CALIFORNIA
AIR RESOURCES BOARD

June 2021

2020 Annual Enforcement Report

Contents

Acronyms

AECD	Auxiliary Emission Control Device
AB 617	California Assembly Bill 617 (approved July 26, 2017)
AFI	Area Focused Investigation
AMP	Aftermarket Part
AQ Web	Air Quality Webinar
ATCM	Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BIA	Basic Inspector Academy
CA CD	California Department of Justice Consent Decree
Cal e-GGRT	California Electronic Greenhouse Gas Reporting Tool
CalEPA	California Environmental Protection Agency
CARB	California Air Resources Board
CARBOB	California Reformulated Gasoline Blendstock for Oxygenate Blending
CaRFG	California Reformulated Gasoline
CCR	California Code of Regulations
CD	Consent Decree
CDFA	California Department of Food and Agriculture
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CHP	California Highway Patrol
CI	Carbon Intensity
CNC	Certificate of Noncompliance
COVID-19	Coronavirus Disease of 2019
DMV	Department of Motor Vehicles
DTSC	Department of Toxic Substances Control
EJ	Environmental Justice
EO	Executive Order
ERC	Emission Reduction Credit
GDF	Gasoline Dispensing Facility
ISO	International Organization for Standardization
I/M	Inspection and Maintenance
IRP	International Registration Plan
IT	Information Technology
IVAN	"Identifying Violations Affecting Neighborhoods" (an environmental monitoring system used by CalEPA and local air districts to receive public reports of environmental health concerns)

LCFS	Low Carbon Fuel Standards
LLC	Limited Liability Corporation
LMR	Landfill Methane Regulation
MOU	Memorandum of Understanding
MW	Megawatts
MY	Model Year
NFA	No Further Action
NO_X	Oxides of Nitrogen
NOV	Notice of Violation
NTC	Notice to Comply
OBD	On-Board Diagnostics
OGV	Ocean-Going Vessel
OHRV	Off-Highway Recreational Vehicle
OS	Out-of-State
PEAQS	Portable Equipment AcQuisition System
PERP	Portable Equipment Registration Program
PM	Particulate Matter (generically)
PM2.5	Particulate Matter less than 2.5 micrometers in diameter
RMP	Regulation for the Management of High Global Warming Potential Refrigerants for Stationary Sources
RVP	Reid Vapor Pressure
SCAQMD	South Coast Air Quality Management District
SEMA	Specialty Equipment Market Association
SEP	Supplemental Environmental Project
SJV	San Joaquin Valley
SJVAPCD	San Joaquin Valley Air Pollution Control District
T50	Temperature at which 50% of gasoline volume boils away
T90	Temperature at which 90% of gasoline volume boils away
TRU	Transport Refrigeration Unit
TRUCRS	Truck Regulation Upload, Compliance and Reporting System
TSE	Tactical Support Equipment
U.S. EPA	United States Environmental Protection Agency
VEE	Visible Emissions Evaluation
VIN	Vehicle Identification Number
VOC	Volatile Organic Compound

Executive Summary

Since its creation in 1967, the California Air Resources Board (CARB or Board) has been a world leader in emission control programs designed to protect public health and address climate change. Even as California's population doubled and economy quadrupled over the past 30 years, emissions of smog forming pollutants have dramatically decreased and air quality has improved.

Despite these past successes, recent events have highlighted the need to do more to address climate change, and to achieve equity in providing healthful air to Californians so that their race or socioeconomic status is not a determinant of their health. 2020 was the hottest year on record.[1] More than 4 million acres burned in the state, and more than 50 million people experienced unhealthy air quality across California and the western United States.[2] COVID-19 became a pandemic. Stay-at-home orders slowed the spread, but more than 3.6 million people in California contracted COVID-19, and more than 60,000 people lost their lives.[3] Studies have shown that areas with high concentrations of air pollutants, like Los Angeles County, tended to have higher rates of infections and fatalities.[4] 2020 saw a national reckoning in race relations that resulted in large-scale protests in California and across the United States, highlighting the racial inequities faced by black, indigenous and other people of color in many aspects of life.

The events of 2020 challenged us to think critically about our mission and goals. In response, CARB set an overall vision of *Clean Air for All Californians*[5] that reaffirms our commitment to a collaborative, community- and science-driven approach for achieving our air quality and climate goals. As part of this effort, we have been working to build equity into programs across CARB including our enforcement programs – to provide air quality protection to those who need it most, and to provide a level playing field across regulated industry. With this vision in mind, in 2020 we:

- Achieved a 98% compliance rate with California registered trucks in California's Truck and Bus Rule – an increase from 66% in 2016;
- Inspected more than 13,000 vehicles and marine vessels, with 73% of them in disadvantaged communities;
- Published our investigation into the San Joaquin Valley's Emission Reduction Credit System, leading to reform in industrial permitting;
- Diverted $6.8 million to Supplemental Environmental Projects that provide high efficiency air filtration to students in schools, and other benefits to disadvantaged communities;
- Resolved a landmark case with Daimler for using defeat devices in its Mercedes-Benz cars, resulting in more than $1 billion in penalties and mitigation nationally, with $285 million going to California; and
- Settled 959 cases and citations for $22,009,875.

This report describes CARB's enforcement programs and achievements in 2020.

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1 NASA, 2020 Tied for Warmest Year on Record, NASA Analysis Shows," January 14, 2021 *https://climate.nasa.gov/news/3061/2020-tied-for-warmest-year-on-record-nasa-analysis-shows/*

2 National Public Radio, "1 in 7 Americans Have Experienced Dangerous Air Quality Due to Wildfires This Year," September 23, 2020, *https://www.npr.org/2020/09/23/915723316/1-in-7-americans-have-experienced-dangerous-air-quality-due-to-wildfires-this-ye*

3 The Sacramento Bee, "Tracking COVID-19 in U.S." (landing header), *https://www.sacbee.com/*; accessed on April 8, 2021.

4 Environment International, COVID-19 Mortality Rates in Los Angeles County Higher in Communities with Poor Air Quality," April 14, 2021, *https://ph.ucla.edu/news/press-release/2021/apr/covid-19-mortality-rates-los-angeles-county-higher-communities-poor-air*

5 California Air Resources Board, "*CARB Vision and Roadmap: Clean Air for All Californians*."


NEXT EXIT
LODGING

Introduction

In California, CARB is charged with enforcing its regulations applicable to mobile sources, consumer products and other area-wide categories, fuels, and climate programs. We are also charged with overseeing the implementation of local air district permit and enforcement programs implementing requirements that apply to stationary industrial pollutant sources. These enforcement and oversight roles are coordinated by CARB's Enforcement Division, in partnership with agency staff that develop and implement programs across the agency, and also with CARB's Legal Office.

Our enforcement programs are designed to achieve compliance in every one of our air pollution programs to ensure emission reductions envisioned at adoption of a regulation are actually achieved in practice. This is not a simple task given the large and varied number of pollution sources in the state, as well as the impacts that even smaller emission sources can have in individual local communities. However, as we implement our enforcement program, we have several key goals:

- We prioritize our work in disadvantaged communities where it is most needed to help address longstanding environmental injustice;
- We assess compliance rates and prioritize enforcement to provide a fair, consistent, and level playing field across industry; and
- We publish information about our enforcement programs to provide transparency in our enforcement process and accountability to both regulated parties and the public.

CARB's enforcement authority is defined in California's Health and Safety Code (HSC). Accordingly, CARB's enforcement programs focus on mobile sources and fuels, consumer products, toxic air contaminants, greenhouse gases, and other sources. We implement our enforcement programs through our Enforcement Policy.[6] This public document explains the processes that CARB follows to compel compliance and assess penalties. The Enforcement Policy is meant to provide transparency in our enforcement process in the following ways:

- Describes our enforcement authority and provides links to additional information about every program we enforce;
- Highlights our commitment to California communities and environmental justice;
- Explains our enforcement and penalty assessment processes, including the factors we consider in determining an appropriate penalty (such as changes in the Consumer Price Index; see Appendix L);
- Defines our policies in support and oversight of local air districts, public communication and information protection, and Supplemental Environmental Projects (SEPs).

The implementation of enforcement programs is a team effort across CARB. Enforcement staff works closely with the regulatory and implementation divisions to identify noncompliance, and investigate potential violations. Enforcement staff then document the findings of the investigation, and work closely with CARB's legal office to resolve cases. Most case settlements are the product of a partnership between various staff across the agency. We also collaborate with the California Environmental Protection Agency (CalEPA) and our sister agencies on multi-media investigations involving water or hazardous waste, and with local air districts.

6 CARB, Enforcement Policy, updated April 2020, *https://ww2.arb.ca.gov/resources/documents/enforcement-policy*

Our enforcement programs reflect the broad array of CARB regulatory programs focused on vehicles, engines, fuels, consumer products, and stationary sources. We also implement equipment registration programs at the state level, and work to ensure the effectiveness of local air district permitting and enforcement programs. Enforcement programs fall into several categories:

- **Enforcement of Product Requirements**
  CARB regulations establish requirements that products, including vehicles, engines, aftermarket parts, chemically formulated products, composite wood products, indoor air cleaners, and fuels must meet to be legally sold in California. Staff investigates violations related to products that fail to meet these standards, including the use of improper test procedures and defeat devices.
- **Enforcement of Diesel Fleet Rules**
  CARB regulations establish technology and equipment maintenance requirements that diesel fleet operators and vehicle owners must meet to legally operate in California. These regulations apply to truck, bus, off-road equipment, commercial harborcraft, and ocean-going vessel owners and operators in California. Staff inspects equipment and investigates fleets for compliance, and enforces where violations are identified.
- **Enforcement of Climate Programs at Stationary Sources**
  CARB regulations establish reporting and equipment maintenance requirements that apply to stationary sources. Programs include mandatory reporting that supports the Cap-and-Trade Program, refrigerant management, landfill methane, and oil and gas regulations. Staff inspects facilities, conducts audits to identify violations, and either refers violations to local air districts for enforcement, or enforces them directly.
- **Equipment Registration Programs**
  Staff implements registration programs for portable equipment including portable engines, wood chippers, cargo tanks, and other equipment. CARB enforces cargo tank regulations directly; local air districts enforce over equipment registered in the Portable Equipment Registration Program.
- **Local Air District Support and Oversight**
  Staff provides a training program and offers support primarily to smaller local air district inspectors in conducting enforcement work. In 2020, we began increasing our oversight work to address specific issues identified by the Board, including the San Joaquin Valley Emission Reduction Credit (ERC) program and other projects.

Our enforcement programs work by bringing noncompliant companies into compliance, and then assessing penalties and/or injunctive relief to ensure a level playing field across industry and to deter future violations. Addressing environmental injustice is also paramount as part of the compliance process. Through our enforcement programs, we strive to do our part to achieve these goals by targeting enforcement efforts to address community concerns and directing portions of penalties to SEPs in an effort to redress environmental harms caused by noncompliant pollution sources.


International Border
COMMERCIAL
TRUCKS
CARS

Building Equity in Enforcement Programs

We have been working to better understand the environmental injustice and inequity experienced by disadvantaged communities. Our staff attended various types of community meetings ranging from local environmental justice task forces, to Identifying Violations Affecting Neighborhoods (IVAN) meetings, and to local steering committee meetings in Assembly Bill 617 (AB 617) communities. Under the provisions of AB 617,[7] communities across California that are most impacted by air pollution are developing and implementing air monitoring and emissions reductions programs in collaboration with CARB and their local air districts. We also participate in the CalEPA Environmental Justice Task Force,[8] conducting targeted enforcement in many disadvantaged communities.

Steering Committee Meeting for the San Bernardino, Muscoy AB 617 Community.

Through these experiences, we found that many communities across the state are concerned about specific emission sources operating in their community, especially mobile sources. We also learned communities felt that their voices were not heard, or were heard and ignored, by state and/or local authorities, and, as such, their specific local concerns, which vary substantially across communities, have not been addressed.

Working to Address Community Concerns

We continue to evaluate how to address these concerns, and in the process have learned about the importance, and limitations, of enforcement as a tool to address community concerns.

Truck and Bus Compliance

Diesel particulate matter drives local cancer risk, and CARB's Truck and Bus Rule is the most important regulation we adopted to address this risk. The rule requires truck owners to upgrade their trucks with diesel particulate filters, which control diesel particulate matter by 90% or more. Because trucks operate extensively in and around disadvantaged communities, regulatory compliance was crucial. Yet in 2016, the compliance rate for California registered trucks was poor – 66%.

Over the next several years, enforcement staff developed new databases and tools to identify noncompliance, and streamlined its practices to dramatically increase enforcement productivity. CARB staff in multiple divisions increased outreach and worked to implement a new law requiring truck operators to demonstrate compliance before they can register their truck with the Department of Motor Vehicles (DMV). By the end of 2020, as a result of CARB's efforts, the compliance rate for California-registered trucks increased to 98%, with the remaining trucks the current target of enforcement.

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

8 "Environmental Justice Task Force," CalEPA, *https://calepa.ca.gov/enforcement/environmental-justice-compliance-and-enforcement-task-force/*

Targeting Enforcement Efforts

In 2015, CARB prioritized environmental justice in enforcement by setting a goal to conduct half of all inspections in disadvantaged communities. This goal helps us focus and provide as much public health protection as possible in these areas. In 2020, enforcement staff inspected 11,698 diesel vehicles – 8,006 of these inspections occurred in disadvantaged communities. We also inspected 1,737 ships and equipment at ports and railyards – inspections that were in or benefit disadvantaged communities. In total, 73% of these inspections in 2020 were in or benefited disadvantaged communities (see Appendix B-3).

CARB conducting roadside testing in Irwindale.

The results of these inspections are published online in our Enforcement Data Visualization System,[9] which has been updated for 2020. We also reported back to AB 617 communities on implementation of enforcement in Community Emission Reduction Plans. With the pandemic, we found new ways to conduct area-focused diesel fleet investigations, which demonstrate enforcement can be conducted effectively even with a reduced field presence.

Engaging in Local Concerns

Communities are often frustrated by negative impacts they experience from nearby industrial and mobile source operations, and raise these issues to CARB during outreach events and through environmental complaints. Enforcement staff works to engage on these issues in an attempt to address them, and several efforts have provided positive results.

For example, in 2020, enforcement staff engaged with Metrolink about complaints regarding smoke emanating from their Central Locomotive Maintenance Facility in northeast Los Angeles. Since CARB does not currently regulate locomotive emissions, we worked with Metrolink to reduce unnecessary idling and to take other actions.

We also engaged with Union Pacific Railroad regarding complaints about locomotive idling within a few hundred feet of housing and public businesses in Dunsmuir. In both of these cases, CARB received fewer complaints after addressing these issues, but continues to monitor these situations as new complaints arise.

Enforcement staff received a 2020 complaint about aircraft exhaust coming from the Van Nuys Airport located across the street from a residential neighborhood. The complainant and other neighbors reported experiencing strong odors, headaches, eye and throat irritation, and difficulty in breathing. While CARB does not have regulations to control aircraft emissions, we sent out inspectors on two different occasions to observe aircraft activities. Enforcement staff worked with the complainant and a representative from Los Angeles City Council President Nury Martinez's office, who was in contact with the airport and their operator, Los Angeles World Airports. After CARB and the Council President's office raised these concerns to the airport, nearby residents have reported reduced aircraft idling and odors.

Van Nuys Airport.

9 "Enforcement Data Visualization System," CARB, *https://webmaps.arb.ca.gov/edvs/*

In 2020, CARB supported the Department of Toxic Substances Control (DTSC) in their enforcement case against Schnitzer Steel in West Oakland. For more than a decade, the facility had been releasing light, fibrous, hazardous waste material generated by shredding automobiles into the community. DTSC issued a formal enforcement action to clean-up the facility, and assessed a $4.1 million penalty. CARB staff supported DTSC in this effort by evaluating and ensuring adequate air pollution controls at the facility to control hydrocarbon emissions and working with the local community to develop a SEP benefitting West Oakland, which included installation and maintenance of air filtration systems in community buildings, and a mobile asthma clinic.[10] CARB enforcement staff are also engaged in several local efforts that are ongoing and not yet resolved.

- Staff has issued a Notice of Violation (NOV) to the AB&I Foundry in east Oakland for generating odors in the community and is working to resolve this enforcement action.
- Staff is investigating odors in the community of Avenal located near a local landfill. In 2020, enforcement staff met with the community to better understand their concerns, and inspected the landfill with the local air district. At the time of the inspection, the landfill was compliant with CARB and district requirements, but we continue to work with local agencies to investigate potential odor sources.
- Staff is working with the South East Los Angeles AB 617 community to develop approaches to deter catalytic converter theft.

Local Air District Program Reviews

CARB enforcement staff evaluates the implementation of local air district programs to determine if there are ways to provide greater environmental protection, especially in disadvantaged communities. In 2020, we completed three stationary source program reviews. The first was a review of the San Joaquin Valley Emission Reduction Credit System, which is critical to the function of the District's stationary source permitting program. We also completed a review of the Imperial Valley Air Pollution Control District enforcement program, and local/state permitting of backup generators at Bay Area data centers. In each of these three cases, which are described in detail later in this report, we found areas for improvement that we are addressing.

Supplemental Environmental Projects

CARB recognizes, while enforcement penalties play an important role in deterring environmental violations, they alone do not address the environmental harm that communities suffer because of these violations. One way that CARB addresses local environmental concerns is through the SEP program.[11] 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.

In 2016, in response to Assembly Bill 1071,[12] CARB updated its SEP Policy to prioritize projects that benefit disadvantaged communities across the state. The updated SEP policy includes an ongoing public process to solicit SEP proposals and considers the relationship between the location of a violation and the location of the proposed SEP, with priority given to projects in disadvantaged communities. CARB's list of eligible SEPs[13] has grown since the revamp of the SEP program, enabling numerous community groups and local districts across California to gain access to funding for community-based projects.

10 News Release (2), Department of Toxic Substances Control, *https://dtsc.ca.gov/2021/02/23/news-release_t-04-21/*

11 CARB, "Supplemental Environmental Projects (SEPs)," *https://ww2.arb.ca.gov/our-work/programs/supplemental-environmental-projects-seps*

12 AB 1071: *https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1071*

13 The continuously updated list of eligible SEPs can be found on CalEPA's website: *https://calepa.ca.gov/enforcement/supplemental-environmental-projects/*

In 2020, CARB listed 13 new SEP proposals, with a total budget of over $8 million, as eligible for funding, and by the end of the year, 40 projects were on the list of eligible SEPs (see Appendix G).[14] Eighteen SEPs received funding for over $6.7 million in 2020. Table 1 below provides a high-level summary of SEPs funded from cases settled in 2020. The last column of the table lists the CalEnviroScreen 3.0 percentile ranges for each project location. CalEnviroScreen is a screening tool used to identify California communities that are disproportionately burdened by multiple sources of pollution, and CalEPA defines disadvantaged communities as the top 25% scoring areas (i.e., 75%-100%).[15]

Projects funded through the SEP program include installing school air filtration systems, community air monitoring, tree plantings, and implementing youth education programs. In 2020, with prioritization of schools located in disadvantaged communities and/or within close proximity to major transportation corridors or industry, high-performance air filtration systems were installed in 30 schools, benefitting over 17,000 elementary, middle, and high school students. The "Asthma Impact Model in Fresno County" SEP submitted by the Central California Asthma Collaborative also received funding in 2020. This project allowed for the continuation of an existing program that provides home remediation, asthma management resources, and referrals to primary care physicians on asthma issues to low-income community members in Fresno County.

Over the past three years, CARB's SEP Program has provided nearly 40,000 students in 65 underserved California schools with cleaner indoor air through the installation of advanced filtration systems.

Another SEP funded in 2020, the "Brawley Health ACTION Environmental Study" was developed by the Public Health Institute in partnership with Comité Cívico del Valle and with cross-agency support from CARB and the Department of Toxic Substances Control. This project aims to directly respond to community concerns regarding environmental exposures in the City of Brawley through a health survey on current and past health burdens and environmental sampling to identify potential exposures that may increase health risks.

14 The number of eligible SEPs will vary throughout a given year as CARB continuously updates the list based on the approval of new SEP proposals and the funding status of already approved SEPs.

15 "CalEnviroScreen 3.0," California Office of Environmental Health Hazard Assessment, June 25, 2018, *https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30*

Table 1: SEPs Funded from Cases Settled in 2020

SEP Name	Case Settlements	Total Funds Requested	Total Committed SEP Funds 2020	Location	CES 3.0 Percentile Range
CES Asthma Impact Model Fresno County	1	$66,129	$66,129	Fresno County	75-100%
Brawley Health ACTION Environmental Study SEP	1	$1,076,482	$1,076,482	Brawley, CA	61-90%
Coachella Valley Mitigation Project Extension 2018-2023	3	$4,988,094	$1,625,307	Coachella Valley	51-90%
EcoSystems Exhibition Wing – Teen Program 108k	1	$108,000	$108,000	Los Angeles, CA	85-90%
Flag Program Coachella Valley Mitigation Project Extension 2018-2023	1	$502,970	$100,594	Coachella Valley	51-90%
Fresno Trees	3	$11,015,929	$110,000	Fresno County	91-100%
Installation of Air Filtration Systems in Schools	1	$2,306,935	$1,013,400	South Coast	40-100%
Installation of Air Filtration Systems in Schools Oakland	2	$1,321,065	$248,557	Oakland, CA	80-100%
Installation of Air Filtration Systems in Schools Phase 2	1	$11,868,150	$17,600	South Coast	85-100%
Installation of Air Filtration Systems in Stockton – Washington Elementary School	1	$80,000	$80,000	Stockton, CA	95-100%
Installation of Residential Air Filtration Systems	2	$1,000,000	$24,000	South Coast	61-100%
Installation of School Air Filtration Systems – Calexico (Imperial County)	2	$1,585,240	$431,512	Calexico, CA	70-95%
Installation of School Air Filtration Systems – El Centro (Imperial County)	2	$2,198,288	$227,003	El Centro, CA	50-100%
Marine Vessel Speed Reduction Incentive Program Phase 2	1	$1,010,000	$995,325	Ventura County	25-100%
Placer County Community Based Air Filtration SEP – Phase 2	2	$3,662,755	$87,250	Placer County	10-60%
Placer County Community Based SEP	1	$926,704	$353,152	Placer County	10-60%
Skill Development Program for Rejuvenation of Urban Trees (SPROUT)	1	$2,087,164	$35,156	Los Angeles County	75-100%
Survey of Freight Truck Transportation Corridors	1	$97,930	$89,500	Wilmington, CA	75-100%
Totals	–	$45,901,835	$6,788,967	–	–

In addition to approving SEP proposals for funding, CARB staff continue to engage stakeholders, both internally at CARB and externally with communities across the state, to expand SEP program outreach. Due to social distancing restrictions related to COVID-19, enforcement staff quickly transitioned to engage stakeholders virtually through existing programs and initiatives. Internally, CARB continued to build relationships between SEP program administrators and case investigators in an effort to increase staff knowledge in the program and develop additional resources to streamline the SEP program funding process.

Externally, enforcement staff began to develop engagement resources for SEP program applicants, and throughout 2020, continued to work closely with community groups, tribal nations, non-governmental organizations, and air districts through the virtual AB 617 community steering committee meetings, IVAN network calls, and individual calls with interested SEP applicants.

With the growing number of community-based projects receiving SEP funding, CARB staff are committed to continue improving the reporting review processes and ensure that the SEP policy requirements, as well as the project's proposed goals and objectives are being met.

Since SEP recipients are required to provide quarterly and final progress reports about their funded projects, CARB staff have developed standardized reporting guidelines and templates for SEP program users. Staff are also developing best practices for proposals and reports, which include minimum project requirements and recommendations for performance metrics based on SEP project categories.

Lessons Learned

Through our enforcement programs, we continue to address social equity issues and advance environmental justice to the maximum extent possible. We aim to listen to communities to understand and address concerns, and we have built a SEP program that uses settlement funds to support local community projects. In the process, we are learning how to be more effective in the role enforcement can play in broadly addressing social inequity. Our SEP program can be a powerful tool to provide resources to communities directly and relatively quickly, and is a program we are building on yearly.

The COVID-19 pandemic impacted our ability to conduct inspections at certain times during the year, and forced us to adjust our approach to enforcement, especially in disadvantaged communities. A prime example is area-focused diesel fleet investigations, which are discussed later in the report. These new approaches focused more on the use of data analysis, desk audits, and remote communication techniques both for investigations and settlement discussions. We are continuing to evaluate the effectiveness of these approaches and how we might use these approaches to better improve the efficiency of our enforcement programs overall, and particularly in disadvantaged communities.

Finally, we recognize that communities often need action faster than we can provide through the enforcement process. Furthermore, sometimes just the mere presence of pollutant sources is of concern to a community rather than the compliance of those sources with current regulations. In some communities, we might achieve universal compliance with air pollution requirements, and still not resolve the concerns raised. This has been especially true in the case of diesel vehicles and equipment. A prime example is truck idling, which is discussed later in the report.

Diesel Fleet Enforcement Programs

CARB regulations establish stringent emission requirements that new diesel vehicles must meet. However, diesel engines and heavy-duty vehicles and equipment are designed to last decades. CARB's diesel fleet regulations require operators to replace older, higher polluting vehicles and equipment with lower pollutant vehicles, equipment, and technologies in order to protect public health and attain ambient air quality standards. These regulations apply to operators of on-road diesel vehicles such as trucks, and off-road diesel vehicles and equipment including construction and cargo handling equipment, commercial harborcraft, and ocean-going vessels. Enforcement approaches are tailored to different types of equipment and fleets.

Truck and Off-Road Fleet Regulations

Our efforts enforcing the Truck and Bus Rule have substantially evolved over the last five years as we have worked to improve compliance rates. Five years ago, we began using DMV registrations, and vehicle compliance and inspection data to assess compliance rates. In 2016, we found that compliance with the Truck and Bus Rule was only 66% for California registered trucks, and 70% for all trucks operating in California. This meant there were 88,000 noncompliant California registered trucks, and up to 287,000 noncompliant trucks registered in other states and operating in California.[16] The envisioned emission reductions from the Truck and Bus rule were not being achieved.

We responded by initiating a process to fix the problem. We tracked compliance rates every year to measure improvements in our program, and developed new, streamlined enforcement procedures that dramatically improved our efficiency. We worked with CARB staff from across the agency who enhanced outreach, and over a two-year period, we brought 35,000 trucks into compliance, including issuing more than 24,000 registration holds on noncompliant trucks to stop their illegal operation in California. Enforcement staff sent letters to every fleet owning a truck that would fall out of compliance in the next two years. By the end of 2019, the compliance rate for California registered trucks increased to 88%, and every fleet facing a pending compliance requirement was directly notified. In 2020, CARB began implementing a new law that made vehicle registration dependent on Rule compliance.

This work continued in 2020. We reassessed compliance rates, maintained a field presence despite COVID-19 impacts, and developed new enforcement techniques. 2020 and 2021 are transitionary years for truck enforcement as we develop next generation enforcement techniques for the heavy-duty truck inspection and maintenance (I/M) program currently under development.

Current Compliance Rates

With the new law requiring a compliance demonstration with the Truck and Bus Regulation prior to vehicle registration in California, compliance rates for California-registered heavy vehicles have reached 98% as of December 31, 2020. Staff will target enforcement action on the remaining 2%, or 5,891 noncompliant heavy vehicles this year. Throughout 2021, there will be an additional 4,953 California heavy vehicles that will have their registrations blocked, or will be targeted for enforcement action.

For California-registered light vehicles regulated by the Truck and Bus Rule (less than 26,000 pounds gross vehicle weight rating), compliance rates have increased to 96% as of December 31, 2020. Similar to heavy vehicles, staff will target enforcement action on the remaining 4%, or 6,019 noncompliant light vehicles this year. In 2021, compliance demonstration will be required for all light

16 CARB, 2016 Enforcement Report, June 2017, *https://ww2.arb.ca.gov/sites/default/files/2020-06/2016_enf_annual_report_R.pdf*

vehicles 2007 and older. This means that an additional 17,533 California light vehicles will have their registrations blocked throughout 2021, or will be targeted for enforcement action.

Compliance rates among trucks operating in California but registered in other states is 88% for heavy vehicles and 95% for light vehicles. To assess compliance in non-California registered trucks we use International Registration Plan (IRP) information, which provides a listing of trucks in fleets reporting operation in California – but not operation in California at a truck level. As a result, the 88% compliance rate is a worst-case estimate. We are continuing to work to refine this estimate. Between 2019 and 2020, heavy vehicle compliance increased slightly, while light vehicle compliance decreased only slightly - even though the number of vehicles that were required to comply on January 1, 2020, more than doubled. As with in-state vehicles, staff will target enforcement action on any remaining vehicles that are out of compliance.

Compliance with the Truck and Bus Rule in 2020 was 98%, which is a 32% improvement from just four years ago.

Enforcing Against Noncompliant Fleets Outside of California

To maintain a level playing field between trucks registered in California and in other states, staff conduct field inspections at border crossings and throughout the state. When we identify a noncompliant fleet through registration and inspection data, we can pursue the case directly, or refer it to another agency for enforcement.

To expand our enforcement presence and increase our impact on compliance, CARB continues to partner with the United States Environmental Protection Agency's (U.S. EPA) Region 9, which covers federal environmental laws in the Pacific Southwest of the country, to conduct investigations of fleets registered out-of-state to confirm compliance with the Truck and Bus Regulation. In 2020, U.S. EPA Region 9 settled the following cases:

- **FL Transportation, Inc. and New Bern Transport Corporation, both subsidiary companies of PepsiCo**, together failed to verify that trucks they hired for use in California complied with the state's Truck and Bus Regulation. The two companies hired a total of 104 different fleets with noncompliant trucks. FL Transportation, Inc., headquartered in Plano, Texas, and New Bern Transport, headquartered in Somers, New York, each agreed to pay a $24,375 civil penalty. They will also each spend $73,125 on a SEP to install air filtration systems in one or more southern California schools in the South Coast Air Basin, which includes Orange County and parts of Los Angeles, Riverside and San Bernardino counties.
- **Roadrunner Transportation Systems, Inc.** operated heavy-duty diesel vehicles that lacked the diesel particulate filters required by the Truck and Bus Regulation and operated unregistered and noncompliant drayage trucks. The company also hired carriers to transport goods in California without verifying that the vehicles complied with the Truck and Bus Regulation, and dispatched drayage trucks without required recordkeeping. As part of the settlement, the company will pay a $117,000 civil penalty and has agreed to use compliant trucks.
- **Ruan Transportation Management Systems Inc.** operated heavy-duty diesel trucks in California lacking the required diesel particulate filters. Ruan also failed to verify that the carriers it hired to transport goods in California complied with the Truck and Bus Regulation. Ruan is the first company cited by the U.S. EPA for failing to timely meet specified particulate matter (PM) emission reductions in transport refrigeration equipment under State of

California requirements. As part of the settlement, the company will pay a $125,000 civil penalty and will use compliant vehicles.

- **The Boise Cascade Company** failed to verify that the carriers it hired to transport goods in California complied with the Truck and Bus Regulation. As part of the settlement, the company will pay a $175,000 civil penalty, and has agreed to use compliant trucks.

Similarly, CARB has recently partnered with local prosecutors' offices across Southern California to pursue enforcement on noncompliant out-of-state fleets. These cases are ongoing.

Maintaining Enforcement and Field Presence

COVID-19 limited CARB's ability to conduct field inspections in 2020. Despite these challenges, enforcement staff continued to implement the diesel fleet enforcement programs. In 2020, CARB staff inspected 11,698 diesel fleet vehicles, resulting in 1,350 citations issued. This represents a 28% reduction in vehicles inspected, and a 56% reduction in citations issued from 2019. Still, 68%, or 8,006 vehicle inspections, were conducted in disadvantaged communities.

CARB offers air districts and select local agencies the ability to enter into a memorandum of understanding with CARB so they may jointly enforce CARB diesel emission requirements. The San Diego Air Pollution Control District, Bay Area Air Quality Management District, and the Port of Los Angeles have signed such agreements, as shown in Appendix K. Over the past several years, the San Diego Air Pollution Control District has significantly increased its inspections, conducting a total of 3,588 inspections in 2020. These inspections are listed in Appendix B-4, including the total diesel inspections described in this report.

To supplement this decrease in our ability to conduct field inspections, staff enhanced enforcement efforts using an Area-Focused Investigation (AFI) strategy that concentrates enforcement in AB 617 and other disadvantaged communities, including communities surrounding freight hubs and distribution centers. These locations are regularly exposed to a large fraction of the emissions resulting from the activities of diesel equipment used by companies, and most often are considered disadvantaged communities by CalEnviroScreen.

In an AFI, staff conduct an in-depth review of the facilities and companies that either reside in or frequently operate in targeted areas. The first step in an AFI requires understanding where trucks are located. Some of this work can be accomplished by reviewing data sources such as vehicle registration and company location information, and federal inspection databases. Fleets can also be identified through complaints.

We use the results of the initial review to develop an enforcement strategy that identifies the facilities and companies recommended for further investigation by audit or by in-person inspection. In addition, the enforcement strategy will detail what data sources were evaluated, the CARB regulations that apply to each facility or company, the compliance status, and the justification of why the facility or company is being targeted for inspection or audit.

In 2020, staff conducted AFIs for Santa Maria, Salinas and West Oakland. Hundreds of companies and facilities were identified, screened and reviewed in each of these three locations. The AFI teams recommended 133 companies in these regions for audit, and 29 audits have been initiated to date. In addition, the AFI teams identified 20 potential facilities and companies for field inspections in Santa Maria, and 40 facilities and companies for inspection in Salinas. Due to COVID-19 travel restrictions, enforcement staff were unable to conduct in-person field inspections for these AFIs in 2020, but our work is ongoing.

In addition to AFIs, CARB received 709 heavy-duty diesel program complaints in 2020 (see Appendix C), which were evaluated using a new triage process designed to ensure effective response. Of these, 73 of the highest priority complaints were queued for audit, where staff investigate the vehicle fleet belonging to the company. CARB sent field inspectors to 24 locations where on-site inspections were deemed the most appropriate action.

Roadside Emissions Monitoring

Fleets operating in an area can also be identified using roadside emission technology. Roadside emissions monitoring technology has been used in research for several years to measure the emissions from vehicles as they pass by the system's detection area. It has demonstrated an ability to screen a large number of vehicles to find those with high emissions that are likely to be noncompliant with CARB's smoke opacity limits.

PEAQS testing in Calexico, California.

There are various types of technology available that use different methods for analyzing emissions from passing vehicles. CARB has developed its own plume-capture system called the Portable Emissions AcQuisition System (PEAQS). PEAQS includes an Automated License Plate Reader camera to help pair the emissions reading with a specific vehicle. CARB is developing the information technology (IT) infrastructure, software, and database applications to support PEAQS operations and provide decision recommendations for targeted enforcement operations. Once a vehicle has been screened as a high emitter, CARB follows up with a letter to notify the vehicle owner of the high emitter flag and options to come in to compliance. CARB is collaborating with the University of Chicago, as part of a behavioral study, to enhance enforcement communication methods to better induce compliance.

CARB has developed two PEAQS deployment platforms. The first is an unattended platform where the PEAQS system is contained in a box that is installed on existing infrastructure. This type of PEAQS deployment continuously collects emissions data from trucks traveling along California highways in a quick and unobtrusive way. CARB is currently operating two unattended PEAQS platforms at California Department of Food and Agriculture (CDFA) facilities, with the second system installed in mid-2020. CARB also began coordinating closely with the California Department of Transportation and the California Highway Patrol (CHP) in 2020 to site future systems at CHP's Commercial Vehicle Enforcement Facilities, commonly referred to as "weigh scales," throughout California.

The second deployment platform is a mobile platform in which PEAQS is completely contained on a trailer. The mobile PEAQS system is operated by CARB staff and deployed in conjunction with CHP on local roads throughout California, including in communities heavily impacted by truck traffic. CARB staff deployed the mobile PEAQS system at multiple locations throughout the state in 2020 as shown in Table 2 below. During most deployments, high-emitting vehicles identified by PEAQS were flagged for inspection immediately after being screened and citations were issued when violations were found.

Table 2: Mobile PEAQS Deployment Dates and Locations in 2020

Date	Location Type	Location City	Vehicles Screened	Citations Issued
February 26th	CHP Scale	Camino	32	2
March 3rd–4th	Port of Entry/CHP	Calexico	801	8
August 18th–19th	Roadside	Sun Valley[17]	74	–
September 22nd	Roadside	Calexico	115	3
September 23rd	Roadside	Westmorland	229	3
October 13th–14th	Roadside	Irwindale	404	4
November 2nd–14th	CDFA	Mt. Pass[18]	11,310	–
November 17th	Roadside	Fresno	207	4

Case Settlements and Citation Processing

With dramatic improvement in truck and bus compliance rates, 2020 was going to be a transitional year for CARB enforcement even if the pandemic did not occur, as we continued to develop and implement new approaches to reduce emissions from high-emitting vehicles. Because field operations were more limited due to COVID-19, CARB could better focus on accelerating our next generation enforcement program, though circumstances reduced enforcement case settlements to 14 diesel fleet cases for $257,150 in 2020.

A reduction in field inspections in 2020 due to COVID-19 restrictions resulted in a reduction in the number of citations issued, and a need to adapt office-based, public-engagement through hotlines to voice-over-internet protocols and working from home. In 2020, staff issued 1,350 citations, and closed 862 citations – collecting $405,092. About half of these penalties were for truck violations, and the remainder of them were for transportation refrigeration unit violations. Some of these citations were closed through our minor violations program without penalties. CARB's Enforcement Policy includes a framework for identifying and processing minor violations. These generally involve reporting or labeling violations with little to no impact to the functioning of the regulatory program. In 2020, we issued minor violations for the Transportation Refrigeration Unit Regulation and the In-Use Off Road Diesel-Fueled Fleets Regulation. Staff also closed 90 heavy-duty vehicle idling citations for $30,100.

17 Multi-divisional/Multi-agency research projects.
18 Multi-divisional/Multi-agency research projects.

Truck Idling in Disadvantaged Communities

One common theme communities express is concerns with idling trucks. CARB regulations limit idling near schools, and limit the amount of time that can be spent idling unless the truck is equipped with a clean-idle certified engine. CARB staff enforce these regulations by issuing citations to noncompliant operators caught idling their trucks. To conduct these inspections, CARB staff work with community representatives to determine where and when idling is occurring, and then conduct inspections on those trucks as they are idling. Idling enforcement can sometimes be challenging because CARB inspectors working in one area often cannot easily relocate to another area to respond to complaints. Fortunately, though, CARB's idling regulation can also be enforced by local law enforcement and local air district inspectors, in addition to CARB staff.

A truck idling inspection near Bakersfield, California.

In 2020, inspection schedules were shifted to accommodate COVID-19 restrictions and social distancing. This resulted in increased number of idling inspections, while some other vehicle inspection types were reduced in order to limit interpersonal interactions during the tightest social distancing restrictions. Staff inspected 7,010 idling trucks in 2020, approximately a 37% increase over 2019. 5,383 of these inspections (76%) occurred in disadvantaged communities, and others occurred at truck stops and similar locations. Results of our inspections are consistent with previous years, and show that approximately 3% percent of all idling trucks inspected by CARB are in violation of our idling regulations. Furthermore, these results do not appear to vary significantly across most communities. This means that when we identify idling trucks in communities, 97% of the time this idling is compliant with CARB regulations.

Through our discussions in disadvantaged communities, we understand the disruption, noise, and air pollution that truck idling can cause. In addition to inspections, staff conduct outreach in disadvantaged communities to discourage idling.

CARB provides a webpage[19] to house outreach materials, and developed a community-oriented, anti-idling fact sheet (in English and Spanish) for distribution in communities.[20] The fact sheet describes what idling is, what CARB's regulations are, and what people can do about idling in their communities. Staff also developed complaint reporting business cards that include information on where to report complaints and the type of information that would be useful to provide when reporting complaints. These cards are available in both English and Spanish. Lastly, staff worked to get additional, school-appropriate "No Idling" signs designed and produced for distribution in AB 617 communities (see Figure 1).

19 For enforcement-related resources and outreach materials, visit *https://ww2.arb.ca.gov/our-work/programs/community-outreach-and-enforcement*

20 English and Spanish versions of the anti-idling factsheet can be found at *https://ww2.arb.ca.gov/resources/documents/idling-fact-sheet*

Figure 1: No Idling Signs for Schools & City of South Gate

In 2020, CARB staff, in conjunction with City of South Gate staff and South Gate's Community Environmental Action Team, completed a project to install 22 such signs in the City of South Gate (see Figure 1). CARB enforcement continues to work with cities and school districts in the South Coast Air Quality Management District's AB 617 communities to get "No Idling" signs installed near sensitive receptors (e.g., day care centers, senior care facilities) to help remind truck drivers to not idle in these areas.

Under CARB's truck idling regulation, trucks may legally idle if they are waiting in a queue to enter a facility or operating a clean-idle certified engine.[21] With high compliance rates, further regulations may be necessary to reduce the frequency of idling trucks in disadvantaged communities.

Developing Next Generation Enforcement Program

CARB estimates show that by 2031, 11% of trucks will be responsible for 47% of all oxides of nitrogen (NO_X) emissions from trucks, and 3% of trucks will be responsible for 65% of all diesel PM emissions in California from trucks.[22] Excess emissions are generated by malfunctioning trucks that require repair. However, the vast majority of trucks in California are well maintained and emitting at low levels. Finding the small fraction of the fleet that requires maintenance and are high emitters is challenging, and requires new, streamlined enforcement approaches rooted in emission measurement, data management, and efficiency.

CARB fitted a warehouse space to assemble PEAQS units, built and developed prototypes, and purchased equipment in order to assemble and deploy 12 new PEAQS units to be deployed by January 1, 2023, in the San Joaquin Valley Air Pollution Control District (SJVAPCD) and South Coast Air Quality Management District (SCAQMD) regions. These efforts are the first phase of the planned heavy-duty I/M program, and will maximize emission reductions to help achieve attainment with ambient air quality standards. Concurrently, staff is building a robust IT infrastructure, software, and

21 Exceptions to CARB's idling regulation can be found in title 13 CCR § 2485 (d)(2): *https://ww2.arb.ca.gov/sites/default/files/classic//msprog/truck-idling/13ccr2485_09022016.pdf*

22 Lui, Hang, "Next-Generation Heavy-Duty Vehicle Enforcement: A Pilot Study using Roadside Emissions Monitoring Systems," 30th CRC Real World Emissions Workshop, March 8-11, 2021.

database applications to support PEAQS operations and provide decision recommendations for targeted enforcement operations.

CARB's enforcement and regulatory development divisions continue to work closely together on developing upcoming regulations including the proposed amendments to the Transport Refrigeration Unit (TRU) Air Toxic Control Measure, the proposed regulation to develop a HD I/M program and the proposed Advanced Clean Fleet Regulation. CARB is working to identify innovative strategies to ensure CARB's regulations include the tools needed to enforce the regulations as effectively as possible and how enforcement programs will utilize roadside screening going forward.

Ocean-Going Vessel Enforcement

Marine ports are a major source of air pollution and pose a health risk to surrounding communities. CARB regulations require ocean-going vessels to use clean distillate fuels within 24 nautical miles of shore, and to use shore power while operating at berth. We ensure that these requirements are continually complied with.

The ocean-going vessel (OGV) fuel regulation requires the use of 0.1% sulfur, distillate grade fuel, within Regulated California Waters. In almost 12 years, staff has settled 232 violations and collected over $3 million in penalties. In 2020, staff inspected 245 vessels, issued four notices of violation, closed six cases, and assessed $282,670 in penalties.

A container ship in San Francisco Bay.

International regulatory sulfur limits have become more stringent. Beginning January 2018, the limit within the North American Emission Control Area was reduced to 0.1% sulfur, but differed from California by allowing the use of residual grade fuel, and air pollution scrubbers. This has inadvertently created situations where a vessel's fuel may in fact meet the sulfur limits of both International and California regulations, but does not meet the requirement of distillate grade, as required by California law. This difference is significant. Studies have shown that the use of distillate fuel versus lower sulfur residual grade fuel reduces the formation of directly emitted particulate from diesel engines.

In recognizing this issue, staff sought to improve the enforcement process by incorporating an important part of the regulation's language, by conducting further analysis of collected fuel samples. The regulation specifies ISO 8754 to determine sulfur compliance, and ISO 8217 lists numerous test methods to determine whether the fuel meets the specifications of distillate grade fuel. Specifically, staff will be utilizing ISO 10370 Carbon Residue: Micro Method. Enforcement staff conducted fuel studies both at CARB's Haagen-Smit Laboratory and a third-party lab, hosted numerous internal meetings with different levels of CARB management and legal staff, and coordinated outreach with industry stakeholders to outline CARB enforcement staff's intentions which include further sample analysis beginning May 2021 as outlined in an enforcement advisory released in October 2020 (Marine Notice 2020-2).

Adding carbon residue testing to ensure uncontaminated distillate grade fuel use, will strengthen an already robust OGV enforcement program, help lower emissions, and reduce health risks from these emissions in disadvantaged portside communities.

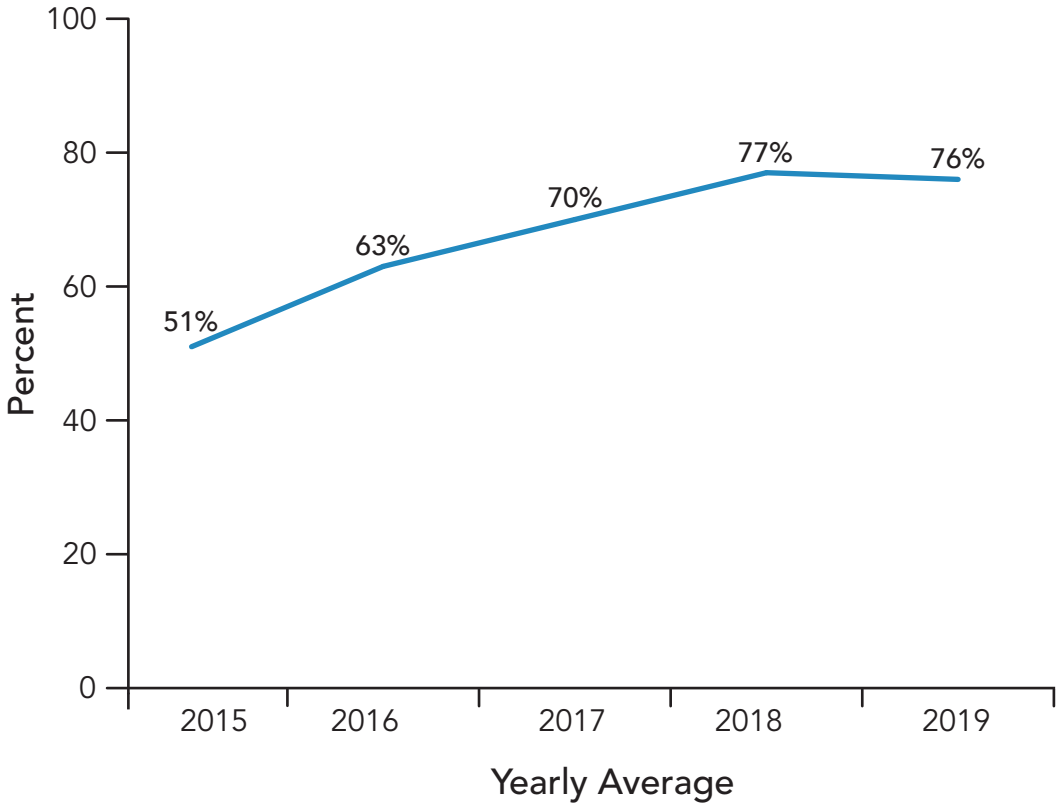
Enforcing the At-Berth Regulation (Shore Power)

The intent of the Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port (At-Berth Regulation) is to reduce PM and NO_x emissions, a health risk from ports throughout California. Container, refrigerated cargo, and cruise vessels are required to reduce their diesel engine use while at-berth and must report all fleet visits by March 1 of the following year. Staff audits these reports to determine compliance at a visit and fleet level. Results are used to target enforcement. We publish the most recent audit results in our annual enforcement report each year, and when audits for the next year are completed, we use this information to enforce against noncompliant fleets.

A shore power vault connection.

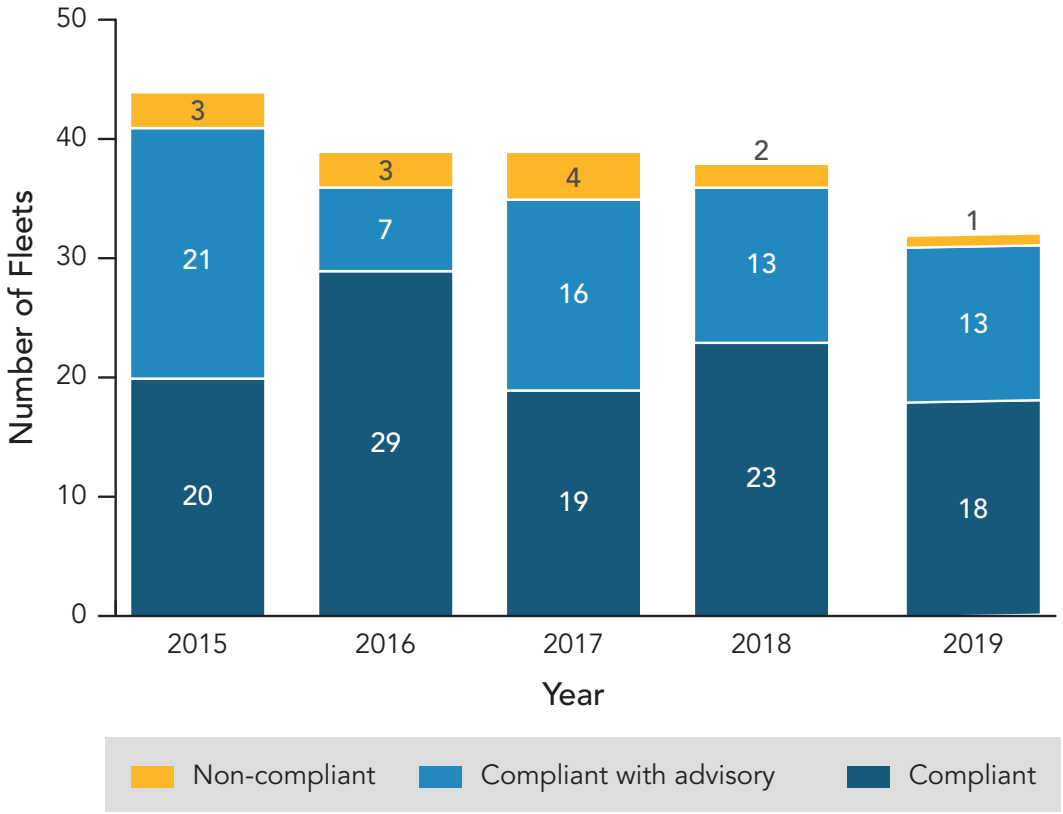
In 2019 (the most recent year we have audited fleet level data for), each fleet was required to reduce its engine power by 70% at-berth. Figure 2 below shows that all fleets in California reduced a combined 76% of their engine power, meeting and exceeding the statewide requirement.

Figure 2: Percentage Reduction in Ocean-Going Vessel Diesel Engine Use While At-Berth in California, Measured in Megawatt Hours



Although fleets met the power requirement statewide, each individual fleet may have been above, below, or near the required 70%. Figure 3 reveals a breakdown of statewide compliance by fleet. It is important to note the key role that scenario relief specified in CARB compliance advisories play when determining compliance. Between 2014 and 2017, several advisories were issued allowing fleets to request the use of specific scenario conditions when events outside their control impeded their ability to connect to shore power at-berth. Enforcement staff review all scenario requests and approve or deny them on a case-by-case basis. A fleet can be compliant by meeting the 70% power reduction requirement before or after the use of the scenarios is applied. This difference in compliance is also illustrated in Figure 3.

Figure 3: Distribution of Statewide At-Berth Regulation Compliance Status for Power Reduction Requirement 2015-2019



An analysis of fleet data since 2017 (the year the power reduction requirement increased to 70%) revealed that the total number of scenario requests increased each year between 2017 and 2019. Exact reasons for this are unknown, but reasons may include aging equipment, construction activities, and adding shore power capability to more ships. Staff grant or deny the scenario requests based on the applicability to the advisory and documentation proving situations were out of the vessel's control. Still, more than 60% of all visits under the At-Berth Regulation did not request scenario use in 2019.

Scenario request reasons are expected to change and possibly increase in 2020 fleet reports. Multiple events in 2020 created unanticipated situations for fleets such as COVID-19, two heat-related states of emergency, and a cease-and-desist letter issued to one of the alternative control technology providers. The full impact of these events are still unknown, however, but will be addressed in the 2021 annual enforcement report.

In 2020, CARB enforcement settled two significant cases for violations of the At-Berth Regulation. Del Monte Fresh Produce N.A., Inc. (Del Monte) was found to be in violation of the regulation for five consecutive years (2015–2019) at the Port of Hueneme. Del Monte agreed to a penalty of $1,990,650, half of which went toward the Marine Vessel Speed Reduction Incentive Program Phase 2 SEP in Ventura County. This project will implement a vessel speed reduction program in and around the Santa Barbara Channel to reduce PM, NO_x, and greenhouse gas (GHG) emissions.

CARB is the first agency in the world to require the use of at-berth shore power, and in 2020 expanded this program to more types of ships for added air quality benefits.

In a second case, Mitsui O.S.K. Lines, Ltd. was found to be in violation of the At-Berth Regulation from 2017 to 2018 at the Port of Oakland. Mitsui O.S.K Lines, Ltd. settled with CARB in 2020 for a total of $253,300. Even with such a high compliance rate (97% in 2019), it is important to maintain a level playing field and minimize excess emissions that would otherwise pose a health risk in disadvantaged communities around California ports.

Another significant event related to the At-Berth Regulation in 2020 was the adoption of the new Control Measure for Ocean-Going Vessels At-Berth. This new regulation supersedes the current At-Berth Regulation beginning on January 1, 2021. However, the majority of the new requirements will not take effect until January 1, 2023. In the meantime, the existing requirements of the regulation will remain in place and be enforced by CARB.

Enforcement of Product Requirements

CARB develops and adopts regulations to protect public health and the environment from harmful pollutants produced by a range of vehicles, equipment and consumer products. In order to be legally sold in California, they must conform with applicable testing, emissions, certification, product formulation, reporting, and/or labeling requirements established by CARB. Enforcement programs assess compliance with the specific factors required under the different regulations to ensure that CARB's health and environmental goals are being met.

Vehicle and Engine Enforcement

Vehicles and engines must first obtain emissions certification and be issued Executive Orders (EO) before they can be legally sold in California. CARB's Emissions Certification and Compliance Division is responsible for processing applications and granting certification. To be certified, a vehicle must be demonstrated to show that its exhaust and (as applicable, depending on the specific vehicle category) evaporative emission control systems are durable and comply with the emission standards for the vehicle's useful life. This is done through durability demonstrations and certification testing of a prototype certification vehicle.

CALIFORNIA AIR RESOURCES BOARD | TOYOTA MOTOR CORPORATION | Executive Order: A-014-1043 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 1 of 4

Pursuant to the authority vested in California Air Resources Board by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

TEST GROUP INFORMATION

MODEL YEAR	TEST GROUP	VEHICLE CLASS(ES)	FUEL CATEGORY	FUEL TYPE
2020	LTYXV02.5P33	PC	HYBRID ELECTRIC VEHICLE	GASOLINE

USEFUL LIFE (miles)		VEHICLE EMISSION CATEGORY		INTERIM / INTERMEDIATE IN-USE STD	
EXH/ORVR	EVAP	FTP	SFTP	FTP	SFTP
150000	150000	LEV3 SULEV30	LEV 3 COMPOSITE	*	PM

SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS		OBD STATUS		ENGINE DISPLACEMENT (L)
1	DFI, SFI, EGR, EGRC, WR-HO2S(2), TWC(2)	FULL	ALL MODELS	2.5
*	*	PARTIAL	*	
*	*	PARTIAL WITH FINES	*	

EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION

EVAP / ORVR FAMILY	EVAPORATIVE STD CATEGORY	EVAP EMISSION STD VEHICLE CLASS	SPECIAL FEATURES
LTYXR0165J72	LEV 3 OPTION2	PC	HCT

EMISSION CREDIT INFORMATION

NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY	NMOG CREDIT FOR NON-PZEV ZERO-EVAP	NMOG CREDIT FOR DOR	OPTIONAL EXH. STD FOR WORK TRUCKS
N	N	N	N

NMOG AND FLEET AVERAGE INFORMATION

NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO	HCHO/NMHC RATIO	NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)	NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)	NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)
*	*	1.10	0.006	0.065	0.074	*

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)

A sample CARB Executive Order.

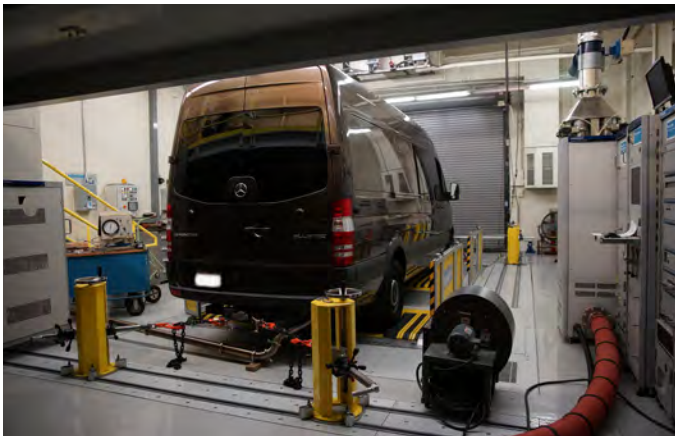
Compliance with on-board diagnostics, engine operation programming, and emission control system operation must also be verified by the manufacturer. Production vehicles must be identical in all material respects to those for which the certification was granted, and CARB must approve all subsequent emissions-related production running changes and field fixes. Production vehicles must be properly labeled and their emission control systems are warranted for the specified duration. New and customer-owned production vehicles are subject to compliance testing (by either the manufacturers or CARB) and warranty repairs reporting by the manufacturers, either of which can result in remedial actions.

Historically, staff conducted most investigations after uncertified vehicles or engines were sold. However, in the wake of the VW "Dieselgate" scandal, CARB shifted focus to ensuring compliance with certification and in-use emission requirements. Additionally, CARB responded in part by sending a notice to all auto manufacturers informing them that we intended to begin conducting special testing it had developed to screen for unapproved Auxiliary Emission Control Devices (AECD) and defeat devices on certified vehicles. Since that time, CARB has remained diligent in leveling the playing field for

A Chevy Volt being set up for testing on a chassis dynamometer.

all manufacturers and making sure that vehicles on the road are complying with California's emission standards. Five years later, we are still dedicated to doing so, and have continued to uncover similar behavior.

Daimler Investigation and Settlement



A Daimler Sprinter van tested on a dynamometer in CARB's laboratory.

Daimler diesel vehicles underwent this specialized testing beginning in 2015. Our test results raised concerns that these vehicles might contain noncompliant AECDs, and might not be operating as certified. CARB conducted further testing and entered into discussions with Daimler about the test results. Our investigation uncovered that Daimler programmed its diesel vehicles manufactured between model years 2009 and 2016 with specific engine calibration software that was not disclosed during certification.

Moreover, several of these undisclosed AECDs caused the subject vehicles to appear compliant when being tested on regulatory test cycles, but to operate differently on the road, thereby reducing the effectiveness of emission controls under normal driving conditions on the road; these AECDs are known as defeat devices. As a result, Daimler's vehicles emitted NO_X in excess of emission standards under normal driving conditions, which negatively affected air quality and public health.

Furthermore, CARB's investigation revealed that, in addition to programming defeat devices into their vehicles, Daimler also programmed the on-board diagnostic (OBD) systems in the subject vehicles to work in concert with certain defeat devices to ensure that malfunctions were detected during regulatory test cycles, but not initiated or detected when the emission control system was operating with reduced effectiveness during normal vehicle operation. The result was that the vehicle would not indicate during regular driving trips, to the vehicle operator, or during a Smog Check inspection that the vehicle was emitting excess emissions on the road.

In March 2021, the United States District Court for the District of Columbia signed the consent decree (Joint CD) previously lodged in 2020 by Daimler, CARB, the California Department of Justice, the United States Department of Justice, and the U.S. EPA. The Court also signed the separate consent decree (CA CD) filed by CARB and the California Department of Justice addressing additional separate California remedies. The CDs settle federal and state claims relating to approximately 250,000 diesel vehicles nationwide, 36,946 of which were sold in California.

The Joint CD required Daimler to pay a civil penalty of $875,000,000, with $131,250,000 going to CARB, and to pay CARB an additional $42,707,900 for multiple OBD (i.e. "Check Engine" light) noncompliances. The CA CD required Daimler to pay CARB $1,678,000 for a specified OBD noncompliance, and $110,000,000 to fund mitigation actions or projects that reduce NO_X emissions in California. California received a total settlement amount of $285,635,900 from both CDs. As part of the overall settlement, Daimler must also implement a repair program for the subject vehicles at no cost, offer an extended warranty to vehicles that receive a repair, implement corporate compliance measures to help prevent future violations, and pay steep stipulated penalties for any violations of the CDs' requirements.

CARB has always encouraged regulated parties to self-disclose when violations have been uncovered, whether intentionally through a self-audit program, for example, or perhaps inadvertently. CARB's Enforcement Policy discusses voluntary disclosure and points out that CARB considers a reduction in penalties for violations that are voluntarily disclosed. Building upon this,

CARB sent a guidance letter back on October 14, 2020, to vehicle, engine, and aftermarket parts manufacturers encouraging voluntary disclosure of any potential violations with respect to major regulatory requirements, including the proper disclosure of all AECDs.[23] Several manufacturers have come forward to voluntarily disclose where they did not follow regulatory requirements. CARB enforcement staff is continuing to work through these disclosures, and any applicable penalties will be properly assessed in accordance with the Enforcement Policy. While this particular letter did note a deadline of December 31, 2020, for manufacturers to self-disclose, any voluntary disclosure that is submitted after this date will still be considered on an individual basis. Companies that have already resolved violations with CARB pursuant to this disclosure policy include car manufacturer Porsche AG and power equipment manufacturer Husqvarna.

Other Vehicle and Engine Settlements

Significant cases in several other categories were also settled during 2020, demonstrating the breadth of engine and vehicle types subject to CARB certification. Small off-road engines (SORE) are 25 horsepower or less and used in various applications, including lawn and garden equipment, commercial utility equipment, specialty vehicles like scooters, and golf carts. Passenger vehicle emissions have gone down over the years due to CARB programs, making SORE worse in comparison. Smog forming emissions from SORE will surpass light-duty passenger cars in 2021, according to CARB's emission inventory assessments. Therefore, ensuring compliance with the SORE regulation is of great importance to the health of California residents and the environment.

In April 2020, CARB reached a settlement of $1,927,800 with American Honda Motor Co., Inc. (Honda) to resolve clean-air violations related to the sale of its small off-road engines in California. The violations involved SORE used in generators and lawn and garden equipment. Through extensive tests in its lab, CARB discovered that this equipment did not meet the evaporative control emission standards that Honda had originally agreed to during the certification process. Evaporative emissions of raw fuel, which occur both while an engine is being used and at rest, are known as volatile organic compounds and are a significant precursor of smog.

When a manufacturer certifies SORE, it can set the emissions limit to meet the current regulation, or choose to demonstrate that they have met standards below those required by the current regulation. In that case, the manufacturer earns evaporative credits based on the additional reductions that they assert in the certification process. These credits can then be used for certification purposes to offset emissions on future products. Since Honda's engines did not meet the self-selected lower evaporative emission limits, they forfeited the credits they had earned for claiming to meet stricter evaporative emissions standards, and also gave up additional credits to mitigate the environmental harm.

To resolve the violations, Honda agreed to pay a total settlement of $1,927,800, with $963,900 going to the California Air Pollution Control Fund. The remaining funds, roughly $1 million, will go to the IQAir Foundation, a non-profit that seeks to promote environmental justice by helping to improve environmental health conditions in neighborhoods unfairly affected by pollution as a result of economic, ethnic, or racial factors. The IQAir Foundation will use these funds to benefit three SEPs: (1) the Coachella Schools Flag Program, (2) the Oakland Unified School District Project 2019 – 2023, and (3) the Coachella Valley Mitigation Project Extension 2018 – 2023.

In early 2020, truck manufacturer Navistar, Inc. (Navistar) paid $2,026,800 to resolve allegations that it altered heavy-duty vehicle engines from their certified design, potentially causing excess diesel emissions and negatively impacting air quality. The Illinois-based company modified its vehicle calibrations from their certified design through the use of running changes and field fixes in the engines of its heavy-duty trucks without notifying CARB that the changes were being made, as is

23 "Mail-Out #ECC 2020-06 - Alert: Self-Disclosure of Non-Compliant Software and Other Violations by December 31, 2020," CARB, October 14, 2020, *https://ww2.arb.ca.gov/sites/default/files/2020-10/Mailout%20ECC%202020-06%20-%20Self%20Disclosure%20of%20Violations_R.pdf*

required. The undocumented running changes and field fixes were implemented on new vehicles in production, and were also deployed to post-production vehicles in the field. These undocumented modifications represent unauthorized changes to a previously approved engine design, and are considered violations because of their potential to increase emissions. The violations were discovered during routine engine testing by CARB.

Navistar agreed to pay half of the total penalty to the California Air Pollution Control Fund to support air quality research. The remaining half will be paid to the SCAQMD for the installation and maintenance of high-performance air filtration systems in Southern California schools, especially those located in disadvantaged communities disproportionately impacted by air pollution.

A Ford F-150 truck modified by Flagship, Inc.

In July 2020, Flagship, Inc. (Flagship) of Elkhart, Indiana, settled its case with CARB for importing, delivering, and offering for sale or sale of uncertified vehicles into California. Flagship is a Ford Authorized Specialty Vehicle Manufacturer that modified model year 2016 and 2017 Ford F-150 trucks with exempted aftermarket parts prior to vehicle transfer to the ultimate purchaser. CARB field inspections discovered the issue, with the subsequent investigation finding 50 uncertified vehicles introduced into California in violation of Health and Safety Code sections 43151-43153. Flagship entered into a settlement agreement with CARB and agreed to pay a total penalty amount of $250,000, or $5,000 per unit, for the uncertified vehicles.

Aftermarket Parts Enforcement

The aftermarket parts (AMP) industry consists of manufacturers, distributors, retailers, installers, and end users that are subject to CARB's regulations for both on- and off-road aftermarket parts and critical emission control parts for cars, trucks, and motorcycles. Examples of AMPs include diesel performance tuners, exhaust headers, and turbochargers. The aftermarket parts program ensures that performance modifications do not increase vehicle emissions, a violation of California Vehicle Code Section 27156 and the Federal Clean Air Act. Part manufacturers must submit an application and receive an exemption from CARB in order to legally advertise and sell in California.

A turbocharger blower and wastegate.

CARB greatly enhanced its AMP enforcement program in 2012, in response to increasing sales of non-exempted parts in non-competition applications. Since that time, we have assessed penalties totaling around $20 million over the past 8 years. This enforcement has created, and continues to exert, a strong deterrence to noncompliance across industry. CARB settled 10 aftermarket parts cases in 2020. While the larger and more widely known companies that sell aftermarket parts may be easier to identify, CARB's enforcement is also effective in uncovering illegal sales from smaller operations done through eBay or other independent websites.

Taylor Made Racing, Inc. settled a case with CARB in January 2020 for $7,750, and is a prime example of the many small part manufacturers that CARB holds to same level of compliance as their much larger, corporate competitors. CARB identified violations from Taylor Made Racing Inc.'s sales information for advertising, selling, and offering for sale non-exempted on-highway motorcycle aftermarket tuners in California. These aftermarket tuners altered or modified the original design or performance of the motorcycle's emission control system, and were sold through its website and dealer network between 2014 and 2015.

With any effective enforcement program, if you can curtail illegal sales using a top-down approach, that is not only an effective use of resources, but it also prevents illegal product from being distributed throughout the supply chain. In January 2020, CARB settled a case with distributor Comoto Holdings, Inc. for $1,937,500. Comoto Holdings is the parent company of Revzilla Motorsports, LLC and Cycle Gear, Inc., which cater to motorcycle enthusiasts. CARB found that Comoto's subsidiaries advertised, sold, and offered for sale add-on or modified motorcycle parts without legal exemptions to California's anti-tampering laws.

Competition Vehicle Project

In an effort to promote compliance, provide clarity, increase awareness, and expand outreach, we engaged the AMP industry in a broad discussion with industry about competition vehicles, and aftermarket parts requirements. The project used a public process to engage the stakeholders and interested parties to comprehensively address the excess emissions and unfair marketplace caused by illegal sales and uses of aftermarket parts and tampered vehicles in California.

The goal of the project was to clarify legal requirements and clearly communicate those requirements to manufacturers, wholesalers, distributors, dealers, retailers, installers, repair shops, and consumers to increase compliance with California emissions standards and California anti-tampering laws. In addition to clarity and communicating requirements, the project sought to increase awareness of the issues, CARB's active enforcement program, increased potential statutory penalties, and the expanded outreach, while reducing demand for illegal products and encouraging legal ones.

The Competition Vehicle Project kicked off with two public workshops in July 2017. The workshops provided background and compliance issues, engaged the AMP industry and interested parties, and invited participants to the stakeholder working group. The working group formed and worked collaboratively to comprehensively address the compliance and excess emission concerns, as well as develop approaches to reduce demand for illegal products, while promoting legal products, outreach, and awareness. The working group members included many industry organizations and associations, manufacturers, attorneys, and state agencies. Holding five public meetings, including two in 2020, the working group collaboratively developed CARB's Enforcement Advisory #292 – Competition Vehicles and Performance Aftermarket Parts in California: Sales, Supply, Use Requirements and Penalties, which was finalized and posted on July 10, 2020.[24]

The advisory provides an overview and description of existing California law and potential liabilities to heighten awareness and encourage compliance. The advisory also provides examples of industry practices that strengthen compliance including the sale of only performance products with a CARB EO, refusal of service by repair shops on tampered vehicles, notification to owners of tampering, detailed recordkeeping and monitoring of sale volumes, educating and advising consumers, and clear labeling on products to inform consumers of legal product use.

During the advisory development process, industry expressed an interest in a voluntary labeling standard. Uniform product labeling would help industry professionals identify legal uses for the product being labeled, as well as consumer information to identify those legal uses. Given the

24 CARB, Enforcement Advisory #292 – Competition Vehicles and Performance Aftermarket Parts in California: Sales, Supply, Use Requirements and Penalties, July 10, 2020, *https://ww2.arb.ca.gov/sites/default/files/2020-07/Advisory_292_7.10.20.pdf*

interest and the opportunity to provide members an additional method to educate consumers and strengthen compliance, the Specialty Equipment Market Association (SEMA) updated and revitalized its voluntary labeling standard.[25]

U.S. EPA Compliance Initiative Demonstrates Enforcement Success

CARB's enforcement work and collaborative efforts with industry are making a difference. In 2020, U.S. EPA announced priorities for the next three years, including six National Compliance Initiatives. One of those initiatives is Stopping Aftermarket Defeat Devices for Vehicles and Engines by stopping the manufacture, sale, and installation of aftermarket defeat devices and thereby reducing excess pollution and harm to public health created by illegal modifications to vehicles and engines.

A report supporting U.S EPA's new Tampering Policy compiled information from approximate five years of prior U.S. EPA case work on defeat devices for Class 2b and 3 (8,500 – 14,000 pounds Gross Vehicle Weight Rating (GVWR)) diesel pickup tampering occurring after 2009 and before 2020. The report found California had the lowest population of tampered vehicles, approximately 1.8% of the 2016 California registered Class 2b and 3 vehicles, for the respective categories, and the California tampering rate for those vehicles is three times less than the next lowest state. California's low tampering rates in the U.S. EPA report and success against tampering are the result of CARB's aftermarket parts program, California's Smog Check program, and CARB enforcement.

Chemically Formulated Consumer Product Enforcement

The pandemic significantly affected the retail marketplace all over the world. The demand for consumer products, especially cleaning and disinfecting products, caused shortages felt by everyone in California. Businesses stepped in to meet demand, but, as was seen with the hand sanitizers regulated by the Food and Drug Administration, manufacturers did not always fully understand the associated regulatory issues. CARB enforcement staff worked to investigate potentially noncompliant cleaning products that flooded the retail market in 2020.

Sanitizers and disinfectants used on surfaces are not only regulated by the CARB's consumer product regulations, but must also be registered with the U.S. EPA and California Department of Pesticide Regulation.

In 2020, staff focused on investigations based on past inspections; staff recorded fewer inspections in 2020 compared to 2019 due to the COVID-19 pandemic. In 2020, staff assessed a total of $602,275 in penalties from 20 companies for selling chemically formulated products such as multi-purpose solvents, charcoal lighter materials, and general purpose cleaners.

A notable case for hairspray violations was with Drybar Holdings LLC/Drybar Products LLC (Drybar). In April 2020, CARB and Drybar, of Irvine, California, reached a settlement agreement for $155,380. Drybar sold, supplied, offered for sale and/or manufactured two aerosol hair styling products for use in California containing concentrations of volatile organic compounds (VOC) that exceeded the regulatory standard specified in the Consumer Products Regulation. The violation resulted in 9.14 tons of excess VOC emissions.

25 "Emissions Compliance Resources, "Specialty Equipment Market Association, *https://www.sema.org/emissions-compliance-resources*

Composite Wood Product Enforcement

Composite wood products pose a different hazard to the public than chemically formulated consumer products such as cleaners and hairspray. Unlike consumer products that have a limited lifespan, composite wood products are often permanently installed within households in the form of flooring or cabinetry. Noncompliant composite wood products can emit formaldehyde over long periods of time. For this reason, these products have continued to be a primary focus over the last year.

Composite wood staff verify compliance through one of two approaches. The first approach is a desk audit, for which CARB staff randomly choose several products from a composite wood product retailer or distributor and then audit the documentation for those particular products without purchasing said products. During the desk audit, staff verify compliance steps were taken by all entities in the supply chain that provided the composite wood materials. Staff review documentation of the efforts made by the entities to ensure only compliant material was offered for sale and subsequently 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 other various records provided to CARB.

Samples of composite wood.

The second approach is to verify compliance at stores. During a store inspection, staff conduct preliminary emission tests with a screening tool. The screening tool gives staff an indication as to whether the product has formaldehyde emissions above the California limit. Unlike desk audits, staff purchase and obtain samples of all products that are in question so that further emissions testing can be completed. The purchased products' documentation is then reviewed in a way that mirrors the desk audit process.

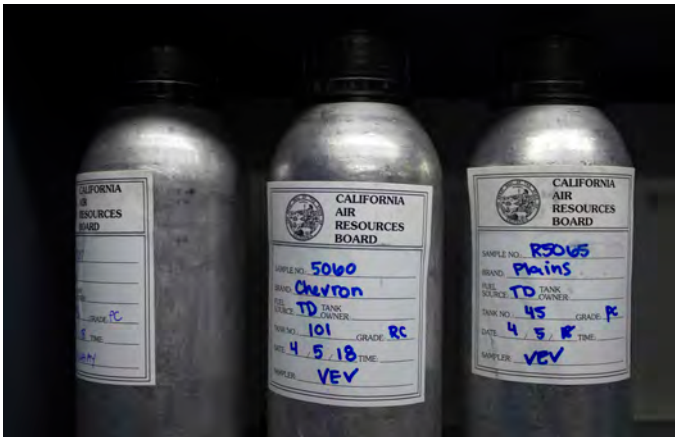
In 2020, staff settled four cases and assessed $357,811. One example was Best Choice Products. Best Choice Products, Incorporated (BCP) of Irvine, California sold, supplied, and offered for sale in California noncompliant finished goods that contained medium density fiberboard. The product, L-Shaped Corner Computer Office Desk, contained formaldehyde emissions above the limits set forth in title 17, California Code of Regulations (CCR), section 93120.2. The case was settled for $150,304. Part of the settlement amount was contributed to the SEP supporting the Central California Asthma Collaborative. BCP has since discontinued sales of the noncompliant product and implemented new procedures that include testing, training, and tracking to ensure that only compliant composite wood products are sold.

In another case, the TJX Companies Inc. (TJX) of Framingham, Massachusetts sold, supplied, and offered for sale in California finished goods that contained medium density fiberboard or thin medium density fiberboard. The finished goods sold by TJX include various home décor and home furnishing items that contained formaldehyde emissions above the limits set forth in title 17 CCR section 93120.2. In addition, TJX was in violation of title 17 CCR section 93120.6 for not taking reasonable and prudent precautions as required by the regulation. TJX imported and sold finished goods containing composite wood products without documentation from their supplier establishing that the products comply with CARB's emission standards. The case was settled for $193,507. TJX has since discontinued sales of the noncompliant finished goods and implemented measures that include vendor education, improved product inspections, and product testing to ensure compliance with the regulation.

In 2020, CARB inspections and screening evaluations also revealed several children's furniture products made of noncompliant composite wood products. When these products were identified, staff immediately issued a cease and desist letter to curb further sales of noncompliant products. Staff is currently conducting multiple investigations involving children's furniture and is communicating with key stakeholders within the furniture industry to address this issue.

Fuels Enforcement

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. The California Reformulated Gasoline (CaRFG) program sets stringent standards for California gasoline that produce cost-effective emission reductions from gasoline-powered vehicles. The CaRFG program sets specifications for sulfur, aromatics, oxygen, benzene, T50, T90, Olefins, and RVP, and established a Predictive Model for the certification of alternative formulation.



CARB fuel sample canisters.

Our CaRFG enforcement program relies on inspections and collection of fuel samples throughout the distribution system. The program also has important certification and reporting requirements. CARB's reformulated fuel enforcement programs provide a powerful deterrent to noncompliance, and help ensure industry continues to take appropriate precautions to comply with regulatory requirements. A few cases settled in 2020 are highlighted below.

In April 2019, Shell self-disclosed an incident at the Martinez Refinery. Shell failed to submit a tank designation notification resulting in the mixing of a Reid Vapor Pressure (RVP) controlled gasoline with a Non-RVP controlled gasoline. Analysis of a sample of the mixture indicated a RVP content that failed to comply with the regulatory control period for RVP in the San Francisco Bay Area Air Basin. CARB alleged that between April 4, 2019, and April 9, 2019, Shell supplied noncompliant California gasoline and that Shell was liable for 13 total violations of title 13 CCR sections 2262.4, 2266.5, and 2268. To resolve its violation, Shell agreed to pay $195,000 to the California Air Pollution Control Fund in 2020.

Additionally, during a routine audit, CARB staff discovered that Shell failed to report the fuel specifications for a blend of gasoline. Shell conducted an internal investigation and upon discovery, self-disclosed to CARB three additional blends that were not reported to CARB. CARB alleged that Shell supplied the noncompliant California gasoline and that Shell was liable for four total violations of title 13 CCR section 2265. To resolve its violation, Shell agreed to pay $20,000 to the California Air Pollution Control Fund.

Enforcing the 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. Our enforcement goal is to maintain market confidence and ensure that no party can gain an unfair advantage through illicit practices. CARB staff had conducted several audits of high-risk facilities outside of California to ensure GHG reduction credits granted by LCFS are real and compliant. Noncompliant parties stand to benefit financially if CARB cannot maintain an enforcement presence outside its state boundaries. Any noncompliance 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. Two cases for LCFS enforcement are highlighted below. Starting in 2020, third-party verification was implemented for LCFS to provide additional assurance of reported claims in carbon intensity (CI) reductions.

In October 2018, CARB conducted a routine onsite audit at the British Petroleum (BP) River Birch Landfill in Avondale, Louisiana. CARB staff discovered a previously undisclosed fuel source during it. Consequently, staff determined that BP misreported and submitted quarterly LCFS fuel transaction reports using a certified fuel pathway CI that deviated from the actual CI of the fuel reported. CARB alleged that BP was liable for 188 total violations of title 17 CCR section 95484. To resolve its violation, BP agreed to pay $98,500 to the California Air Pollution Control Fund and $89,500 to a SEP implemented by the Coalition for a Safe Environment, for a total of $188,000 in penalties.

River Birch Landfill in Avondale, Louisiana.

In December 2018, CARB staff reviewed quarterly reports submitted by AltAir and identified that previously undisclosed volumes had been entered into the reports. The previously undisclosed volume totaled 3.3 gallons of California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) and generated deficits that carried over into the proceeding compliance year. CARB alleged that AltAir misreporting led to a failure to eliminate annual deficits. CARB alleged that AltAir was liable for 1,454 total violations of title 17 CCR sections 95485 and 95494. To resolve its violation, AltAir agreed to pay $66,500 to the California Air Pollution Control Fund and $66,000 to a SEP implemented by Tree Fresno, for a total of $132,500 in penalties.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Stationary Source Programs

California state law gives the 35 local air districts primary authority to regulate stationary sources for criteria pollutants. However, CARB has an important role in providing support to those districts through training and enforcement assistance when requested. State law authorizes CARB to review district permitting programs to ensure that they are sufficient to meet state ambient air quality standards,[26] and enforcement programs to ensure that they are reasonable.[27] As such, state law allows CARB to require any district to provide requested information utilized in the normal operation of the district or required by a state or federal statute or regulation.[28] In addition, CARB has direct enforcement authority over climate programs, many of which impact stationary sources directly or indirectly. Stationary source-focused programs in CARB's Enforcement Division are implemented consistently with legal authority through training and support, program review, and direct enforcement.

Enforcement Division's work in this area has helped ensure combustion equipment is as clean as possible, statewide, and is also highlighting opportunities to move towards zero emission technologies. Thus, the division's work fits into a larger CARB-wide effort to transition away from combustion engines, and can help support it through permit and program reviews.

Training and Support

California's 35 air districts range in size from very large in Los Angeles, the Bay Area and the San Joaquin Valley, to one staff person in several mountain counties. Our training program is designed to support consistent and effective enforcement in all air districts and at CARB by helping to increase stationary source knowledge, and inspection and investigation skills. Key classes include Visual Emissions Evaluation training and certification, basic enforcement and health and safety training, and CalEPA's Basic Inspector Academy.

A CARB smoke trailer used for VEE classes.

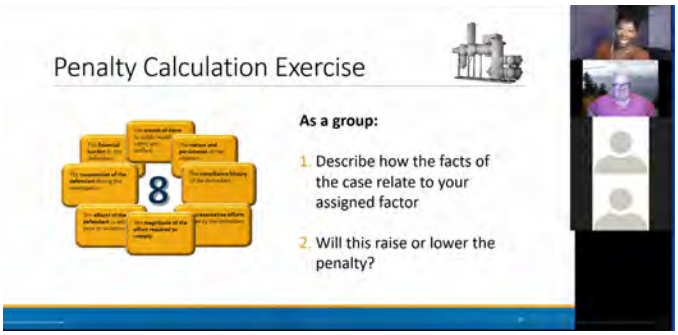
In 2018-2019, CARB staff worked with district representatives to develop a training plan focused on helping to ensure district enforcement staff had access to the information they needed to inspect and enforce district requirements most efficiently using CARB staff training resources. Staff worked to implement this training plan in 2020. One key component of CARB training is Visual Emissions Evaluation.

Visible Emissions Evaluation (VEE) is a method for quantifying a pollution stream from a stationary source based on its visibility to the human eye. In 1974, the U.S. EPA promulgated Reference Method 9, which contains the required method for performing a VEE observation as well as the procedures for certifying an observer. Air quality regulators, in order to determine compliance with federal, state, and local air pollution regulations that contain a visible emission limitation, are required to be VEE certified. Additionally, many local air districts stipulate on the Permit to Operate that a certified VEE observer be onsite when the associated stationary source equipment operates. The certification includes a prerequisite online training course and training that is conducted in the field. To remain current in their certification, VEE observers must re-certify every six months.

26 Health and Safety Code § 41500(b)
27 Health and Safety Code § 41500(c)
28 Health and Safety Code § 30605

With the COVID-19 pandemic, in-person trainings were significantly impacted. Starting in April 2020, several in person training sessions were canceled, which meant that a large number of district inspectors could not be certified. Staff worked closely with CARB's industrial hygienist to develop new protocols for staff and student safety, including an online prerequisite advising students of the required use of personal protective equipment, social distancing, and class size reductions at all VEE certification sessions. As stay-at-home orders and group gathering restrictions eased later in the year, the VEE team rescheduled the April sessions. The number of locations remained unchanged, but the sessions for the year increased to 41 due to the smaller class sizes. Most importantly, approximately 1,000 VEE students were trained and certified during the pandemic in 2020 without any reports of illness. The pandemic continues to impact VEE scheduling. A regular schedule, as initially published in 2020, is not expected until 2022.

CARB's Training Section successfully released four courses in 2020 for air district staff. These courses fall within the priority category of "Enforcement Fundamentals" within the Training Plan. Two of the courses were new releases and two were online-conversion releases. The new releases, "Essentials for Air District Inspectors" and "Stationary Source Permitting Overview for Inspectors," were scheduled to launch as in-person trainings in March 2020. Because of COVID-19, instructors redesigned both courses for the virtual classroom, which required new technology, approaches, and skills. Both classes relied heavily on classroom exercises and student exchange, so it was critical that the redesigned virtual trainings used technology that permits breakout sessions and student interaction. Training Section instructors trained more than 200 students between the two courses.



A CARB enforcement training class via Zoom.

Gasoline dispensing facilities (GDF) are ubiquitous in California, and most district inspectors will conduct GDF inspections at some point in their careers. In 2020, the Training Section converted two in-person GDF courses to online training. More than 150 students have completed the courses since they were released in the summer and fall of 2020. The two courses were selected for conversion due to the static nature of their content and expected benefit to a high number of district staff.

One area that saw an increase in student attendance was live non-VEE trainings, which after March 2020 were held virtually. The 2020 live training student count increased by more than 200 to nearly 900 students, largely due to the introduction of the Air Quality Webinar Series and the California Oil and Gas Seminar. These two virtual events accounted for 512 of the 896 live student attendees. See Table 3 below.

Table 3: Total Student Counts Across Enforcement Training Programs

Category	2018	2019	2020
Online Training & Recorded Webinars	1,721	1,887	1,633
Live (In-Class and Virtual) Training (Non-VEE)	1,245	687	384
Live Virtual Webinars & Seminars	0	0	512
Live VEE Certifications & Training	1,816	1,893	1,228
Internal Training (Live & Online)	55	103	87
Total	4,837	4,570	3,844

In 2020, we collaborated with air districts, the California Air Pollution Officers Association, and other CARB staff to identify and harness subject matter expertise for four training events that reached more than 500 air quality regulators. Three of the four events were part of the newly launched Air Quality Webinar (AQ Web) Series.

The AQ Web Series is designed for district staff and consists of 90-minute webinars with presentations, followed by question-and-answer and discussion sessions. Presenters consist of individuals or a panel of speakers, and the sessions are recorded for future viewing. The 2020 topics included updates to the Portable Equipment Registration Program, inspecting continuous emissions monitoring systems, and district staff access for viewing facility data in CARB's electronic reporting tool, Cal e-GGRT.

The fourth event was the California Oil and Gas Seminar, which was held in September 2020. The virtual event included presentations by district and CARB staff and was attended by 154 air quality regulators.

Program Reviews

In our discussions with communities, we have heard concerns about mobile source enforcement, and have worked diligently to address them. These include smoking trucks and the need for increased CARB presence in heavily impacted areas, such as the border region. We also often hear about frustrations with stationary source related issues that are not being heard or addressed. As a result, we have looked for areas where we can increase our oversight role, consistent with state law to address these types of issues. In 2020, we completed three such reviews.

San Joaquin Valley Emission Reduction Credit System

In January 2019, at the Board's request, we initiated a review of the San Joaquin Valley Air Pollution Control District's (SJVAPCD) Emission Reduction Credit (ERC) system. This project included a review of the federal offset equivalency demonstration and an overview of the ERC system in the context of the broader district program for reducing emissions from stationary sources, including New Source Review, permitting, and regulatory requirements.

In June 2020, we reported our review findings to the Board: (1) the program needs to be more transparent to the public and industry and more rigorous, (2) the implementation procedures and policies need to be upgraded, and (3) specific calculations and assumptions in the federal offset equivalency demonstration need to be reviewed and revised. On June 26, 2020, CARB staff presented these findings to the Board.[29] In response to these findings, the Board issued Resolution 20-11, which contained commitments by both CARB and SJVAPCD to address several items, including the district's reevaluation of its federal offset equivalency demonstration with an improved public process and CARB staff's continued engagement with the district through this process.

In response to these overarching findings, SJVAPCD committed to taking a series of actions including improving their equivalency demonstration, expanding the public process for the program, addressing findings regarding specific projects in the equivalency demonstration, and convening a working group to support the implementation of district commitments. On September 17, 2020, the District Board voted to provisionally withdraw the emission reductions from the electrification projects and orphan shutdowns in question from the district's equivalency system. As a result, the district now requires facilities to provide sufficient ERCs valued at time of use to offset emission increases through the district's New Source Review program.

The SJVAPCD is currently working to reform its ERC system to ensure the system both ensures no net increase in emissions from major modifications and new major sources as required by the Clean Air Act, and to ensure a sufficiently liquid market for ERCs to ensure offsets are available to enable

29 "Review of the San Joaquin Valley Air Pollution Control District Emission Reduction Credit System, CARB Enforcement Division, June 2020, *https://ww2.arb.ca.gov/sites/default/files/2020-06/SJV_ERC_FINAL_20200604.pdf*

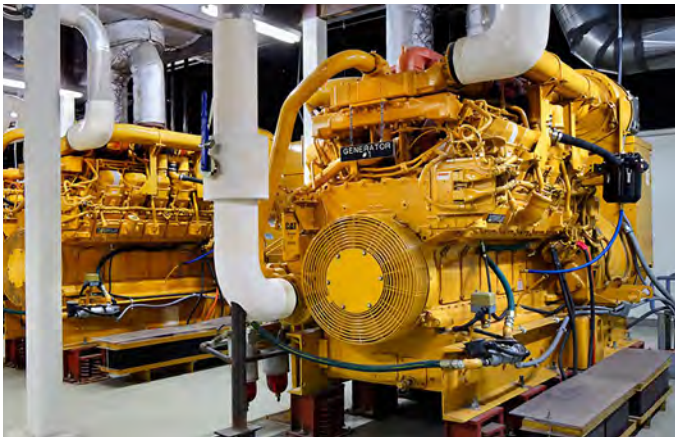
economic growth in the Valley. CARB staff are currently working with the district, U.S. EPA, and both industry and community stakeholders in this process.

Imperial Valley Air Pollution Control District Enforcement

In May 2018, we initiated a review of the Imperial County Air Pollution Control District's Enforcement Program. The goal of the review was to ensure that emission sources regulated by the air district comply with air pollution control requirements. We reviewed the district's enforcement and permitting policies, evaluated permits issued by the district, and observed district inspections. We concluded that the district's enforcement program has a strong foundation. The district's four compliance inspectors inspect nearly all of the 800 district issued permits, at minimum, annually. Facilities with federal "Title V" permits, and which qualify as synthetic minor facilities, are inspected twice per year. District staff respond to all complaints within 24 hours of submittal, and issue NOVs and Notices to Comply (NTC) whenever they identify a violation of a permit, regulation, or statute. District inspectors attend and observe all source tests conducted at permitted facilities. These actions help ensure that permitted businesses comply with the permits to operate. From 2016 to 2018, district staff issued 611 NOVs and NTCs, which resulted in over $320,000 in penalties collected.

While the district's enforcement program is built on a strong foundation, CARB and district staff identified opportunities to further strengthen the program by clarifying permit conditions, and by making enforcement and permitting information more readily available to the regulated community and the public. Our findings, and the joint state and local commitments to enhance the district's enforcement program are posted online.[30]

Bay Area Data Centers



Diesel engines used for data center backup power.

Data centers are centralized locations housing computing and networking equipment for the purpose of collecting, storing, processing, and distributing large amounts of data via the internet. Having a reliable source of backup or emergency electric power is a critical feature of every data center during an interruption of utility grid supplied power. A typical design for a backup power system at a data center includes a combination of batteries, and a number of backup or emergency diesel generator engines. Given the size and number of these diesel emergency generators at the larger data centers, the criteria pollutant and toxic air contaminant emissions associated with their operation can result in significant impacts on ambient air quality and public health. These public health issues are especially concerning given that many of the data center projects are located near disadvantaged communities already suffering from disproportionate air pollution burdens.

In California, power plants and energy projects with generating capacities greater than 50 megawatts (MW) are subject to California Energy Commission (CEC) permitting. As a part of that permitting, CEC is the lead agency responsible for ensuring that the key environmental reviews required by the California Environmental Quality Act (CEQA) are properly performed. Because the larger data centers can have diesel fueled backup or emergency power generating systems greater than 50 MW, CEC is the CEQA lead agency for these projects.

30 CARB, "Imperial County Air Pollution Control District Enforcement Review," February 24, 2021, *https://ww2.arb.ca.gov/sites/default/files/2021-02/draft_imperial_white_paper_02_24_21_EN_R.pdf*

In early 2020, staff became involved in the data center review process due to the increased number of data centers under review by the CEC, as well as public concerns over increased operation of backup engines at data centers. After review, CARB enforcement staff worked with CEC staff to address the following topics:

- Aligning the CEC CEQA review/evaluation process and the Bay Area Air Quality Management District (BAAQMD) CEQA guidelines (as most of the data centers being permitted are within the BAAQMD);
- Strengthening the ambient air quality modeling analyses in the areas of emergency multi-engine operation and using conservative modeling approaches for evaluating single generator maintenance operation;
- Ensuring the most updated Best Available Control Technology (BACT) guidelines are used, which comply with the regulatory requirements of BACT; and
- Strengthening evaluations of alternative technologies to examine alternative cleaner technologies.

CARB staff worked with CEC and BAAQMD staff to address these areas. As a result of this effort, a number of positive developments have occurred, including a recently issued BAAQMD BACT determination requiring cleaner Tier 4 diesel generators for the larger units typically used by data center projects, further focus on the approach used by the CEC to model ambient air quality impacts for data centers. CARB staff is also working with CEC and the Public Utilities Commission to encourage the use of combustion equipment that is as clean as possible, including the potential use of zero emission technologies. For example, in early 2021, CEC held a workshop to discuss cleaner alternatives to the use of diesel engine generators.

Staff's work fits into a larger CARB-wide effort to transition away from combustion engines, and by which can be further encouraged through permit and program reviews.

Direct Enforcement

CARB establishes regulations that impose requirements and limit GHG emissions from industrial sources. CARB enforcement staff inspect facilities. Some of these programs are enforced directly by CARB, while in other programs, CARB has delegated enforcement to local air districts, and in these cases, any violations identified are referred to the district for local resolution.

Landfill Methane Regulation Enforcement Review

CARB's Landfill Methane Regulation (LMR) is designed to reduce methane emissions from municipal solid waste (MSW) landfills in California. The regulation requires owners and operators of landfills with over 450,000 tons of waste-in-place landfills to install and optimally operate gas collection and control systems, monitor surface methane concentration, repair emission exceedances, source test, keep records of these actions, and report certain information to CARB or local air districts.

The LMR allows air districts to voluntarily enter into a memorandum of understanding (MOU) with CARB to implement and enforce the regulation and assess fees to cover costs. The MOUs make the air district the primary enforcement agency.

Currently, twenty-three local air districts have entered into MOU's with CARB to enforce requirements at 174 landfill facilities, with CARB to enforce the LMR at the remaining landfills subject to the regulation (see Appendix K).

A landfill wellhead for maintaining methane gas flow.

In 2020, CARB staff joined air district staff on seven landfill inspections in five different districts (see Table 4). CARB staff inspected two landfills in non-MOU districts, two landfills as part of the CalEPA Environmental Justice Task Force, two landfills as part of CARB oversight efforts, and one based on complaints from the local community. Exceedances found at five of the seven facilities were referred to the appropriate MOU districts. CARB staff are following up on the exceedances in the non-MOU districts (see Appendix E).

Table 4: 2020 CARB Landfill Inspections

Landfill	Air District	Status
Union Mine Landfill	El Dorado	No exceedance found
Neal Road Landfill	Butte County	On-going investigation
Foothill Landfill	San Joaquin Valley	Referred to district
West Central Landfill	Shasta County	Resolved in accordance to regulation timeframe
Johnson Canyon Landfill	Monterey Bay	Referred to district
Monterey Peninsula LF (Marina)	Monterey Bay	Referred to district
Avenal Regional Landfill	San Joaquin Valley	No exceedance found

Refrigerant Management Program

The Regulation for the Management of High Global Warming Potential Refrigerants for Stationary Sources (RMP) establishes requirements to reduce GHG emissions from stationary facilities containing refrigerant systems with more than 50 pounds of refrigerant with a high global warming potential. The RMP regulation requires facilities to conduct periodic leak inspections and leak repairs, requires annual reporting and fee payment, and requires service providers, refrigerant reclaimers and distributors to report and keep records of all refrigerants that are sold or reclaimed.

In 2020, CARB staff opened 140 investigations, issued 14 NOVs and conducted four on-site facility inspections (see Appendix E). Of the investigations opened, 54 were closed in 2020: 13 were closed because the entity was out of business, 34 cases were closed because the entity was found to be in compliance or not subject to the regulation, and seven cases were settled for zero penalty as minor violations. All cases resolved had no emission violations or past violations, and were promptly corrected.

The Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR)

The reporting of GHG emissions by major sources, as required by the California Global Warming Solutions Act of 2006, is applicable to electricity generators, industrial facilities, fuel suppliers, and electricity importers. All GHG emissions data reports must comply with the regulatory requirements and be submitted via the Cal e-GGRT reporting system. CARB implements and oversees a third-party verification program to support mandatory GHG reporting. All GHG reports subject to the Cap-and-Trade Program must be independently verified by CARB-accredited verification bodies and verifiers.

In 2020, CARB settled a case with BP West Coast Products LLC of Chicago, Illinois (BP) for $624,000. BP failed to accurately report the amount of carbon dioxide emissions from their facility in Wilmington for reporting periods 2011 and 2012. The error was discovered and disclosed in 2017 to CARB. BP fully cooperated with CARB's investigation. To resolve the matter, in February 2020, BP agreed to pay a penalty of $624,000, of which, $312,000 funded a SEP to install and maintain high-performance air filtration systems in schools in the Coachella Valley.

Portable Equipment

In California, CARB has primary authority over mobile emission sources whereas local air districts have primary authority over stationary sources. Portable engines and equipment units may be subject to local air district permitting requirements, and/or state requirements. We administer the Portable Equipment Registration Program, which is implemented by CARB and enforced by local air districts. Cargo tanks, pulled by trucks to transport gasoline by truck between terminals and gasoline stations, are also regulated by CARB, and enforcement staff administers and enforces the program.

Portable Equipment Registration Program

The Portable Equipment Registration Program (PERP), as set in title 13 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. The program generated $9 million in revenue in 2020 (see Appendix D). This revenue is distributed between CARB and air districts to pay for program implementation and enforcement.

A portable diesel generator.

PERP placard color-coded by engine tier.

The Portable Diesel Engine Airborne Toxic Control Measure (ATCM) requires portable engine owners to retire, replace, or retrofit older higher emitting engines based on one of two compliance paths. Each registration's certificate and set of operating conditions indicates the applicable compliance path, and is accompanied by a color-coded placard to assist fleet owners and local air districts with easily identifying the tier of the certified engine. Approximately 75% of older, higher emitting registered portable engines will be retired from use and replaced by new, cleaner engines using a phase-out schedule, which establishes a final expiration date based on engine tier, the year the engine was built, and its brake horsepower rating. The other 25% of these engines are subject to a PM emission fleet average standard with scheduled compliance dates of January 1 for 2020, 2023, and 2027, which will reduce emissions. Before the 2017 amendments to the PERP Regulation and Portable Diesel Engine ATCM, all fleets were subject to a PM emission fleet average standard schedule. More than half of PERP fleets were unable to comply with the standards subjecting companies to significant enforcement and implementation issues. Post-amendments, the PM emission fleet average standard option was only approved for large fleets that

demonstrated their understanding of the nuances of the provision and ability to stay in compliance. When the first PM emission fleet average standard became effective on January 1, 2020, these fleets achieved an estimated 90% compliance rate. PERP staff provided assistance to the remaining 10% of noncompliant fleets and brought the fleets into compliance over the course of two months. This effort PERP staff conducted resulted in 100% compliance for all active PERP registrations within fleets opting into the PM emission fleet average standard.

PERP relies heavily on mail services and physical applications, which were significantly impacted by COVID-19 in-office staffing restrictions. The program adapted to these challenges by revising several internal processes to enable the applications to continue to move through the application process while upholding COVID-19 capacity restrictions for in-office work. Some of the impacted and revised processes include initial application screening, data entry, payment processing and closeout of the application.

Since the beginning of the pandemic, the program has averaged approximately 24 days to generate a billing invoice for registration fees that are due within 30 days of the date CARB generates the billing invoice. The program has averaged approximately 60 days to issue registration from the date of receipt of payment for registration fees. In addition to this timeframe for both billing invoices and registration packages, the program experienced delays due to challenges with mail delivery beyond the control of CARB as well as in-office restrictions.

Cargo Tank Vapor Recovery Program (CTVRP)

The CTVRP is a certification program responsible for reviewing and processing applications for certification of vapor recovery systems on cargo tanks. Cargo tanks are used for the transportation of gasoline from bulk loading terminals to the gasoline dispensing facilities or gas stations. The CTVRP oversees a certification process that requires the submittal of a 48-hour test notification to CARB, completion of the annual test procedures, the submittal of passing test results, and the submittal of a completed certification application with a certification fee. The vapor recovery system needs to be tested annually to ensure all components are functioning properly to prevent excess 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.

A cargo tank undergoing maintenance.

In 2020, despite COVID-19 office restrictions, staff processed 6,240 certifications. Staff also maintained a limited field presence, witnessing 100 cargo tank annual certification tests to ensure that the tests were conducted in accordance with the testing protocol. While primarily viewed as a training and outreach opportunity, witnessing still resulted in three ongoing investigations regarding the venting of gasoline vapors directly into atmosphere during the pre-test cleaning process.

Also in 2020, staff developed a Compliance Assistance Program (CAP) for cargo tanks consisting of training, outreach, and an industry self-inspection program; however, CAP has been put on hold until after the pandemic, when people can again gather for hands-on training.

Conclusion

CARB continually improves its enforcement programs to better serve all Californians. We measure compliance in important programs, and over the past several years, compliance rates have improved. We strive to understand community concerns, and have responded by targeting our work in these disadvantaged communities. We focus every day on ensuring the emission reductions envisioned at program adoption are achieved in practice, and we apply enforcement programs fairly, consistently, and transparently in an effort to provide a level playing field across industry.

The COVID-19 pandemic was a major challenge for us all, and like the rest of California, CARB's enforcement programs adapted. We maintained a strong enforcement presence both in the field and virtually, and settled hundreds of cases and citations large and small – including the landmark Daimler case. We completed several reviews of air district programs. We assessed more than $22 million in penalties from routine cases and diverted $6.8 million to disadvantaged community projects. So despite what could have been considered a major setback, CARB enforcement was instead still able to accomplish many of its intended goals for 2020, including consequential improvements in truck and bus compliance, continued surveillance of CARB's screening and special testing programs, and enhanced enforcement work in the state's underserved communities.

Nonetheless, the increasing impacts of climate change, wildfires, air toxics, and persistent socioeconomic inequalities show us just how much more we have left to do. We hope though that the consistent implementation of our enforcement programs has been and will continue to be an effective part of the ongoing solutions to these issues so that one day we will achieve our vision of Clean Air for All Californians.

Appendices

Appendix A

2020 Enforcement Programs Statistics

Program	Category	Total Closed Enforcement Actions	Judgment Penalties Assessed[31]	Settlement Penalties Assessed[31]	Total Penalties Assessed
Certifications	Indoor Air Cleaners	–	–	–	–
Certifications	Vehicles [32]	4	–	$5,439,340	$5,439,340
Certifications	Engines	10	$6,000,000	$2,198,362	$8,194,862
Certifications	Parts[33]	10	$40,000	$2,524,250	$2,564,250
Certifications	Portable Fuel Containers	–	–	–	–
Fuels	Fuels Specifications	6	–	$348,000	$348,000
Fuels	Low Carbon Fuel Standard (LCFS)	2	–	$320,500	$320,500
Fuels	Cargo Tank and Vapor Recovery	–	–	–	–
Stationary Sources	Asbestos	2	–	$15,500	$15,500
Stationary Sources	Consumer & Aerosol Coating Products	20	–	$602,275	$602,275
Stationary Sources	Composite Wood Products	4	–	$357,811	$357,811
Stationary Sources	Refrigerant Management	1	–	–[34]	–[34]
Stationary Sources	Sulfur Hexafluoride	–	–	–	–
Stationary Sources	Landfill Methane Control	–	–	–	–
Diesel	Diesel Fleet Investigations	12	–	$253,650	$257,150
Diesel	Ports & Marine	17	–	$2,859,595	$2,859,595
Mandatory Reporting Requirements	Mandatory Reporting Requirements	1	–	$624,000	$624,000
Subtotal	Enforcement Cases	89	$6,040,000	$15,543,283	$21,583,283
Citation Program	Cargo Tank	–	–	–	–
Citation Program	Dealer & Fleet Tampering	1	–	$1,000	$1,000
Citation Program	Recreational Marine Engines	–	–	–	–
Citation Program	Vehicle & Parts	7	–	$20,500	$20,500
Citation Program	Heavy-Duty Diesel Inspection	862	–	$405,092	$405,092
Subtotal	Enforcement Citations	870	–	$426,592	426,592
Total	Enforcement Actions	959	$6,040,000	$15,969,875	$22,009,875

31 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).

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

33 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 *http://www.arb.ca.gov/msprog/aftermkt/devices/amquery.php*.

34 This case has a suspended penalty of $10,000 per day provided all conditions of the corresponding Settlement Agreement are met.

Appendix B-1

2020 Field Operations Statistics

Program Category	Product Samples Tested	Inspections Completed	Citations & NOVs Issued	Pending Citations & NOVs on 01 Jan 2020	Rescinded, Compliant, or NFA Citations & NOVs	Closed Citations & NOVs	Total	Pending Citations & NOVs on 31 Dec 2020	Penalties Assessed
Ocean-Going Vessel Program	–	245	4	3	–	6	6	1	$282,670
Commercial Harbor Craft Program	–	20	1	4	–	3	3	2	$155,650
Shore Power Program	–	32	–	3	–	2	2	1	$2,243,950
Cargo Handling Equipment Program	–	756	4	1	–	5	5	–	$177,325
Marine TRU Program (see also Heavy-Duty Diesel Field Inspection Programs)	–	684	–	–	–	–	–	–	–
Total: Marine Programs	–	1,737	9	11	–	16	16	4	$2,859,595
Vehicles (CNC, Non-CNC, OHRV)	–	53	12	19	–	11	11	20	$5,459,840
Dealer & Fleet Citations (Tampering)	–	47	6	6	–	2	2	10	$1,000
Recreational Marine Engines (watercraft)	–	16	1	5	–	–	–	6	–
Engines	35	101	7	8	–	8	8	7	$8,194,862
Parts	–	–	2	37	3	10	13	26	$2,564,250
Do-it-yourself Canned Refrigerants	–	120	11	1	–	–	–	12	–
Portable Fuel Containers	–	51	1	26	2	–	2	25	–
Total: Vehicle & Parts Programs	35	388	40	102	5	31	36	106	$16,219,952
Consumer & Aerosol Coating Products	44	–	20	9	1	20	21	8	$602,275
Composite Wood Products	2	–	1	3	–	4	4	–	$357,811
Indoor Air Cleaners	3	–	2	–	–	–	–	2	–
Total: Consumer Product Programs	49	–	23	12	1	24	25	10	$960,086

Program Category	Product Samples Tested	Inspections Completed	Citations & NOVs Issued	Pending Citations & NOVs on 01 Jan 2020	Rescinded, Compliant, or NFA Citations & NOVs	Closed Citations & NOVs	Total	Pending Citations & NOVs on 31 Dec 2020	Penalties Assessed
Refineries	19	5	3	4	–	5	5	2	$330,000
Terminals	23	5	1	1	–	1	1	1	$18,000
Service Stations	4	1	–	–	–	–	–	–	–
Marine Vessels	70	6	–	–	–	–	–	–	–
Railcars	–	–	–	–	–	–	–	–	–
Other	20	10	–	–	–	–	–	–	–
RFG Certifications	–	3,618	–	–	–	–	–	–	–
Red-Dyed Diesel Fuel	–	644	–	–	–	–	–	–	–
Total: Fuels Programs	136	4,289	4	5	–	6	6	3	$348,000
Site Audits	–	1	–	1	–	1	1	0	$188,000
Paper Audits	–	12	–	3	–	1	1	2	$132,500
Other	–	–	–	–	–	–	–	–	–
Total: LCFS Programs	–	13	–	4	–	2	2	2	$320,500
Cargo Tank Inspection Program	–	–	–	–	–	–	–	–	–
Cargo Tank Pressure Test Program	–	–	–	–	–	–	–	–	–
Annual Test Observation Program	–	100	2	–	–	–	–	2	–
Total: Cargo Tank Programs	–	100	2	–	–	–	–	2	–
Total: All Programs	220	6,527	78	134	6	79	85	127	$20,708,133

Appendix B-2

2020 Field Operations Statistics

Heavy-Duty Diesel Inspection Programs

Program Category	Inspections Completed	Citations Issued	Ratio of Citations to Inspections	Pending Citations on 01 Jan. 2020	Rescinded, Compliant, NFA	Closed	Total Resolved	Pending Citations on 31 Dec. 2020	Penalties Collected
Heavy-Duty Vehicle Inspection Program	2,031	107	5%	264	–	79	79	292	$36,253.00
Emission Control Label Program	1,138	108	9%	921	–	96	96	933	$48,419.00
Commercial Vehicle Idling Program	7,010	192	3%	1,356	226	90	316	1,232,	$30,100.00
Solid Waste Collection Vehicle Program	2	–	0%	19	2	–	2	17	–
Truck & Bus Program	4,105	141	3%	4,558	1,897	292	2,189	2,510	$43,400.00
Tractor-Trailer (GHG) (SmartWay®) Program	673	57	8%	348	74	53	127	278	$64,820.00
Drayage Truck Regulation Program	73	3	4%	309	27	2	29	283	$1,000.00
Transport Refrigeration Unit Program	1,103	546	50%	4,432	971	200	1,171	3,807	$176,600.00
Off-Road Diesel Vehicle Program	2,458	195	8%	826	30	50	80	941	$4,500.00
Diesel Exhaust Fluid/ Selective Catalytic Reduction	137	–	0%	–	–	–	–	–	–
School Bus Idling Program	3	1	33%	–	–	–	–	1	–
Other Programs	–	–	0%	–	–	–	–	–	–
Total: Heavy-Duty Diesel Field Program Inspections	18,733	1,350	7%	13,033	3,227	862	4,086	10,294	$405,092.00

Total California Vehicles Inspected	6,751
Total Out-of-State Vehicles Inspected	2,557
Total Off-Road Vehicles Inspected	2,390
Total Number of Vehicles Inspected [35]	11,698[35]

35 Each vehicle can be inspected in more than one program

Appendix B-3

2020 Field Operations Statistics: Environmental Justice Area Inspection Statistics

Heavy-Duty Diesel Vehicles and Ships Inspected

Description	EJ Areas	Total	Percentage in EJ Areas
Heavy-Duty Diesel Vehicles Inspected	8,006	11,698	68%
Ships Inspected	1,737	1,737	100%
Total for Heavy-Duty Diesel & Ships Inspected	9,743	13,435	73%

Heavy-Duty Diesel Vehicle Program Summary

Description	EJ Areas	Total	Percentage in EJ Areas
Heavy-Duty Total Inspections[36]	12,943	18,729	69%
Heavy-Duty Diesel Citations	844	1,350	63%

Appendix B-4

2020 Field Operations Statistics

Heavy-Duty Diesel Field Program Inspections

Program Category	CARB		SDAPCD		NCUAQMD	
	Inspections Completed	Citations Issued	Inspections Completed	Citations Issued	Inspections Completed	Citations Issued
Heavy-Duty Vehicle Inspection Program	1,468	50	563	57	–	–
Emission Control Label Program	788	85	350	23	–	–
Commercial Vehicle Idling Program	6,510	178	500	14	–	–
Solid Waste Collection Vehicle Program	2	–	–	–	–	–
Truck and Bus Program	3,778	80	327	61	–	–
Tractor-Trailer (GHG) (SmartWay®) Program	673	57	–	–	–	–
Drayage Truck Regulation Program	73	3	–	–	–	–
Transport Refrigeration Unit Program	1,022	526	81	20	–	–
Off-Road Diesel Vehicle Program	689	89	1,764	106	5	–

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

Program Category	CARB		SDAPCD		NCUAQMD	
	Inspections Completed	Citations Issued	Inspections Completed	Citations Issued	Inspections Completed	Citations Issued
Diesel Exhaust Fluid/ Selective Catalytic Reduction	137	–	–	–	–	–
School Bus Idling Program	–	–	3	1	–	–
Other Programs	–	–	–	–	–	–
Total – Heavy-Duty Diesel Field Program Inspections	15,140	1,068	3,588	282	5	–

Appendix C

2020 Complaint Program Statistics

CalEPA & CARB Hotline Services 2020	Complaints Received	Complaints Referred to Air District	Investigated By CARB	Other Dispositions[37]	Total Complaints Resolved
Stationary Source Complaints	1,390	1,139	225	26	1,390
Vapor Recovery Complaints	68	68	0	0	68
School Bus Idling Complaints	0	0	0	0	0
Commercial Vehicle Idling	302	0	302	0	302
Smoking Vehicle Complaints	5,075	0	5,075	0	5,075
Heavy-Duty Diesel Program	709	1	593	115	709
All Other Complaints[38]	15	0	14	1	15
Total	7,559	1,208	6,209	142	7,559

37 Complaints referred to an external agency or those without enough information to take action.
38 Includes Weights and Measures complaints and those that fall outside the purview of CARB.

Appendix D

2020 Portable Equipment Registration Program Statistics

Table D-1: Portable Registration – New Applications (January 1, 2020 - December 31, 2020)

Action	Application Count	Registration Unit Count	Engine Unit Count	Equipment Unit Count	TSE[39] Unit Count
Received	2,100	5,086	4,023	1,055	8
Issued	1,368	3,331	2,717	608	6
Deemed Incomplete[40]	170	236	203	30	3

Table D-2: Portable Registration – Renewal Applications (January 1, 2020- December 31, 2020)

Action	Application Count	Registration Unit Count	Engine Unit Count	Equipment Unit Count
Issued[41]	2,966	5,505	4,775	730
Not Renewed	1,892	2,893	2,490	403
Deemed Incomplete	133	212	201	11
TSE Annual Reporting[42,43]	32	26	3,333	0

Table D-3: Portable Registration – Fee Totals

Renewal Activity Net Fees	$5,265,912.84
All Other Activity Net Fees	$3,912,626.58
Total Net Revenue	$9,178,539.42

39 Tactical Support Equipment (TSE)
40 Includes some applications from latter part of previous year – data based on date deemed incomplete.
41 Multiple unit renewal applications include units that are renewed and those that are not renewed.
42 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 12/31/2019 (end of previous calendar year).
43 Includes only active TSE registrations which may include TSE registrations with 0 units; expired TSE registrations are not included.

Appendix E

2020 Stationary Source Enforcement Support Statistics

Table E-1: Air District Hearing Board Programs

Variances Received and Reviewed	139
Notices Reviewed	141
Abatement Orders Received and Reviewed	11

Table E-2: Landfill Methane Gas Program Services

Inspections Completed	7
Investigations Completed	7
Violations Referred to the District	3
Violations Resolved	0

Table E-3: Asbestos National Emissions Standard for Hazardous Air Pollutants Program

Renovation and Demolition Notifications Received and Reviewed	215
Inspections Completed	0
Violations Resolved	2
Task Force Workshops Conducted	1

Table E-4: Other Stationary Source and Equipment Inspections

Stationary Source Inspections and Investigations	10
Other Airborne Toxic Control Measure Inspections/Investigations	0

Table E-5: Refrigerant Management Program

Inspections Completed	4
Investigations Completed	140
Violations Resolved[44]	67

Table E-6: Sulfur Hexafluoride Regulation Programs

Inspections Completed	0
Investigations Completed	3
Violations Resolved	1

Table E-7: Sulfur Hexafluoride Regulation Programs

Inspections Completed	0
Investigations Completed	0
Violations Resolved	1

44 Includes minor violations resolved with no penalty.

Appendix F

2020 Training Program Statistics

Table F-1: Training Totals by Category

Category	Sessions	Students
Online Training and Recorded Webinars	–	1,478
Live (In-Class and Virtual) Training (Non-VEE)	13	384
Live Webinars and Seminars	4	512
Live VEE Certifications and Training	41	1,228
Internal Training	3	87
Training Total	61	3,689

Table F-2: Online Training Summary

Title	District	CARB	Other[45]	Total
AP101 - Air Academy Online Training (AAOT): Online	57	84	263	404
AP102 - Air Quality Training Program (AAOT): Online	63	43	138	244
AP106 - CalEPA Fundamental Inspector Course (FIC): Online Training	53	15	295	363
CR103 - Chrome Plating ATCM Certification: Online (Recorded)	21	8	49	78
MM104 - Visible Emissions Evaluation: Online	45	8	158	211
PS105 - Stationary Control Source Technology (Online)	82	14	1	97
Online Training Total	321	172	904	1,397

Table F-3: Live (In-Class and Virtual) Training Totals

Title	Sessions	Students
AP108 - Stationary Source Permitting Overview	2	55
AP109 - Essentials for Air District Inspectors	4	148
AP206 - CalEPA Basic Inspector Academy (BIA): In Class	6	163
MM203 - Health Risk Assessments: Train-the-Trainer	1	18
MM105 - Visible Emissions Evaluation: In Class	5	105
MM106 - Visible Emissions Evaluation: Day Certification	33	1,063
MM107 - Visible Emissions Evaluation: Night Certification	3	60
CARB/District Oil and Gas Seminar	1	154
Live Training Total	55	1,766

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

Table F-4: Air Quality Webinar (AQ Web) Series Summary

Title	Sessions	Students
AQ Web Series (MM100): PERP Live Webinar	1	127
AQ Web Series (MM100): CEMS Live Webinar	1	193
AQ Web Series (MM100): Cal eGGRT Live Webinar	1	38
AQ Web Series (MM100): PERP Webinar Recording	–	32
AQ Web Series (MM100): CEMS Webinar Recording	–	19
AQ Web Series (MM100): Cal eGGRT Webinar Recording	–	5
AQ Web Series (MM100): Smoke Mgmnt. Webinar Recording	–	25
AQ Web Total	3	439

Table F-5: Internal Enforcement Division Training Summary

Title	Sessions	Students
ED101 - Enforcement Fundamentals	1	19
ED103 - Legal Essentials	1	22
ED104 - Writing Investigation Reports	1	29
ED102 - Introduction to CARB Workplace Safety (Online)	–	17
Internal Training Total	3	87

Appendix G

2020 CalEPA Eligible Supplemental Environmental Projects

SEP Name	Location	Project Summary
Fresno Trees	Fresno County	TREE Fresno proposes to strategically place green barriers downwind of major sources of pollution, and use air monitors to evaluate how effective green barriers are at protecting people from exposure to air pollution. It also aims to reduce greenhouse gases by sequestering carbon. Lessons learned from this study can help influence the selection of vegetation used for green barriers, and the placement of vegetation for future projects.
Community Based Monitoring and Assessment Program for Fresno Phase 2	Fresno County	Central California Asthma Collaborative proposes a project that would use community based air quality monitoring and modeling and related outreach and education to inform community members about air quality issues in their communities. The purpose of this is to help community members reduce their exposure to air pollutants, thus providing protection for public health.
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 West Contra Costa School District, which is part of an area impacted by air pollution and identified as Environmental Justice and/or Disadvantaged Communities.
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-K)	Kern County	Central California Asthma Collaborative intends to 1) compare outdoor PM2.5 levels in disadvantaged rural communities vs. urban PM2.5 monitors in Kern 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-T)	Tulare County	Central California Asthma Collaborative intends to 1) compare outdoor PM2.5 levels in disadvantaged rural communities vs. urban PM2.5 monitors in Tulare 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.
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.
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.

SEP Name	Location	Project Summary
Skill Development Program for Rejuvenation of Urban Trees (SPROUT)	LA County: Carson (WCWLB), Florence-Firestone (SELA), Lynwood and Watts (adjacent to SELA), and Pacoima (in the Valley not AB617)	California Greenworks, Inc. proposes a project that will enroll youth aged 16 to 24 who will receive training and education to foster a future generation of green sector workforce, especially within the sector of construction. Each cohort will participate in field days, where youth will assist in planting trees in Los Angeles County.
SEI Air Quality Education Program - Contra Costa	Contra Costa County	Strategic Energy Innovations proposes a project that will support teacher training, instruction, and supply air quality education kits for middle school and high school students to measure local air pollution levels, learn about the impact of air pollution on human health and the environment, and understand how to create solutions to reduce air pollution sources.
High Desert Environmental Education and Health Connections SEP	San Bernardino County with an emphasis on the High Desert (City of Adelanto), Hesperia, Victorville, Apple Valley	El Sol Neighborhood Environmental Center proposes a project that will include the implementation of a community-based and community-driven outreach and education on respiratory health. The expansion includes education on acute respiratory infections (ARI) through the use of Community Health Workers-CHWs, (also known as Promotores de Salud). El Sol will educate community residents about preventative habits and inform them about environmental diseases (e.g. soil, water, air) affecting the Eastern Coachella Valley.
Installation of Air Filtration Systems in San Jose - KIPP Heartwood	San Jose, CA	IQAir Foundation in collaboration with KIPP Charter Schools (KIPP Heartwood) and IQ Air North America, Inc. proposes a SEP to install and maintain high-performance air filtration systems in schools located in communities impacted by air pollution within San Jose, CA. The length of this SEP is expected to be 5 years and will benefit 413 students.
Installation of Air Filtration Systems in San Jose - KIPP Prize	San Jose, CA	IQAir Foundation in collaboration with KIPP Charter Schools (KIPP Prize) and IQ Air North America, Inc. proposes a SEP to install and maintain high-performance air filtration systems in schools located in communities impacted by air pollution within San Jose, CA. The length of this SEP is expected to be 5 years and will benefit 408 students.
West Oakland Air Quality - Reducing Resident Exposure to Pollution	West Oakland, CA	West Oakland Environmental Indicators Project proposes a project that will entail 2 parts: the first part is the Resiliency Hub - WOEIP is currently undertaking a project in collaboration with PG&E and the City of Oakland to upgrade three city-owned centers at 18th and Adeline Streets into a "resiliency hub". Infrastructure upgrades at these locations will improve community resilience and provide vital support in the immediate aftermath of environmental disasters. The second part focuses on affordable housing in high impact zones - This project will implement mechanical filtration in numerous affordable housing complexes owned and managed by the East Bay Asian Local Development Corporation (EBALDC) in the Prescott Neighborhood. Prescott is immediately downwind of the Port of Oakland, Pacific Rail Yard, and the 880 freeway.

SEP Name	Location	Project Summary
Installation of Air Filtration Systems in San Francisco- Bay Academy	San Francisco, CA	IQAir Foundation in collaboration with IQ Air North America, Inc. proposes a SEP to install and maintain high-performance air filtration systems at KIPP San Francisco Bay Academy, San Francisco. The length of this SEP is expected to be 5 years and will benefit 369 students.
Installation of Air Filtration Systems in Oakland - Oakland HS	Oakland, CA	IQAir Foundation in collaboration with IQ Air North America, Inc. proposes a SEP to install and maintain high-performance air filtration systems at Oakland High Schools in Oakland, CA. The length of this SEP is expected to be 5 years and will benefit 1,586 students.
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.
Air Quality Network for 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.
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.
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.
Installation of Residential Air Filtration Systems	South Coast Air Quality Management District	SCAQMD proposes to install and maintain air filtration systems in residential areas within EJ/DAC's most impacted by toxic air contaminants.

SEP Name	Location	Project Summary
Coachella Valley Mitigation Project Extension 2018-2023	Coachella	IQAir Foundation, in collaboration with Comite Civico Del Valle, Inc (CCV). and IQAir North America, Inc., proposes a SEP to install and maintain high-performance air filtration systems in schools located in communities impacted by air pollution, especially Environmental Justice and/or Disadvantaged Communities disproportionately impacted by toxic air contaminants. IQAir Foundation, in collaboration with IQAir North America, Inc. will install the air filtration systems, and work with the local community and school district on the mitigating impacts of air pollution. All schools are located in Coachella Valley.
Installation of Air Filtration Systems in Schools Oakland	Oakland, CA	IQAir Foundation in collaboration with Communities for a Better Environment and IQ Air North America, Inc. proposes a SEP to install and maintain high-performance air filtration systems (~ 89% reduction of UFPs and black carbon) in schools located in communities impacted by air pollution within Oakland Unified School District. A total of 11 schools will be benefited, and the length of this SEP is expected to be 5 years.
Environmental Education and Health Connections	Riverside County	El Sol Neighborhood Educational Center proposes to continue and expand an ongoing SEP in the 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.
Installation of School Air Filtration Systems-Calexico (Imperial County)	Imperial County	ICAPCD proposes to install and maintain air filtration systems as well as an electronic flag program (enhanced flag program) in Calexico schools, which is part of the AB617 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-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 El Centro schools, which is part of the AB617 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 System Meadows Elementary School	Imperial County (El Centro)	ICAPCD proposes to install and maintain air filtration systems as well as an electronic flag program (enhanced flag program) in Meadows Elementary School, which is part of an area 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 Reservioir Restoration project.

SEP Name	Location	Project Summary
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.
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.

SEP Name	Location	Project Summary
Side Street Projects - Woodworking bus SEP	Pasadena, CA	Side Street Projects proposes to replace diesel powered woodworking buses with new propane powered buses that exceed current CARB regulations. Funds from SEP will go towards the purchase and registration of the new buses and the labor involved in transferring the wood working classrooms out of the old buses and into the new buses. The Woodworking Buses provide woodworking lessons to thousands of under-resourced youth in Los Angeles County each year.
Marine Vessel Speed Reduction Incentive Program Phase 2	Santa Barbara Channel Region and Bay Area Region	Ventura County APCD proposes a project that will implement a vessel speed reduction (VSR) incentive program, which provides financial and public relations incentives for owner/operators of oceangoing cargo vessels to slow down in the VSR zones during peak whale and ozone seasons. Slowing cargo vessels in transit has various benefits, including the reduction of nitrogen oxides (NO_X), diesel particulate matter (DPM), and sulfur oxides (SO_X), and greenhouse gas emissions. The NO_X emission reductions will result in lower ozone concentrations in coastal areas of Ventura and Santa Barbara Counties with extended benefits for inland Ventura County, the San Francisco Bay Area, and the South Coast Air Basin.
SEI Air Quality Education Program - San Diego	San Diego County	Strategic Energy Innovations proposes a project that will support teacher training, instruction, and supply air quality education kits for middle school and high school students to measure local air pollution levels, learn about the impact of air pollution on human health and the environment, and understand how to create solutions to reduce air pollution sources.
Flag Program Coachella Valley Mitigation Project Extension 2018-2023	Coachella	IQAir Foundation proposes a project that will help people with asthma by improving awareness and education about the school environment with outdoor air quality practices. The air quality school flag program uses colored flags based on U.S. EPA's Air Quality Index (AQI) to notify teachers, coaches, students, and others about outdoor air quality conditions. Schools raise a colored flag each day that corresponds to their local air quality forecast. By comparing the colored flags to the AQI, members of the school and the surrounding community can tell what the daily air quality is, and adjust their activities to reduce their exposure to air pollution.

Appendix H

2020 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	Flagship, Inc.	–	$250,000	$125,000	$125,000
Certifications	Engine	American Honda Motor Co., Inc.	–	$1,927,800	$963,900	$963,900
Certifications	Engine	Kalmar USA, Inc.	–	$1,000	$1,000	–
Certifications	Engine	Kawasaki Motors Corp., U.S.A.	–	$160,000	$80,000	$80,000
Certifications	Engine	Kohler Co.	$6,000,000	–	$6,000,000[46]	–
Certifications	Engine	Mitsubishi Turbocharger and Engine America, Inc.	–	$7,750	$7,750	–
Certifications	Vehicle	Phoenix Motorcars Leasing LLC	–	$11,000	$11,000	–
Certifications	Engine	Graco Inc.	–	$2,000	$2,000	–
Certifications	Engine	Aebi & Co. AG Maschinenfabrik	–	$70,312	$35,156	$35,156
Certifications	Engine	Husqvarna Consumer Outdoor Products N.A	–	$26,000	$13,000	$13,000
Certifications	Parts	Comoto Holdings, Inc. and Comoto Holdings, LLC (Revzilla/Cycle Gear)	–	$1,937,500	$968,750	$968,750
Certifications	Parts	Cummins, Inc.	–	–	–	–
Certifications	Parts	Detroit Diesel Corporation	–	–	–	–
Certifications	Parts	J&P Cycles, LLC	–	$229,500	$114,750	$114,750
Certifications	Parts	Moinfar Enterprises, Inc., dba ATV Galaxy	–	$42,000	$42,000	–
Certifications	Parts	Onyx Enterprises Int'l Corp.	–	$281,000	$140,500	$140,500
Certifications	Parts	Solo Moto, LLC dba Solo Moto Parts and Buster's Dirt Shop	$40,000	–	$40,000	–
Certifications	Parts	Taylor Made Racing, Inc.	–	$7,750	$7,750	–
Certifications	Parts	Vortech Engineering, Inc.	–	$18,500	$9,250	$9,250
Certifications	Parts	Weapon R Competition Products, Inc.	–	$8,000	$8,000	–

46 $1.8 million of this settlement was applied to a mitigation project.

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Certifications	Vehicle	Navistar, Inc.	–	$2,026,800	$1,013,400	$1,013,400
Certifications	Vehicle	Porsche AG and Porsche Cars North America Inc	–	$3,151,540	$1,577,417.67	$1,574,122.33
Fuels	Fuels Specifications	Torrance Refining Company LLC	–	$25,000	$25,000	–
Fuels	Fuels Specifications	Shell Oil Products US	–	$20,000	$20,000	–
Fuels	Fuels Specifications	Shell Oil Products US	–	$195,000	$195,000	–
Fuels	Fuels Specifications	Torrance Logistics Company LLC	–	$18,000	$18,000	–
Fuels	Fuels Specifications	Kern Oil & Refining Co.	–	$54,000	$27,000	$27,000
Fuels	Fuels Specifications	Kern Oil & Refining Co.	–	$36,000	$36,000	–
Fuels	Low Carbon Fuel Standards	BP Products North America, Inc./River Birch	–	$188,000	$98,500	$89,500
Fuels	Low Carbon Fuel Standards	AltAir Paramount LLC	–	$132,500	$66,500	$66,000
Stationary Sources	Consumer and Aerosol Coating Products	Western Fragrant Products Corp.	–	$5,530	$5,530	–
Stationary Sources	Consumer and Aerosol Coating Products	The Kroger Co.	–	$83,640	$83,640	–
Stationary Sources	Consumer and Aerosol Coating Products	7-Eleven, Incorporated	–	$15,000	$15,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Aervoe Industries, Inc.	–	$13,800	$13,800	–
Stationary Sources	Consumer and Aerosol Coating Products	Beauty 21 Cosmetics Inc.	–	$11,600	$11,600	–
Stationary Sources	Consumer and Aerosol Coating Products	Sunnyside Corporation	–	$8,800	$8,800	–

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	Empire Candle Company, LLC	–	$6,000	$6,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Nails Inc.	–	$3,800	$3,800	–
Stationary Sources	Consumer and Aerosol Coating Products	Speedball Art Products Company	–	$60,600	$60,600	–
Stationary Sources	Composite Wood	Woody & Lamy Floor, Inc.	–	$9,000	$9,000	–
Stationary Sources	Consumer and Aerosol Coating Products	Drybar Holdings LLC	–	$155,380	$155,380	–
Stationary Sources	Consumer and Aerosol Coating Products	Spenser Gifts, LLC	–	$4,500	$4,500	–
Stationary Sources	Composite Wood	Sky Billiards, Inc., DBA Best Choice Products	–	$150,304	$84,175	$66,129
Stationary Sources	Consumer and Aerosol Coating Products	Illinois Industrial Tool, Incorporated	–	$7,500	$7,500	–
Stationary Sources	Consumer and Aerosol Coating Products	Radiator Specialty Company	–	$109,440	$109,440	–
Stationary Sources	Consumer and Aerosol Coating Products	Family Dollar Stores, Inc.	–	$4,000	$4,000	–
Stationary Sources	Consumer and Aerosol Coating Products	SAS Group Inc.	–	$1,500	$1,500	–
Stationary Sources	Consumer and Aerosol Coating Products	Central Garden and Pet Company	–	$4,500	$4,500	–
Stationary Sources	Composite Wood	DellWood Kitchen & Floor, Inc. dba ChaseWood & Cabinet, Inc.	–	$5,000	$5,000	–

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Stationary Sources	Consumer & Aerosol Coating Products	The Clorox Company	–	$10,000	$10,000	–
Stationary Sources	Consumer & Aerosol Coating Products	Insta-Fire, Incorporated	–	$20,000	$20,000	–
Stationary Sources	Consumer & Aerosol Coating Products	Momar, Incorporated	–	$72,000	$72,000	–
Stationary Sources	Composite Wood	TJX Companies Inc.	–	$193,507	$193,507	–
Stationary Sources	Consumer & Aerosol Coating Products	Schaeffer Manufacturing Company	–	$4,685	$4,685	–
Diesel	Diesel Fleet	A & U Mex-Export Corp., USA	–	$40,750	$20,375	$20,375
Diesel	Diesel Fleet	AAJD Transport, Inc.	–	$2,500	$2,500	–
Diesel	Diesel Fleet	Basalite Concrete Products, LLC	–	$12,000	$12,000	–
Diesel	Diesel Fleet	Better Built Truss, Inc.	–	$4,000	$4,000	–
Diesel	Diesel Fleet	Graciela Mendoza	–	$500	$500	–
Diesel	Diesel Fleet	V & L Produce, Inc./V & L Transportation, Inc.	–	$15,000	$15,000	–
Diesel	Diesel Fleet	Western Express Transporter's, Inc. and Western Express, Inc.	–	$ 35,000	$ 35,000	–
Diesel	Diesel Fleet	California Freight Sales and Sandair, dba California Freight Sales	–	$43,500	$43,500	–
Diesel	Diesel Fleet	San Francisco Deluxe Sightseeing, LLC	–	$3,800	$3,800	–
Diesel	Diesel Fleet	Sysco Los Angeles, Inc.	–	$31,000	$31,000	–
Diesel	Diesel Fleet	Dependable Highway Express, Inc.	–	$47,600	$47,600	–
Diesel	Diesel Fleet	Tutor Perini and O & G Industries	–	$18,000	$18,000	–

Program Category	Subprograms	Company Name	Total Assessed Judgment	Total Assessed Settlement	Amount Assessed to CARB	Amount to AB 1071 SEP
Diesel	Engine	Intermodal Express, Inc.	–	$2,000	$2,000	–
Certifications	Engine	Nuckles Oil Company, Inc., dba Merit Oil Company	–	$1,500	$1,500	–
Diesel	Port & Marine	Mitsui O.S.K. Lines, Ltd.	–	$253,300	$253,300	–
Diesel	Port & Marine	Total Terminals International (TTI)	–	$25,500	$25,500	–
Diesel	Port & Marine	Island Packers	–	$7,150	$7,150	–
Diesel	Port & Marine	Hapag Lloyd Shipping	–	$24,750	$24,750	–
Diesel	Port & Marine	APM Port of LA	–	$18,375	$18,375	–
Diesel	Port & Marine	CMA/CGM	–	$165,920	$82,960	$82,960
Diesel	Port & Marine	Technomar	–	$21,000	$21,000	–
Diesel	Port & Marine	Carnival Corp. & pcl dba Princess Cruises	–	$8,500	$8,500	–
Diesel	Port & Marine	Mitsui O.S.K. Lines, Ltd., Singapore	–	$10,000	$10,000	–
Diesel	Port & Marine	Seatrade Reefer BV	–	$22,500	$22,500	–
Diesel	Port & Marine	Del Monte Fresh Produce N.A., Inc.	–	$1,990,650	$995,325	$995,325
Diesel	Port & Marine	Long Beach Container Terminal (LBCT)	–	$35,200	$17,600	$17,600
Diesel	Port & Marine	SSA Terminals Oakland	–	$37,500	$37,500	–
Diesel	Port & Marine	SSA Long Beach	–	$60,750	$60,750	–
Diesel	Port & Marine	Dutra Construction Co., Inc	–	$148,500	$74,250	$74,250
Diesel	Port & Marine	Hornblower Yachts	–	–	–	–
Diesel	Port & Marine	Vincent III AS	–	$30,000	$30,000	–
Stationary Sources	Asbestos	Warren Asbestos Abatement Contractors, Inc.	–	$ 5,500	$5,500	–
Stationary Sources	Asbestos	M.J. Shelton General Engineering, Inc.	–	$10,000	$10,000	–
Mandatory Reporting Requirements	Mandatory Reporting Requirements	BP West Coast Products LLC	–	$624,000	$312,000	$312,000
Stationary Source	Refrigeration Management	Wabash National Corporation	–	–[48]	–[47]	–
Total	–	–	$6,040,000	$15,543,283	$14,794,315.67	$6,788,967.33

47 The Wabash settlement has a suspended penalty of $10,000 per day provided all specified conditions are met.

Appendix I

2020 Diesel Programs Compliance Calculations

Methodology for Calculations in Appendix I:

In February 2021, 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 14,001 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 DMV vehicle registration data used for this analysis was from October 2020. 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 2007 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 diesel particulate filter or be reported into CARB's Truck Regulation Upload, Compliance and Reporting System (TRUCRS) to use a flexibility option, extension, or exemption. All light vehicles with engines 2007 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 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 62 to 99 percent.

Table I-1: CA Registered Heavier Diesel Truck Counts - GVWR > 26,000 (excludes IRP[48])

Pre-1995MY	5,915
MY1995–MY1996	1,925
MY1997–MY2000	6,186
MY2001–MY2005	10,712
MY2006–MY2007	7,756
MY2008–MY2010	27,854
MY2011 +	112,839
Total All MY's	173,187
Pre-2008MY Total	32,494

Table I-2: CA IRP Registered Heavier Diesel Truck Counts - GVWR > 26,000

Pre-1995MY	72
MY1995–MY1996	41
MY1997–MY2000	217
MY2001–MY2005	1,064
MY2006–MY2007	1,121
MY2008–MY2010	6,755
MY2011 +	76,268
Total All MY's	85,538
Pre-2008MY Total	2,515

Table I-3: IRP (excluding CA) Registered Heavier Diesel Truck Counts - GVWR > 26,000

Pre-1995MY	6,909
MY1995–MY1996	5,649
MY1997–MY2000	28,812
MY2001–MY2005	47,515
MY2006–MY2007	58,754
MY2008–MY2010	36,802
MY2011 +	1,009,226
Total All MY's	1,193,667
Pre-2008MY Total	147,639

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

Table I-4: CA Registered Light Diesel Truck Counts - GVWR between 14,001 and 26,000

Pre-1998MY	4,722
1998	864
1999	1,826
2000	2,482
2001–2004	9,722
2005–2007	27,244
2008–2010	13,415
2011 +	103,793
Total All MY's	164,068
Pre 2001MY Total	46,860

Table I-5: CA IRP Registered Light Diesel Truck Counts - GVWR between 14,001 and 26,000

Pre-1998 MY	4
1998	0
1999	2
2000	3
2001–2004	29
2005–2007	107
2008–2010	78
2011 +	1,421
Total All MY's	1,644
Pre 2001MY Total	145

Table I-6: IRP (excluding CA) Registered Light Diesel Truck Counts - GVWR between 14,001 and 26,000

Pre-1998 MY	345
1998	158
1999	217
2000	239
2001–2004	1,213
2005–2007	2,472
2008–2010	1,785
2011 +	78,971
Total All MY's	85,400
Pre 2001MY Total	4,644

Table I-7: Truck Compliance Rates

Reg. Type	Heavy-Duty[49]: All Model Years	Heavy-Duty: Pre 2008	Heavy-Duty: Pre 2008Non Compliant	Heavy-Duty: Compliance Rate	Light-Duty[50]: All Model Years	Light-Duty: Pre 2008	Light-Duty: Pre 2008Non Compliant	Light-Duty: Compliance Rate
CA Reg. Fleet Size 1–3	62,722	13,958	1,998	97%	73,451	30,047	4,477	94%
CA Reg. Fleet Size 4–20	48,486	10,264	1,208	98%	42,719	10,941	1,077	97%
CA Reg. Fleet Size 21–100	30,661	5,078	491	98%	18,909	3,388	258	99%
CA Reg. Fleet Size >100	31,318	3,194	260	99%	28,989	2,484	84	100%
CA Reg. In- State Totals	173,187	32,494	3,957	98%	164,068	46,860	5,896	96%
CA IRP Fleet Size 1–3	33,424	1,253	1,085	97%	472	58	54	89%
CA IRP Fleet Size 4–20	27,775	657	470	98%	776	68	56	93%
CA IRP Fleet Size 21–100	16,158	347	160	99%	306	16	12	96%
CA IRP Fleet Size >100	8,181	258	219	97%	90	3	1	99%
CA IRP Totals	85,538	2,515	1,934	98%	1,644	145	123	93%
OS IRP Fleet Size 1–3	105,097	36,289	36,173	66%	3,148	599	598	81%
OS IRP Fleet Size 4–20	101,412	23,400	23,269	77%	3,275	834	828	75%
OS IRP Fleet Size 21–100	159,772	24,533	24,360	85%	4,445	816	815	82%
OS IRP Fleet Size >100	827,386	63,417	62,968	92%	74,532	2,395	2,391	97%
OS IRP Totals	1,193,667	147,639	146,770	88%	85,400	4,644	4,632	95%
Total CA In State & CA IRP	258,725	35,009	5,891	98%	165,712	47,005	6,019	96%
Grand Totals	1,452,392	182,648	152,661	89%	251,112	51,649	10,651	96%

49 Light Duty refers to trucks with GVWR between 14,001 and 26,000 pounds.
50 Heavy Duty refers to trucks >26,000 pounds

Appendix J

2014–2020 Maximum and Minimum Penalties

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020		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	$5,150 to $10,300 per violation per day, Cal. Health & Safety Code (HSC), §§ 42400, 42402
	https://arb.ca.gov/enf/consprod.htm	$6,160–16,981/ton (3 cases)	$750–850/day (2 cases)	
2	**Aftermarket Parts** Title 13, CCR, sections 1900 et. seq., 2030-2031,2047-2048, 2200-2207, 2220-2225California Vehicle Code (VC), section 27156	Certification		$40,050 per action, HSC § 43016
	http://www.arb.ca.gov/msprog/aftermkt/aftermkt.htm	$8.70–2,967/part (45 cases)		
3	**Antiperspirants & Deodorants** Title 17, CCR, sections 94500-94506.5	Excess VOC	Labeling	$5,150 to $10,300 per violation per day, HSC §§ 42400, 42402
		$15,000/ton (1 case)	No per ton penalties assessed during this period	
	https://arb.ca.gov/enf/consprod.htm	$1,150/day (1 case)	No per day penalties assessed during this period	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020				Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
4	**Asbestos (ATCM) (HSC 39658(b))** Title 40, Code of Federal Regulations (CFR), Part 61, Subpart M	Failure to notify	Failure to inspect	Asbestos emissions		$1,000 to $10,000 per violation per day, HSC §§ 39674, 39675; or up to $1,030,000 and one year in jail per violation per day possible where willful and intentional results in harm/death, HSC § 42400.3
	http://www.arb.ca.gov/enf/asbestos/asbestos.htm	$500–$5,500/day (12 cases)	$1,363–5,000/day (6 cases)	$25,000/day (1 case)		
5	**Automotive Refrigerant, Small Containers** Title 17, CCR, sections 95360-95370	No penalties assessed during this period				$5,150 to $10,300 per violation per day, HSC §§ 38580, 42400, 42402
	https://www.arb.ca.gov/cc/hfc-mac/hfcdiy/hfcdiy.htm					
6	**Cap-and-Trade** Title 17, CCR, sections 95800 et. seq.	Lack of compliance instruments	Disclosure violations	No account representatives	Auction rule violation	$5,150 to $10,300 per violation per day, HSC §§ 38580, 42400, 42402
	https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/about	$100/instrument (1 case)	$10,000–35,000/incident (1 case)	$1,605/day (1 case)	$25,000/incident (1 case)	
7	**Cargo Handling Equipment** Title 13, CCR, section 2479	Failure to meet opacity requirements	Failure to meet in-use performance requirements		Failure to meet reporting requirements	$1,000 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; $534 per unit or $40,050 per action, HSC §43016
	https://ww2.arb.ca.gov/our-work/programs/cargo-handling-equipment	$275–$1,500/violation (8 cases)	$500–$37,000/piece of equipment (11 cases)		$7,500/violation (1 case)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020						Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
8	**Cargo Tank Vapor Recovery** Title 17, CCR, section 94014	Failure to meet pressure performance requirements						$5,150 to $10,300 per violation per day, HSC §§ 42400, 42402
	https://ww2.arb.ca.gov/our-work/programs/cargo-tank-vapor-recovery	$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	$2,500–6,457/engine (5 cases)						$1,000 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC §43016
	https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft							
10	**Composite Wood ATCM** Title 17, CCR, sections 93120-93120.12	Failure to comply with composite wood ATCM						$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	https://ww2.arb.ca.gov/our-work/programs/composite-wood-products-program	$27–10,000/day (19 cases)						
11	**Consumer Products** Title 17, CCR, sections 94507-94517	Excess VOC	Excess aromatic	Excess TAC	Global warming potential	Certification	Labeling	$5,150 to $10,300 per violation per day, HSC §§ 39674, 42400, 42402
	Penalties shown as per ton or per day depending on nature of penalty	$3,512–70,588/ton (129 cases)	No per ton penalties assessed during this period	$4,391–45,021/ton (10 cases)	$32,967/ton HFC134a (1 case)	$7,500–10,000/ violation (4 case)	No per ton penalties assessed during this period	
	http://arb.ca.gov/enf/consprod.htm	$560–4,500/ day (63 cases)	$1,000/day (1 case)	No per day penalties assessed during this period	No per day penalties assessed during this period	$1,000/day (17 settled cases)	$667–1,000/ day (18 cases)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020					Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
12	**Consumer Products, Alternative Control Plan** Title 17, CCR, sections 94540-94555	No penalties assessed during this period					$5,150 to $10,300 per violation per day, HSC §§ 42400, 42402
	https://www.arb.ca.gov/consprod/regact/acp/acp.htm						
13	**Diesel Emission Control System, Verified** Title 13, CCR, sections 2706(g), 2707(c), and 2709	Selling non-unit		Offering for sale non-verified unit installing without authorization	Installing without authorization		$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC §43016
	http://www.arb.ca.gov/diesel/verdev/verdev.htm	$369–5,000/unit (7 cases)		$50–1,000/unit (6 cases)	$550–5,000/unit (2 cases)		
14	**Drayage Trucks**	Trucks			Rail yards		$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC §43016
	Title 13, CCR, section 2027	Failure to report	Failure to meet in-use performance requirement	Submitting false data	Failure to submit quarterly report	Dispatching non- compliant trucks	
	https://ww2.arb.ca.gov/our-work/programs/drayage-trucks-seaports-railyards	$0–800/vehicle (34 cases)	$200–1,800/violation (229 cases)	$300–1,300 /violation (4 cases)	$7,300–10,000/quarterly report (2 cases)	$30–100/dispatch (10 cases)	
15	**Dry Cleaner (ATCM)** Title 17, CCR, sections 93109 and 93110	Submitting inaccurate report			Failure to pay fees		$1,000 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	https://ww2.arb.ca.gov/our-work/programs/phase-out-perchloroethlyene-dry-cleaning-process/dry-cleaning-program	$357/violation (1 case)			$357/violation (1 case)		

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020	Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
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 2nd citation in 12 months, HSC § 44011.6
	https://ww2.arb.ca.gov/resources/documents/road-heavy-duty-certification-program-california-motor-vehicle-emission-control	$66–1,800/label (1,758 citations)	
17	**Fleet Tampering/Non-conforming** HSC, section 43008.6	$500–1,500/ vehicle (8 cases)	$1,500 per violation, HSC § 43008.6
	http://www.arb.ca.gov/enf/othermbl.htm		
18	**Fuel Containers and Spouts, Portable** Title 13, CCR, sections 2467-2467.9	Certification	$534 per portable fuel container or spout, HSC § 43016
	https://ww2.arb.ca.gov/our-work/programs/portable-fuel-containers-gas-cans	$0.50–36/unit (5 cases)	
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
	http://www.arb.ca.gov/enf/fuels/distcert.htm		

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020				Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
20	**Fuels** Title 13, CCR, sections 2250-2259; 2260-2276; 2280-2285; 2290-2293,5; and 2299-2299.5	Fuels				$25,000, $35,000, $50,000, $250,000 per violation per day, HSC § 43027; or $5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050peraction, HSC § 43016, 43020
	http://www.arb.ca.gov/fuels/fuels.htm	$500–25,000/day (45 cases)				
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 2nd citation in 12 months, HSC § 44011.6
		1st Citation	$300/violation (65 citations)	$300/violation (327 citations)	$800–1300/ violation (13 citations)	
	http://www.arb.ca.gov/enf/hdvip/hdvip.htm	No corrective action taken within 45 days	$500–800/ violation (35 citations)	$800/violation (107 citations)	–	
		2nd 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				$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC §43016
	https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling	$100–1,000/violation (1,356 cases)				
23	**Idling, School Bus** Title 13, CCR, section 2480	No penalties assessed during this period				$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	https://ww2.arb.ca.gov/resources/documents/school-bus-idling-and-idling-schools					

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020			Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
24	**Indoor Air Cleaning Devices** Title 17, CCR, sections 94800-94810	Certification			$5,150 to $10,300 per violation per day, HSC §§ 42400, 42402
	https://ww2.arb.ca.gov/list-carb-certified-air-cleaning-devices	$8,145–35,000/violation (3 cases) $776–1,000/day (2 cases)			
25	**Landfill Methane Rule (LMR)** Title 17, CCR, sections 95460-95476	Failure to report			$5,150 to $10,300 per violation per day, HSC §§ 38580, 42400, 42402
	http://www.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			$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC§43016
	https://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			$5,150 to $10,300 per violation per day, HSC §§ 38580, 42400, 42402; or $25,000, $35,000, $50,000, $250,000 per day, HSC §§ 38580, 42402, 43027
	https://www.arb.ca.gov/fuels/lcfs/lcfs.htm	$50–195/deficit (2 case)	$4,167–10,000/ misreporting (5 cases)	$1,000/day (1 case)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020			Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
28	**Mandatory Reporting of Greenhouse Gas Emissions (MRR)** Title 17, CCR, sections 95100 et. seq.	Inaccurate MRR report	Failure to maintain meter accuracy	Inaccurate fee regulation report	$5,150 to 10,300 per violation per day, HSC §§ 38580, 42400, 42402
	https://ww2.arb.ca.gov/our-work/programs/mandatory-greenhouse-gas-emissions-reporting	$400–3,000/day (9cases), $25,000/incident (1 case)	$75,000/incident (1 case)	$600–1,500/day (4 cases)	
29	**Marine/Watercraft** Title 13, CCR, sections 2440-2448	Certification			$40,050 per action, HSC §§ 43016, 43212
	https://ww2.arb.ca.gov/our-work/programs/spark-ignition-marine-watercraft/about	$500/violation (8 cases)			
30	**Motor Vehicles/Engines Certification, New** HSC, sections 43150-43154	Certification			$40,050 per action, HSC §§ 43016, 43212
	http://www.arb.ca.gov/msprog/onroad/onroad.htm	$500–5,000/violation (106 cases)			
31	**Off-Highway Recreational Vehicles** Title 13, CCR, sections 2410-2415	Certification			$40,050 per action, HSC §§ 43016, 43150, 43154, 43212
	http://www.arb.ca.gov/msprog/offroad/orrec/orrec.htm	$500–2,500/vehicle (4 cases)			

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020						Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
32	**Off-Road Engine Certification, Compression Ignition** Title 13, CCR, sections 2420-2427	Certification						$40,050 per action, HSC §§ 43016, 43154, 43212
	https://ww2.arb.ca.gov/our-work/programs/road-compression-ignition-certification-program/about	$125–21,428/vehicle (15 cases)						
33	**Off-Road Engine Certification, Large (LSI)** Title 13, CCR, sections 2430-2439	Certification						$40,050 per action, HSC §§ 43016, 43212
	https://arb.ca.gov/msprog/offroad/lsi/lsictp/lsictp.htm	$375 (2 case)						
34	**Off-Road Engine Certification, Small (SORE)** Title 13, CCR, sections 2400-2409 and 2750-2774	Certification						$534 per unit, HSC §§ 43016, 43212
	https://ww2.arb.ca.gov/our-work/programs/small-off-road-engines-sore	$21.29–500/violation (16 cases)						
35	**Off-Road Equipment, In-Use** Title 13, CCR, section 2449	Adding illegal engine	No roar	Failure to report	Submitting false data	No EIN	Misreporting	$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC§43016
	https://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm	$200–2,000/violation (128 cases)	$0–1,000/violation (138 cases)	$0–800/violation (512 cases)	$300–500/violation (10 cases)	$0–600/violation (428 cases)	$300/violation (24 cases)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020	Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
36	**On-Board Diagnostics, On-Road Heavy-Duty Vehicle** Title 13, CCR, sections 1971.1 and 1971.5 *https://ww2.arb.ca.gov/resources/documents/heavy-duty-obd-regulations-and-rulemaking*	No penalties assessed during this period	$40,050 per action, HSC §§ 43016, 43154, 43212
37	**On-Board Diagnostics, On-Road Light-Duty Vehicle** Title 13, CCR, sections 1968.2 and 1968.5 *https://ww2.arb.ca.gov/our-work/programs/obd*	Failure to meet certification requirements $6.25–1,800/vehicle (2 cases)	$40,050 per action, HSC §§ 43016, 43154, 43212
38	**On-Road New Diesel Engine Emission Standards Certification** Title 13, CCR, sections 1956.8, 1971, and 1971.1 *http://www.arb.ca.gov/msprog/onroad/cert/cert.php*	No penalties assessed during this period	$40,050 per action, HSC §§ 43154, 43212
39	**Outboard Marine Tanks and Components, Portable** Title 13, CCR, sections 2190-2194 *https://ww2.arb.ca.gov/our-work/programs/outboard-marine-tanks*	No penalties assessed during this period	$40,050 per action, HSC §§ 43016, 43212

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020			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			$40,050 per action, HSC § 43016
	http://www.arb.ca.gov/enf/hdvip/hdvip.htm	$42–800/violation (341 cases)			
41	**Public Agencies and Utilities Fleets** Title 13, CCR, sections 2023-2023.4	Failure to meet in-use performance requirements			$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC §43016
	https://ww2.arb.ca.gov/our-work/programs/fleet-rule-public-agencies-and-utilities/about	$1,000/violation (2 cases)			
42	**Public Transit Bus Fleets** Title 13, CCR, sections 2023-2023.4	Failure to Report			$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC §43016
	https://www.arb.ca.gov/regact/bus02/bus02.htm	$50/day (1 case)			
43	**Refrigerant Management Program (RMP)**	Failure to register/report	Automatic leak detection system	Failure to inspect	$5,150 to $10,300 per violation per day, HSC §§ 38580, 42400, 42402
	Title 17, CCR, sections 95460-95476	$115–600/day (11 cases)	$152–411/day (3 cases)	$152–600/day (5 cases)	
	https://www.arb.ca.gov/cc/rmp/rmp.htm	$150–1,800/violation per day (101 cases)			
44	**Solid Waste Collection Vehicles** Title 13, CCR, sections 2020, 2021, 2021.1, and2021.2	Failure to meet in-use performance requirements			$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 peraction, HSC § 43016
	https://www.arb.ca.gov/msprog/swcv/swcv.htm	$150–1,800/violation per day (107 cases)			

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020					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			$5,150 to $10,300 per violation per day, HSC §§ 38580, 42400, 42402
	http://www.arb.ca.gov/cc/sf6elec/sf6elec.htm	$136.99–700/day (8 cases)	$5,000/violation (1 case)	$10,000/day (1 case)			
46	**Tractor and Trailer Greenhouse Gas Regulation** Title 17, CCR, section 95300	Failure to meet in-use performance requirements					$5,150 to $10,300 per violation per day, HSC §§ 38580, 42400, 42402
	https://ww2.arb.ca.gov/our-work/programs/ghg-std-md-hd-eng-veh	$1,000–1,800/ violation (253 cases)					
47	**Transport Refrigeration Units**	Failure to meet in-use performance requirements	No IDN	Failure to register		Submitting false data	$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	Title 13, CCR, section 2477	$225–3,000/unit	$0–1,800/ label	$0–1,300/unit		$300–500/ violation	
	https://www.arb.ca.gov/diesel/tru/tru.htm	(1,885 cases)	(421 cases)	(646 cases)		(23 cases)	
48	**Trucks and Buses, In-Use Diesel**	Failure to meet in-use performance requirements	Failure to provide sales disclosure	Failure to report/ misreporting	Failure to verify compliance of hired vehicle/ fleet	Hiring non-compliant vehicle/fleet	$5,150 to $10,300 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 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	
	http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm	(4,494 cases)	(26 cases)	(171 cases)	(12 cases)	(13 cases)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020	Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
49	**Vessels, At-Berth for Auxiliary Engines ATCM (Shore Power)**	Failure to meet in-use operational requirements	$1,000 to $77,250 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	Title 17, CCR, sections 93118.3 et. seq.		
	https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessels-berth-regulation	$250–550/violation (5 case)	
50	Vessel (Ocean-Going) Incineration ATCM Title 17, CCR, section 93119	No penalties assessed during this period	$5,150 to $77,250 per violation per day, HSC §§ 39674, 39675, 42400, 42402
	https://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	$1,000 to $77,250 per violation per day, HSC §§ 39674, 39675, 42400, 42402; or $40,050 per action, HSC § 43016
	Title 13, CCR, section 2299.2 and Title 17, CCR, section 93118.2	$610–1,000/hour, $1,000–53,000/day	
	https://ww2.arb.ca.gov/our-work/programs/ocean-going-vessel-fuel-regulation	(105 cases)	

#	Regulation or Program CA Regulatory or Statutory Code Program Internet Site	Maximum & Minimum Penalties 2014–2020	Applicable Maximum Penalties (Strict Liability, Willful, Intentional & Criminal) CA Health & Safety Code Reference
52	**Prohibition on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Chiller, Aerosols-Propellants, and Foam End-Uses** Title 17, CCR, sections 95371-95378	Failure to comply with regulatory requirement – Use of prohibited substances	$10,000 per violation per day, HSC § 38580
	https://ww2.arb.ca.gov/rulemaking/2020/hfc2020	$0/day (1 case)	

Appendix K

2020 Districts Agreements to Enforce CARB Programs

Air District	Landfill Methane Control Regulation	Oil & Gas Field Methane Control Regulation[51]	Semiconductor Operations	Gas Insulated Switchgear	SF_6-General Restrictions (non-semiconductor, non-GIS)	Refrigerant Management Program	Specified Mobile Diesel Regulations[52]
Amador County	–	–	–	–	–	–	–
Antelope Valley	Yes	–	–	–	–	–	–
Bay Area	Yes	Yes	–	–	–	–	Yes
Butte County	–	Yes	–	–	–	–	–
Calaveras County	–	–	–	–	–	–	–
Colusa County	–	Yes	–	–	–	–	–
Eastern Kern	Yes	–	–	–	–	–	–
El Dorado County	–	–	–	–	–	–	–
Feather River	Yes	Yes	–	–	–	–	–
Glenn County	–	Yes	–	–	–	–	–
Great Basin	–	–	–	–	–	–	–
Imperial County	Yes	–	–	–	–	–	–
Lake County	Yes	–	–	–	–	–	–
Lassen County	Yes	Yes	–	–	–	–	–
Mariposa County	–	–	–	–	–	–	–
Mendocino County	Yes	Yes	–	–	–	–	–
Modoc County	–	–	–	–	–	–	–
Mojave Desert	Yes	Yes	–	–	–	–	–
Monterey	Yes	Yes	–	–	–	–	–
North Coast	Yes	Yes	–	–	–	–	–
Northern Sierra	Yes	–	–	–	–	–	–

51 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.

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

Air District	Landfill Methane Control Regulation	Oil & Gas Field Methane Control Regulation[51]	Semiconductor Operations	Gas Insulated Switchgear	SF_6-General Restrictions (non-semiconductor, non-GIS)	Refrigerant Management Program	Specified Mobile Diesel Regulations[52]
Northern Sonoma County	Yes	–	–	–	–	–	–
Placer County	Yes	–	–	–	–	–	–
Sacramento Metropolitan	Yes	Yes	–	–	–	–	–
San Diego County	Yes	–	–	–	–	–	Yes[53]
San Joaquin Valley	Yes	Yes	–	–	–	–	–
San Luis Obispo County	Yes	Yes	–	–	–	–	–
Santa Barbara County	Yes	Yes	–	–	–	–	–
Shasta County	–	–	–	–	–	–	–
Siskiyou County	–	–	–	–	–	–	–
South Coast	Yes	Yes	–	–	–	Yes[54]	POLA[55]
Tehama County	Yes	Yes	–	–	–	–	–
Tuolumne County	–	–	–	–	–	–	–
Ventura County	Yes	Yes	–	–	–	–	–
Yolo-Solano	Yes	Yes	–	–	–	–	–

53 CARB has entered into agreements with San Diego County APCD (SDAPCD) authorizing district staff to comprehensively enforce specified requirements of the Transport Refrigeration Unit and Off-Road Diesel-Fueled Equipment Regulations on CARB's behalf.

54 South Coast AQMD enforces local rule 1415.1, which is equivalent to CARB's Refrigerant Management Program regulation.

55 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

2020 Memo: Increase in Maximum Penalties

CALIFORNIA AIR RESOURCES BOARD

Gavin Newsom, Governor
Jared Blumenfeld, CalEPA Secretary
Liane M. Randolph, Chair

To: Enforcement Division Staff

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

Date: February 24, 2021

Subject Increase in Maximum Penalties Based on 2020 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 law[1] 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 2020, as reported by the California Department of Industrial Relations (DIR) on February 11, 2021 is **285.315.**[2] This reflects an increase of:

- **8.6%** 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.
- **4.7%** 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.

Attachment

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*.

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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 §)	Maximum Penalty per Violation
43016(a)(1)	$40,725 $543
43154(a)(1)	$40,725
43154(a)(2)	$10,860
43211(a)	$40,725
43211(b)	$5,430
43212(a)(1)	$40,725

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
42400(a)	$5,235
42400(c)	$15,705
42400.1(a)	$26,175
42400.1(b)	$104,700
42400.2(a)	$41,880
42400.2(c)	$261,750
42400.3(a)	$78,525
42400.3(b)	$130,875 $523,500
42400.3(c)	$261,750 $1,047,000
42400.3.5(a)	$10,470
42400.3.5(b)	$36,645
42400.4(a)	$10,470
42400.4(b)	$10,470
42401	$26,175

Penalty Statute (HSC §)	Maximum Penalty per Violation
42402(a)	$5,235
42402(b)(1)	$10,470
42402(c)	$15,705
42402.1(a)	$26,175
42402.1(b)	$104,700
42402.2(a)	$41,880
42402.2(b)	$261,750
42402.3(a)	$78,525
42402.3(b)	$130,875 $523,500
42402.3(c)	$261,750 $1,047,000
42402.4	$36,645
42402.5	$524
42410(a)	$10,470 $104,700

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