	4,349	376	376	91%
OS IRP Fleet Size > 100	851,119	77,587	76,847	91%	71,938	1,500	1,498	98%
OS IRP Totals	1,199,976	174,691	173,295	86%	82,756	2,624	2,619	97%
Total CA In-State & CA IRP	251,167	49,265	28,952	88%	181,953	46,407	42,776	76%
Grand Totals	1,451,143	223,956	202,247	86%	264,709	49,031	45,395	83%

²⁵ Light-duty refers to trucks with GVWR between 14,001 and 26,000 pounds.

²⁶ Heavy-duty refers to trucks > 26,000 pounds.

Appendix J

2014–2019 Maximum and Minimum Penalties

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019			Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference	
1	Aerosol Coating Products Title 17, California Code of Regulations (CCR), sections 94520 – 94528	Excess Ozone	Labeling		\$5,000 to \$10,000 per violation per day, Cal. Health & Safety Code (HSC), §§ 42400, 42402	
	\$750 – \$850/day (2 cases)					
2	ww2.arb.ca.gov/consumer-products-enforcement Aftermarket Parts Title 13, CCR, sections 1900 et. seq., 2030 – 2031, 2047 – 2048, 2200 – 2207, 2220 – 2225 California Vehicle Code (VC), section 27156	Certification				\$40,050 per action, HSC § 43016
	\$221 – \$2,967/part (35 cases)					
3	Antiperspirants and Deodorants Title 17, CCR, sections 94500 – 94506.5	Excess VOC	Labeling		\$5,000 to \$10,000 per violation per day, HSC §§ 42400, 42402	
	\$15,000/ton (1 case)	No per ton penalties assessed during this period				
4	ww2.arb.ca.gov/consumer-products-enforcement	\$1,150/day (1 case)	No per day penalties assessed during this period			\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675; or up to \$1,000,000 and one year in jail per violation per day possible where willful and intentional results in harm/ death, HSC § 42400.3
	Asbestos (ATCM) (HSC 39658(b)) Title 40, Code of Federal Regulations (CFR), Part 61, Subpart M	Failure to notify	Failure to inspect	Asbestos emissions		
	ww2.arb.ca.gov/our-work/programs/asbestos-neshap-program	\$500 – \$1,363/day (11 cases)	\$1,363 – \$5,000/day (4 cases)	\$25,000/day (1 case)		

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019				Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
5	Automotive Refrigerant, Small Containers Title 17, CCR, sections 95360–95370 ww2.arb.ca.gov/our-work/programs/small-containers-automotive-refrigerant	No penalties assessed during this period				\$5,000 to \$10,000 per violation per day, HSC §§ 38580, 42400, 42402
	Cap and Trade Title 17, CCR, sections 95800 et. seq. ww3.arb.ca.gov/cc/capandtrade/capandtrade.htm	Lack of compliance instruments \$100/ instrument (1 case)	Disclosure violations \$10,000–\$35,000/incident (1 case)	No account represent- atives \$1,605/day (1 case)	Auction rule violation \$25,000/ incident (1 case)	\$5,000 to \$10,000 per violation per day, HSC §§ 38580, 42400, 42402
7	Cargo Handling Equipment Title 13, CCR, section 2479 ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment	Failure to meet in-use performance requirements				5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC § 43016
	Cargo Tank Vapor Recovery Title 17, CCR, section 94014 ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment	\$375–\$21,875/piece of equipment (11 cases) ²⁸				
8	Cargo Tank Vapor Recovery Title 17, CCR, section 94014 ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment	Failure to meet pressure performance requirements				\$5,000 to \$10,000 per violation per day, HSC §§ 42400, 42402
	ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment	\$500–\$2,500/non-compliant cargo tank (93 cases)				
9	Commercial Harbor Craft Title 13, CCR, section 2299.5 and Title 17, CCR, section 93118.5 ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft	No penalties assessed during this period				\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC § 43016

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019	Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
10	Composite Wood ATCM Title 17, CCR, sections 93120–93120.12	Failure to comply with Composite Wood ATCM	\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	ww2.arb.ca.gov/our-work/programs/composite-wood-products-program	\$27–\$10,000/day (15 cases)	
11	Consumer Products Title 17, CCR, sections 94507–94517	Excess VOC	Labeling
		Excess Aromatic	Certification
	Penalties shown as per ton or per day depending on nature of penalty	No per ton penalties assessed during this period	No per ton penalties assessed during this period
12	ww2.arb.ca.gov/consumer-products-enforcement	\$3,512– \$70,588/ ton (118 cases)	\$9,750/ violation (1 case)
	Consumer Products, Alternative Control Plan Title 17, CCR, sections 94540–94555	\$560– \$4,500/day (56 cases)	\$667– \$1,000/ day (12 cases)
13	ww2.arb.ca.gov/our-work/programs/consumer-products-program/alternative-control-plan	No penalties assessed during this period	
	Diesel Emission Control System, Verified Title 13, CCR, sections 2706(g), 2707(c), and 2709	Offering for sale non-verified unit	Installing without authorization
13	ww3.arb.ca.gov/diesel/verdev/verdev.htm	Selling non-unit	\$550–\$5,000/unit (2 cases)
		\$369–\$5,000/unit (7 cases)	\$50–\$1,000/unit (6 cases)
13			\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC § 43016

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019					Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
14	Drayage Trucks	Trucks			Rail yards	Dispatching non- compliant trucks	\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC § 43016
	Title 13, CCR, section 2027	Failure to meet in-use performance requirement	Submitting false data	Failure to submit quarterly report			
	ww2.arb.ca.gov/our-work/ programs/drayage-trucks- seaports-railyards	\$100 – \$800/ vehicle (33 cases)	\$200 – \$1,800/ violation (228 cases)	\$300 – \$1,300/ violation (4 cases)	\$7,300 – \$10,000/ quarterly report (2 cases)		
15	Dry Cleaner (ATCM) Title 17, CCR, sections 93109 and 93110	Submitting inaccurate report			Failure to pay fees		\$1,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	ww2.arb.ca.gov/our-work/ programs/phase-out- perchloroethylene-dry-cleaning- process	\$357/violation (1 case)			\$357/violation (1 case)		
16	Engine Certification Label Program, On-Road Heavy-Duty Vehicle Title 13, CCR, sections 2180 – 2189	Missing or illegible emission control label (ECL)					\$300 first citation, additional \$800 after 45 days, additional \$1,800 for 2 nd citation in 12 months, HSC § 44011.6
	ww2.arb.ca.gov/our-work/ programs/heavy-duty-diesel- inspection-periodic-smoke- inspection-program	\$66 – \$1,800/label (1,660 citations)					
17	Fleet Tampering/Non- conforming HSC, section 43008.6	\$500 – \$1,500/vehicle (8 cases)					\$1,500 per violation, HSC § 43008.6
	ww2.arb.ca.gov/other-areas- mobile-enforcement						

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019	Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
18	Fuel Containers and Spouts, Portable Title 13, CCR, sections 2467 – 2467.9	Certification \$0.50 – \$36/unit (5 cases)	\$500 per portable fuel container or spout, HSC § 43016
	ww2.arb.ca.gov/our-work/ programs/portable-fuel- containers-gas-cans		
19	Fuel Distributor Certification (Motor Vehicle Fuel) HSC, section 43026	No penalties assessed during this period	\$1,000 to \$10,000 per day, HSC § 43026
	ww2.arb.ca.gov/our-work/ programs/fuels-enforcement- program/fuels-distributor- certification-program		
20	Fuels Title 13, CCR, sections 2250 – 2259; 2260 – 2276; 2280 – 2285; 2290 – 2293.5; and 2299 – 2299.5	Fuels \$500 – \$25,000/day (39 cases)	\$25,000, \$35,000, \$50,000, \$250,000 per violation per day, HSC § 43027; or \$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC § 43016, 43020
	ww3.arb.ca.gov/fuels/fuels.htm		

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019				Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
21	Heavy-Duty Vehicle Inspection Program (HDVIP) Title 13, CCR, sections 2180–2189	–	Exceeding opacity limit	Tampering	Refusal to submit to inspection	\$300 first citation, additional \$500 after 45 days, additional \$1,800 for 2 nd citation in 12 months, HSC § 44011.6
		1 st citation	\$300/violation (48 citations)	\$300/violation (284 citations)	\$800– \$1300/ violation (13 citations)	
	No corrective action taken within 45 days	\$500–\$800/ violation (33 citations)	\$800/violation (91 citations)	–		
	2 nd Citation	\$1,800/violation (1 citation)	\$1,800/violation (1 citation)	–		
22	Idling, Commercial Vehicle Title 13, CCR, section 2485	Idling longer than 5 minutes				\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC §43016
	ww2.arb.ca.gov/our-work/ programs/atcm-to-limit-vehicle- idling	\$100–\$1,000/violation (1,266 cases)				
23	Idling, School Bus Title 13, CCR, section 2480	No penalties assessed during this period				\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	ww3.arb.ca.gov/toxics/sbidling/ sbidling.htm					
24	Indoor Air Cleaning Devices Title 17, CCR, sections 94800–94810	Certification				\$5,000 to \$10,000 per violation per day, HSC §§ 42400, 42402
	ww2.arb.ca.gov/our-work/ programs/air-cleaners-ozone- products/california-certified-air- cleaning-devices	\$8,145–\$35,000/violation (3 cases)				
		\$776–1,000/day (2 cases)				

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019	Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
25	Landfill Methane Rule (LMR) Title 17, CCR, sections 95460–95476	Failure to report	\$5,000 to \$10,000 per violation per day, HSC §§ 38580, 42400, 42402
	ww3.arb.ca.gov/cc/landfills/landfills.htm	\$753/day (1 case)	
26	Large Spark Ignited Engine (LSI) Fleet Requirements Title 13, CCR, sections 2775–2775.2	No penalties assessed during this period	\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC§43016
	ww2.arb.ca.gov/our-work/programs/large-spark-ignition-lsi-engine-fleet-requirements-regulation		
27	Low Carbon Fuel Standard Title 17, CCR, sections 95480–95491	Compliance report	\$5,000 to \$10,000 per violation per day, HSC §§ 38580, 42400, 42402; or \$25,000, \$35,000, \$50,000, \$250,000 per day, HSC §§ 38580, 42402, 43027
	ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard	\$195/deficit (1 case) \$4,167–\$10,000/ misreporting (4 cases)	
28	Mandatory Reporting of Greenhouse Gas Emissions (MRR) Title 17, CCR, sections 95100 et. seq.	Inaccurate MRR report	\$5,000 to 10,000 per violation per day, HSC §§ 38580, 42400, 42402
	ww2.arb.ca.gov/verification	Failure to maintain meter accuracy Inaccurate fee regulation report \$600–\$1,500/day (4 cases)	
29	Marine/Watercraft Title 13, CCR, sections 2440–2448	Certification	\$37,500 per action, HSC §§ 43016, 43212
	ww2.arb.ca.gov/our-work/programs/spark-ignition-marine-watercraft	\$500/violation (8 cases)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019	Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
30	Motor Vehicles/Engines Certification, New HSC, sections 43150–43154	Certification	\$37,500 per action, HSC §§ 43016, 43212
	ww3.arb.ca.gov/msprog/onroad/onroad.htm	\$500–\$5,000/violation (94 cases)	
31	Off-Highway Recreational Vehicles Title 13, CCR, s ections 2410–2415	Certification	\$40,050 per action, HSC §§ 43016, 43150, 43154, 43212
	ww2.arb.ca.gov/our-work/programs/highway-recreational-vehicles	\$500–\$2,500/vehicle (4 cases)	
32	Off-Road Engine Certification, Compression Ignition Title 13, CCR, sections 2420–2427	Certification	\$40,050 per action, HSC §§ 43016, 43154, 43212
	ww3.arb.ca.gov/msprog/offroad/orcomp/orcomp.htm	\$250–\$21,428/vehicle (12 cases)	
33	Off-Road Engine Certification, Large (LSI) Title 13, CCR, sections 2430–2439	Certification	\$40,050 per action, HSC §§ 43016, 43212
	ww2.arb.ca.gov/large-spark-ignition-engine-regulatory-and-certification-documents	\$375 (1 case)	
34	Off-Road Engine Certification, Small (SORE) Title 13, CCR, sections 2400–2409	Certification	\$534 per action HSC §§ 43016, 43212
	ww2.arb.ca.gov/our-work/programs/small-off-road-engines-sore	\$34–\$500/violation (11 cases)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019						Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
35	Off-Road Equipment, In-Use Title 13, CCR, section 2449	Adding illegal engine	No ROAR	Failure to report	Submitting false data	No EIN	Mis- reporting	\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC § 43016
	ww2.arb.ca.gov/our-work/ topics/construction- earthmoving-equipment	\$200– \$2,000/ violation (126 cases) ²⁹	\$375– \$1,000/ violation (138 cases) ²⁹	\$62.50– \$800/ violation (482 cases) ²⁹	\$300– \$500/ violation (10 cases) ²⁹	\$62.50– \$600/ violation (409 cases) ²⁹	\$300/ violation (24 cases) ²⁹	
36	On-Board Diagnostics, On-Road Heavy-Duty Vehicle Title 13, CCR, sections 1971.1 and 1971.5	No penalties assessed during this period						\$40,050 per action HSC §§ 43016, 43154, 43212
	ww2.arb.ca.gov/resources/ documents/heavy-duty-obd- regulations-and-rulemaking							
37	On-Board Diagnostics, On-Road Light-Duty Vehicle Title 13, CCR, sections 1968.2 and 1968.5	Failure to meet certification requirements						\$40,050 per action, HSC §§ 43016, 43154, 43212
	ww2.arb.ca.gov/our-work/ programs/obd							
38	On-Road New Diesel Engine Emission Standards Certification Title 13, CCR, sections 1956.8, 1971, and 1971.1	\$6.25 – \$1,800/vehicle (2 cases)						\$40,050 per action, HSC §§ 43154, 43212
	ww3.arb.ca.gov/msprog/ onroad/cert/cert.php							
39	Outboard Marine Tanks and Components, Portable Title 13, CCR, sections 2190–2194	No penalties assessed during this period						\$40,050 per action, HSC §§ 43016, 43212
	ww2.arb.ca.gov/our-work/ programs/outboard-marine- tanks							

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019	Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference
40	Periodic Smoke Inspection Program (PSIP) Title 13, CCR, sections 2190–2194	Failure to perform test/failed test	\$37,500 per action, HSC § 43016
	ww2.arb.ca.gov/our-work/programs/heavy-duty-diesel-inspection-periodic-smoke-inspection-program	\$42–\$800/violation (332 cases)	
41	Public Agencies and Utilities Fleets Title 13, CCR, sections 2023–2023.4	Failure to meet in-use performance requirements	\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC §43016
	ww3.arb.ca.gov/msprog/publicfleets/publicfleets.htm	\$1,000/violation (2 cases)	
42	Public Transit Bus Fleets Title 13, CCR, sections 2023–2023.4	Failure to report	\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC §43016
	ww3.arb.ca.gov/regact/bus02/bus02.htm	\$50/day (1 case)	
43	Refrigerant Management Program (RMP)	Failure to register/report	\$5,000 to \$10,000 per violation per day, HSC §§ 38580, 42400, 42402
	Title 17, CCR, sections 95460–95476	Automatic leak detection system	
	ww2.arb.ca.gov/our-work/programs/refrigerant-management-program	Failure to inspect	
44	Solid Waste Collection Vehicles Title 13, CCR, sections 2020, 2021, 2021.1, and 2021.2	Failure to meet in-use performance requirements	HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC § 43016 \$5,000 to \$10,000 per violation per day,
	ww3.arb.ca.gov/msprog/swcv/swcv.htm	\$152–\$600/day (5 cases)	
		\$150–\$1,800/violation per day (101 cases)	
44		Failure to meet in-use performance requirements	HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC § 43016 \$5,000 to \$10,000 per violation per day,
		\$150–\$1,800/violation per day (107 cases)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019			Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference	
45	Sulfur Hexafluoride (SF ₆) Reduction Title 17, CCR, sections 95340–95346, 95352–95358	SF ₆ emission rate	Late/inaccurate report	Possessing SF ₆ on or after January 1, 2011, and intentionally emitting SF ₆ to the atmosphere	\$5,000 to \$10,000 per violation per day, HSC §§ 38580, 42400, 42402	
	ww2.arb.ca.gov/our-work/ programs/elec-tandd	\$136.99– \$700/day (8 cases)	\$5,000/violation (1 case)	\$10,000/day (1 case)		
	Tractor and Trailer Greenhouse Gas Regulation Title 17, CCR, section 95300	Failure to meet in-use performance requirements				\$5,000 to \$10,000 per violation per day, HSC §§ 38580, 42400, 42402
46	ww2.arb.ca.gov/our-work/ programs/ttghg	\$1,000–\$1,800/violation (200 cases)				
47	Transport Refrigeration Units	Failure to meet in-use performance require- ments	No IDN	Failure to Register	\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402	
	Title 13, CCR, section 2477	\$225– \$3,000/unit	\$100– \$1,800/label	\$200–\$1,300/unit		\$300–\$500/violation
	ww2.arb.ca.gov/our-work/ programs/transport- refrigeration-unit	(1,779 cases) ³⁰	(394 cases) ³⁰	(579 cases) ³⁰		(23 cases) ³⁰
						Submitting false data

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2019					Applicable Maximum Penalties (Strict Liability, Willful, Intentional, & Criminal) CA Health & Safety Code Reference	
48	Trucks and Buses, In-Use Diesel	Failure to meet in-use performance require- ments	Failure to provide sales disclosure	Failure to report/ misreporting	Failure to verify compliance of hired vehicle/ fleet	Hiring non-compliant vehicle/fleet	\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC §43016	
	Title 13, CCR, section 2025	\$100– \$20,000/ vehicle	\$225–300/ violation	\$75–\$1,375/ violation	\$100– \$1,396/ fleet	\$1,000–\$10,000/fleet		
	ww2.arb.ca.gov/our-work/ programs/truck-and-bus- regulation	(4,199 cases)	(26 cases)	(171 cases)	(12 cases)	(11 cases)		
49	Vessels, At-Berth for Auxiliary Engines ATCM (Shore Power)	Failure to meet in-use operational requirements					\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402	
	Title 17, CCR, sections 93118.3 et. seq.							
50	ww3.arb.ca.gov/ports/ shorepower/shorepower.htm	No penalties assessed during this period					\$5,000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402	
	Vessel (Ocean-Going) Incineration ATCM Title 17, CCR, section 93119							
	ww2.arb.ca.gov/resources/ documents/oceangoing-ship- onboard-incineration							
51	Vessels, Fuel Sulfur and Other Operational Requirements for Ocean-Going	Failure to properly complete operational requirements					\$5000 to \$10,000 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or \$37,500 per action, HSC §43016	
	Title 13, CCR, section 2299.2 and Title 17, CCR, section 93118.2							\$1,000–\$53,000/day
	ww2.arb.ca.gov/our-work/ programs/ocean-going-vessel- fuel-regulation							

Appendix K

2019 Districts Agreements to Enforce CARB Programs

Air District	Landfill Methane Control Regulation	Oil and Gas Field Methane Control Regulation	Semi-conductor Operations	Gas Insulated Switchgear	SF ₆ -General Restrictions (non-semiconductor, non-GIS)	Refrigerant Management Program	Specified Mobile Diesel Regulations ²⁷
Amador County	CARB	CARB	X	CARB	CARB	CARB	CARB
Antelope Valley	X	CARB	X	CARB	CARB	CARB	CARB
Bay Area	X	CARB	X	CARB	CARB	CARB	X
Butte County	CARB	CARB	X	CARB	CARB	CARB	CARB
Calaveras County	CARB	CARB	X	CARB	CARB	CARB	CARB
Colusa County	CARB	CARB	X	CARB	CARB	CARB	CARB
Eastern Kern	X	CARB	X	CARB	CARB	CARB	CARB
El Dorado County	CARB	CARB	X	CARB	CARB	CARB	CARB
Feather River	X	CARB	X	CARB	CARB	CARB	CARB
Glenn County	CARB	CARB	X	CARB	CARB	CARB	CARB
Great Basin	CARB	CARB	X	CARB	CARB	CARB	CARB
Imperial County	X	CARB	X	CARB	CARB	CARB	CARB
Lake County	X	CARB	X	CARB	CARB	CARB	CARB
Lassen County	X	CARB	X	CARB	CARB	CARB	CARB
Mariposa County	CARB	CARB	X	CARB	CARB	CARB	CARB
Mendocino County	X	CARB	X	CARB	CARB	CARB	CARB
Modoc County	CARB	CARB	X	CARB	CARB	CARB	CARB
Mojave Desert	X	CARB	X	CARB	CARB	CARB	CARB
Northern Sonoma County	X	CARB	X	CARB	CARB	CARB	CARB
Placer County	X	CARB	X	CARB	CARB	CARB	CARB
Sacramento Metropolitan	X	CARB	X	CARB	CARB	CARB	CARB
San Diego County	X	CARB	X	CARB	CARB	CARB	X ²⁸

²⁷ CARB has entered into agreements with some air districts authorizing air district staff to conduct specified inspections on CARB's behalf.

²⁸ CARB and San Diego County APCD staff members are currently finalizing revisions to an existing MOU authorizing district staff to comprehensively enforce specified requirements of the Transport Refrigeration Unit and Off-Road Diesel-Fueled Equipment Regulations on CARB's behalf.

Air District	Landfill Methane Control Regulation	Oil and Gas Field Methane Control Regulation	Semi-conductor Operations	Gas Insulated Switchgear	SF ₆ -General Restrictions (non-semiconductor, non-GIS)	Refrigerant Management Program	Specified Mobile Diesel Regulations ²⁷
San Joaquin Valley	X	CARB	X	CARB	CARB	CARB	CARB
San Luis Obispo County	X	CARB	X	CARB	CARB	CARB	CARB
Santa Barbara County	X	CARB	X	CARB	CARB	CARB	CARB
Shasta County	CARB	CARB	X	CARB	CARB	CARB	CARB
Siskiyou County	CARB	CARB	X	CARB	CARB	CARB	CARB
South Coast	X	CARB	X	CARB	CARB	CARB	POLA ²⁹
Tehama County	X	CARB	X	CARB	CARB	CARB	CARB
Tuolumne County	CARB	CARB	X	CARB	CARB	CARB	CARB
Ventura County	X	CARB	X	CARB	CARB	CARB	CARB

Note: CARB staff members are currently developing Memoranda of Agreements that would allow air districts to implement and enforce provisions of the oil and gas field methane control regulation.

²⁹ CARB has entered into agreements with the City of Los Angeles Board of Harbor Commissioners (POLA) authorizing POLA staff to conduct specified inspections on CARB's behalf.

Appendix L

2019 Memo: Increase in Maximum Penalties



Gavin Newsom, Governor
Jared Blumenfeld, CalEPA Secretary
Mary D. Nichols, Chair

To: Enforcement Division Staff

From: Todd P. Sax, D.Env. *TPS*
Chief, Enforcement Division

Date: April 8, 2020

Subject: INCREASE IN MAXIMUM PENALTIES BASED ON 2019 CALIFORNIA
CONSUMER PRICE INDEX

Effective immediately, California Air Resources Board (CARB) staff should reference the maximum penalties in the attached tables when settling violations identified on or after the date of this memorandum.

The California Legislature enacted changes to State law¹ increasing certain maximum penalties from the levels established in the mid-1970s. The Legislature also established that those maximum penalties be adjusted annually based on changes in the California Consumer Price Index (California CPI).

The California CPI for 2019, as reported by the California Department of Industrial Relations (DIR) on February 14, 2020 is **280.638**.² This reflects an increase of:

- **6.8%** since January 1, 2017, when changes to HSC §§ 43016, 43154, 43211, and 43212, became effective. The maximum penalties for specified **vehicular source violations** in Table 1 reflect that increase.
- **3.0%** since January 1, 2018, when HSC § 42411 became effective. The maximum penalties for **non-vehicular source violations** in Table 2 reflect that increase.

Maximum penalties are one factor CARB staff use when establishing penalties for air quality regulations enforced by CARB. As required by State law and described in CARB's Enforcement Policy, CARB staff should continue to consider all relevant factors when establishing penalties on a case-by-case basis.

¹ Assembly Bill (AB) 1685 (Gomez, 2016) revised HSC 43016, 43154, 43211, and 43212, establishing changes to maximum per-violation penalties for violations of vehicular air pollution control laws and regulations; AB 617 (Garcia, 2017) enacted similar changes applicable to violations of non-vehicular air pollution control laws and regulations.

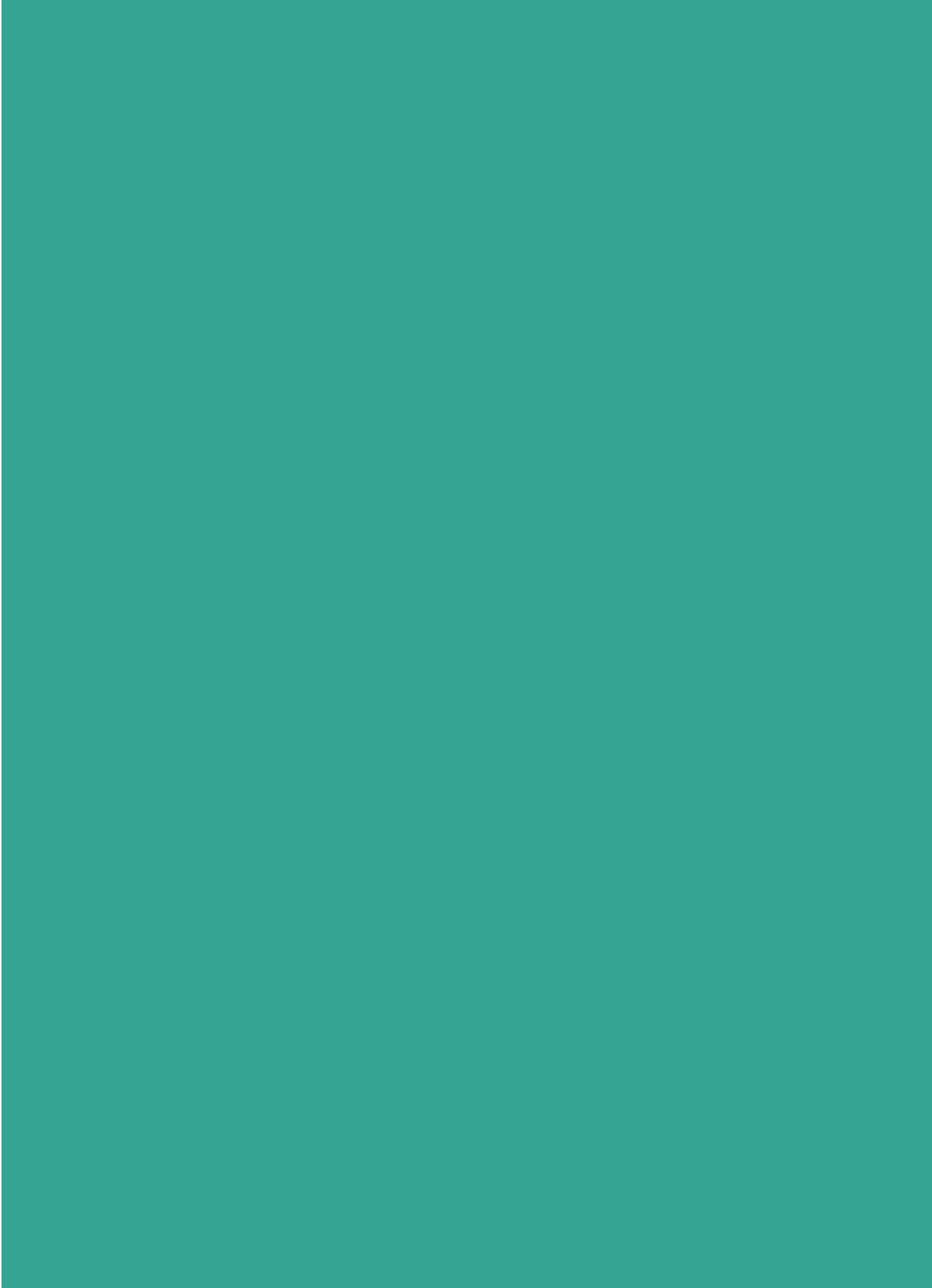
² DIR publishes the California CPI online at: <https://www.dir.ca.gov/OPRL/CAPriceIndex.htm>.

Table 1.
Maximum Penalties for VEHICULAR Source Violations Enforced by the California Air Resources Board Subject to Specified Health and Safety Code (HSC) Part 5 Penalty Provisions.

Penalty Statute (HSC §)	Adjusted Maximum Penalty per Violation
43016(a)(1)	\$40,050 \$534
43154(a)(1)	\$40,050
43154(a)(2)	\$10,680
43211(a)	\$40,050
43211(b)	\$5,340
43212(a)(1)	\$40,050

Table 2.
Maximum Penalties for NON-VEHICULAR Source Violations Enforced by the California Air Resources Board Subject to Specified Health and Safety Code (HSC) Part 4 Penalty Provisions.

Penalty Statute (HSC §)	Maximum Penalty per Violation	Penalty Statute (HSC §)	Maximum Penalty per Violation
42400(a)	\$5,150	42402(a)	\$5,150
42400(c)	\$15,450	42402(b)(1)	\$10,300
42400.1(a)	\$25,750	42402(c)	\$15,450
42400.1(b)	\$103,000	42402.1(a)	\$25,750
42400.2(a)	\$41,200	42402.1(b)	\$103,000
42400.2(c)	\$257,500	42402.2(a)	\$41,200
42400.3(a)	\$77,250	42402.2(b)	\$257,500
42400.3(b)	\$128,750 \$515,000	42402.3(a)	\$77,250
42400.3(c)	\$257,500 \$1,030,000	42402.3(b)	\$128,750 \$515,000
42400.3.5(a)	\$10,300	42402.3(c)	\$257,500 \$1,030,000
42400.3.5(b)	\$36,050	42402.4	\$36,050
42400.4(a)	\$10,300	42402.5	\$515
42400.4(b)	\$10,300	42410(a)	\$10,300
42401	\$25,750		\$103,000



California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812
(916) 323-2514
arb.ca.gov

Enforcement Division
arb.ca.gov/enforcement