Chapter 4: Enforcement Plan

Introduction

This chapter describes the enforcement history and overall approach to enforcement by the South Coast AQMD and the California Air Resources Board (CARB). In addition, the Community Emissions Reduction Plan (CERP) includes focused enforcement actions, which are described within Chapter 5. It is important that enforcement actions are part of the overall AB 617 program actions, which enables the program to be more effective in addressing this community's air quality priorities.

Chapter 4 Highlights

- From 2016 to 2018, CARB has conducted over 2,200 inspections and South Coast AQMD conducted approximately 800 inspections and responded to approximately 2,600 complaints in the Wilmington, Carson, West Long Beach community.
- Both CARB and South Coast AQMD have designed their programs to most effectively address sources within their respective jurisdictions.
- An enforcement approach that utilizes specialized program structures, outreach efforts in the community, use of technology, and interagency partnerships can lead to higher compliance rates and further emission reductions.

Overview of Enforcement Program Purpose and Jurisdiction

The primary goal of enforcement activities is for regulated parties to achieve compliance with air quality rules and regulations, and to protect public health. Part of this process involves consistently identifying and resolving violations, thereby ensuring a level playing field for all regulated entities and preventing unfair advantages for violators.

Both CARB and South Coast AQMD regulate and enforce air pollution regulations. Both agencies have the right to conduct inspections of air pollution sources, and the right to issue violations that can lead to penalties.[1]

An air pollution source can be a specific piece of equipment, a business, a government agency, or any other entity that creates air pollution. CARB is primarily responsible for enforcement of trucks, buses, and other mobile sources, while South Coast AQMD is primarily responsible for enforcement on facilities (i.e. stationary sources).[2] Table 4-1 provides an overview of the agencies' regulatory authorities.

[1] More information about penalties is provided in Appendix.

[2] In some cases, CARB may have agreements that give local air districts delegated authority to enforce a particular CARB rule. Other regulations, such as CARB's truck idling regulation, expressly allow enforcement by local air quality regulators.

Table 4-1. Overview of regulatory authority for South Coast AQMD and CARB

Air Pollution Source Category	Examples	Main Regulatory Agency
Mobile sources	Trucks, buses, ships, boats, cargo handling equipment	CARB
Stationary sources	Refineries, power plants, oil and gas facilities, manufacturing plants; indirect sources	South Coast AQMD
Area-wide sources	Paint used on buildings, dust	South Coast AQMD
Sources of greenhouse gases	Methane and volatile organic compound emissions from facilities	CARB and South Coast AQMD

Enforcement History

Over the years, both CARB and South Coast AQMD enforcement staff have had a significant presence in the community of Wilmington, Carson, and West Long Beach (WCWLB). This section provides the 3-year enforcement history for each agency in this community.

South Coast AQMD Enforcement History in this Community

South Coast AQMD's enforcement presence includes many different compliance-related activities, such as investigating complaints, responding to breakdowns, and performing facility inspections.

Responding to complaints is a crucial part of South Coast AQMD's enforcement program. By taking complaints directly from members of the public, inspectors can focus their efforts to identify and address air pollution problems that matter to the community. South Coast AQMD's enforcement team gives priority to complaints and attempts to respond to every air quality complaint received. The process of responding to a complaint can be unique for each instance, depending on factors such as whether the air quality concern is ongoing, the type of source, the time of day, and the number of complaints for that air quality concern. For example, South Coast AQMD responds to off hour complaints based on the number of complaints that are received for a particular air quality concern. Figure 4-1 shows the number and types of complaints received by South Coast AQMD in this community, for the time period 2016-2018. The large number of complaints in the WCWLB community is due to the large number of air pollution sources – these include oil and gas production sites, diesel truck traffic, and refineries.[3]

[3] Complaints referenced are from WCWLB and the surrounding community.

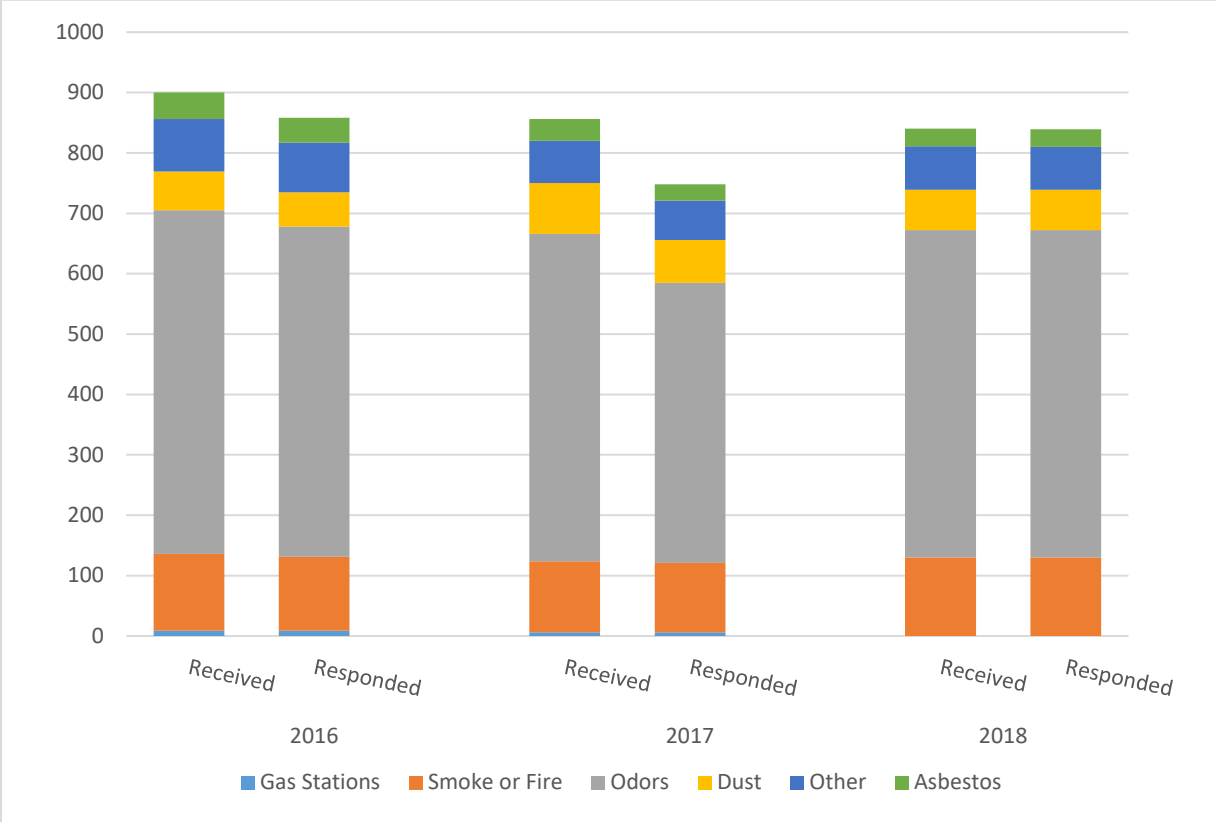


Figure 4-1. Number of complaints (by type) in the Wilmington, Carson, West Long Beach community.

Additionally, South Coast AQMD's enforcement staff perform inspection activities at facilities and other air pollution sources. Those activities can include onsite inspections for permitted and non-permitted equipment, leaks, and compliance with rules, as well as surveillance activities in the community, such as to trace the source of an odor. As of May 2019, South Coast AQMD has approximately 940 permitted facilities in this community and conducted approximately 800 facility inspections from 2016 to 2018. A list of these facilities is available in Appendix X.

Enforcement actions typically involve issuing one of two types of notices:

- *Notice to Comply* (NC) – requiring a facility to quickly correct a minor violation or to provide specified records
- *Notice of Violation* (NOV) – formally identifying a violation of particular rules or regulations, which may result in civil penalties or, in some cases, referral for criminal prosecution.

Between 2016 and 2018, South Coast AQMD has issued 214 NOVs in the Wilmington, Carson, West Long Beach community. Figure 4-2 shows the number of NCs and NOVs in this community during the time period 2016-2018.

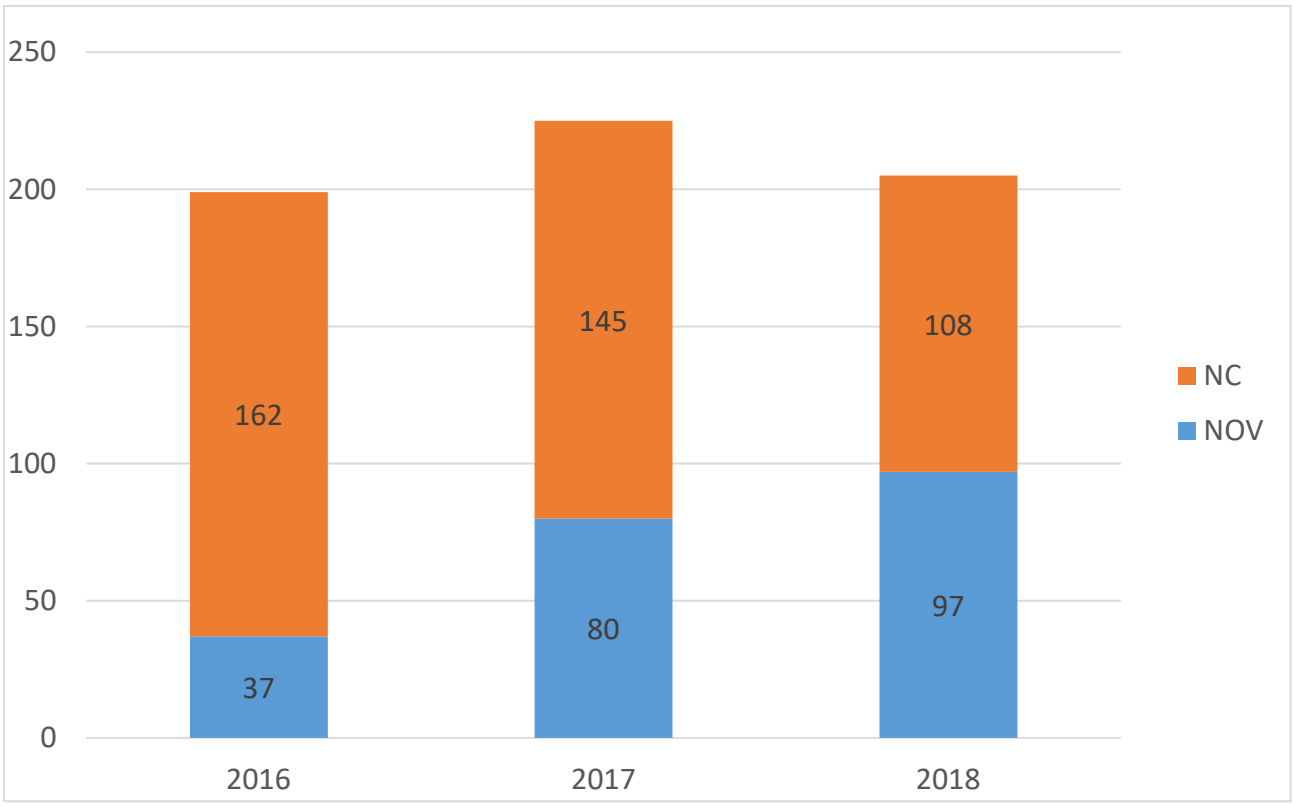


Figure 4-2. Number of Notices to Comply (NCs) and Notices of Violation (NOVs) issued in the Wilmington, Carson, West Long Beach community

CARB Enforcement History in this Community

CARB's enforcement process is two-pronged, including conducting field inspections and fleet-wide audits. For field inspections, the focus has been on enforcing heavy-duty diesel vehicle (HDDV) regulations, such as the statewide truck and bus rule, off-road rule, and the heavy-duty vehicle inspection program (HDVIP); at the refineries and fueling stations enforcing fuel formulation regulations; and in the ports enforcing regulations related to shore power, ocean-going vessels, commercial harbor craft and cargo handling equipment. As Figures 4-3 and 4-4 show, of the vehicles inspected, fuels tested, and marine enforcement conducted at the Ports of Los Angeles and Long Beach, compliance with CARB's regulations has been high. CARB's enforcement has been focused on fuels and port regulations in this area with over 700 fuel inspections and almost 1,450 marine-related inspections in the community in the past three years.

For fleet-wide audits, generally fewer heavy-duty vehicle enforcement inspections have occurred in the area during this time-frame, however beginning in 2018 CARB added the Streamlined Truck Enforcement Program (STEP) to enhance its ability to enforce the Statewide Truck and Bus regulation.

Between January 2018 and May 2019, 286 fleets were audited in WCWLB. A total of 859 vehicles were part of this audit with California Department of Motor Vehicles (DMV) registration holds placed on 389 of those vehicles. As of May 2019, 63 of those vehicles audited have been brought into compliance. For some of CARB's regulations, enforcement staff have not yet conducted many enforcement activities on the issues that concern the community, however, CARB's enforcement efforts are being enhanced in this community to address community concerns.

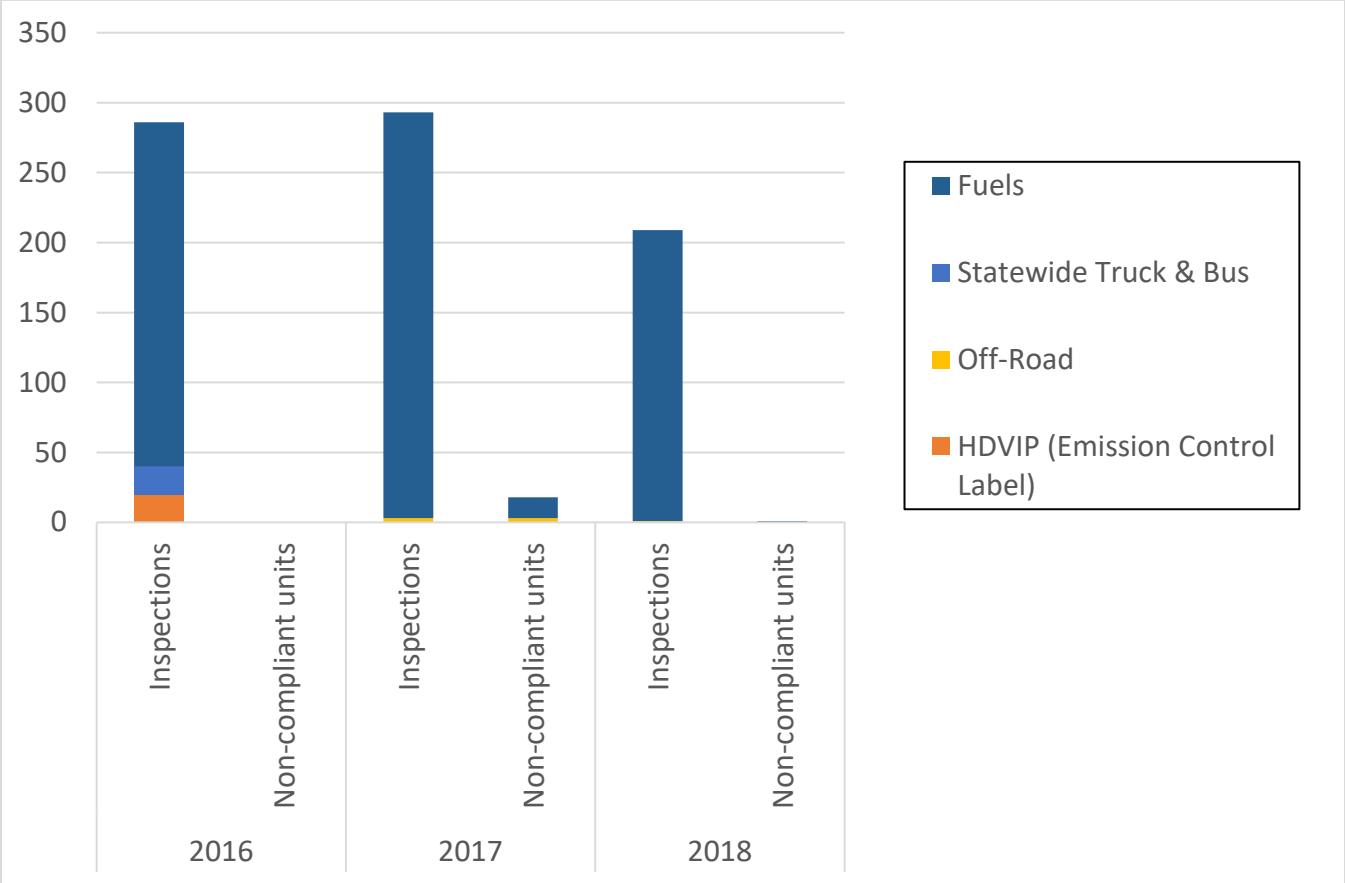


Figure 4-3. CARB Heavy-duty Diesel Vehicle and Fuels Enforcement History 2016 – 2018 in the Wilmington, Carson, and West Long Beach Community.

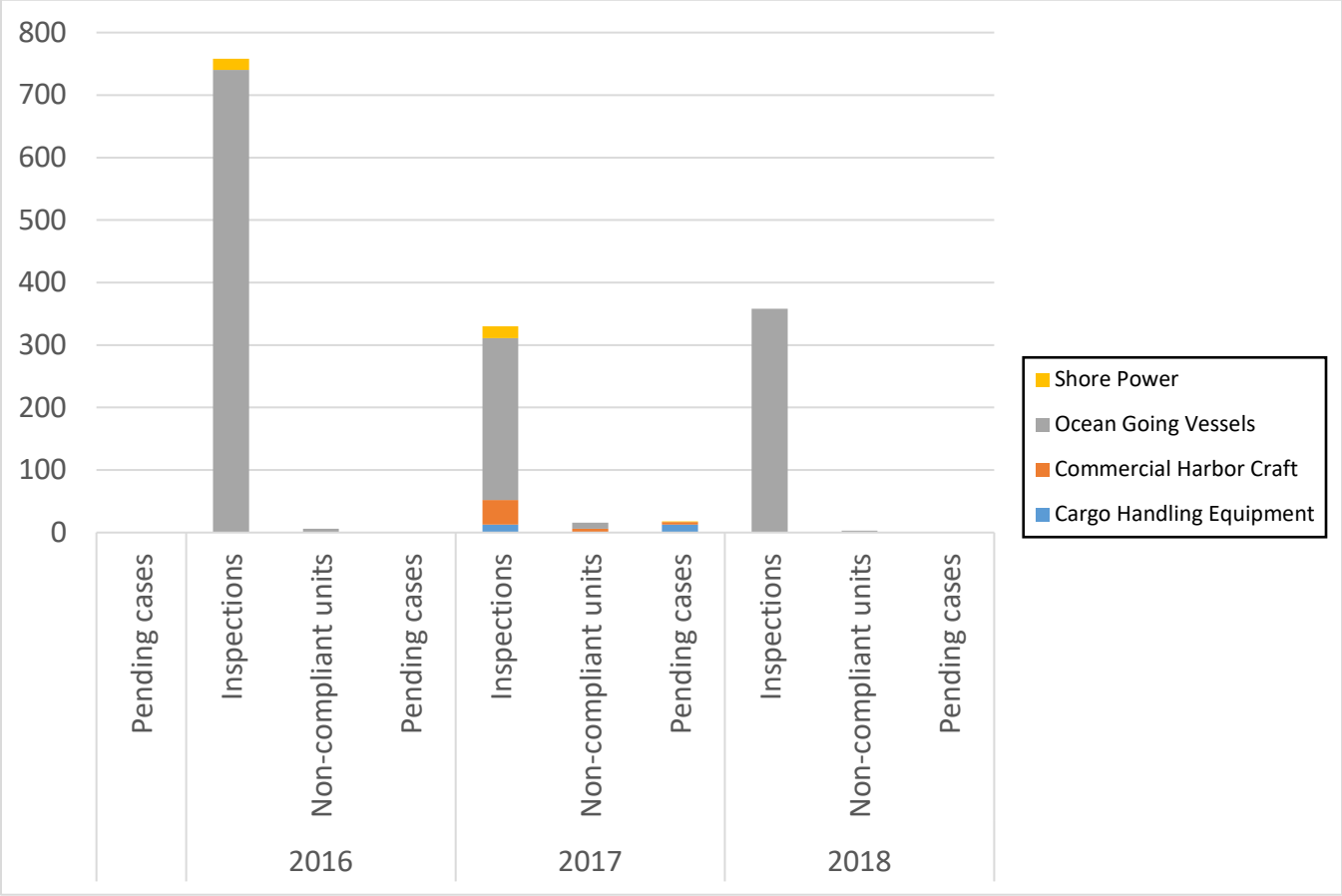


Figure 4-4. CARB Marine Enforcement History 2016 – 2018 in the Wilmington, Carson, West Long Beach community.

In summary, from 2016 to 2018, both CARB and South Coast AQMD have conducted a range of compliance activities in the community. This includes more than 2200 inspections from CARB enforcement staff related to port vessels and equipment, heavy-duty vehicles, and fuels. Of those inspections, the vast majority were in compliance, with less than 50 not in compliance and 19 cases pending. South Coast AQMD enforcement staff conducted approximately 800 facility inspections, responded to approximately 2,600 complaints, and conducted numerous other investigatory activities in WCWLB. South Coast AQMD issued 214 Notices of Violation. A compliance rate may not be an effective predictor of overall compliance within the area, since a portion of compliance actions are against the same facilities.

Due to the large number of potential air pollution sources in this community, an enforcement approach by both agencies that fully utilizes their specialized program structures, outreach efforts in the community, use of technology, and interagency partnerships can lead to further reductions in non-compliance and emission reductions. Both South Coast AQMD and CARB will continue to work closely with the CSC to identify and investigate air quality issues within the community.

Enforcement Approach

Program Structures

Both CARB and South Coast AQMD have designed their programs to most effectively address sources under their respective jurisdictions.

South Coast AQMD's Office of Compliance and Enforcement

The structure of this group is based on teams that focus on source type, and inspectors are also assigned by geographic region. The organizational structure based on source type enables inspectors to become technical specialists on the air pollution regulations that apply to the types of industries or facilities assigned to that team. In addition, assigning inspectors by geographic area improves the agency's ability to respond to complaints or compliance issues in that area.

For example, gas stations have underground gasoline storage tanks, which are inspected by the Retail Service Station Team. This team has the specialized knowledge and procedures to be able to cover the thousands of gas stations across the district. Refineries also have underground gasoline storage tanks, but these are inspected by the Refinery Team, which has a full time employee assigned to inspect each refinery. The inspectors in the Refinery team specialize in enforcing regulations that apply to all refinery equipment, including the Alkylation or Crude Units, underground gasoline storage tanks, and many other pieces of equipment. However, certain facilities may be inspected by inspectors from multiple teams. This ensures that the approach is focused enough to address a variety of sources, yet flexible enough to handle complex facilities.

For most teams, the inspectors conduct regular inspections at their assigned facilities or within their assigned geographic regions. The frequency of regular inspections depends on the type of facility. For example, a chrome plating facility is inspected more frequently than an auto body shop. It is important to consider that there are approximately 110 chrome plating facilities in the South Coast Air Basin, compared to over 1,500 auto body facilities in the region. When considering limited resources, priority for inspections is typically given to higher risk pollution sources – that is, those facilities that emit the more toxic air pollutants and/or are close to schools, hospitals, and residential areas.

The following teams operate in the WCWLB community:

The **Energy team** focuses on crude oil production, energy storage sites, and bulk petroleum terminals. Inspectors in this team usually work in pairs for safety, as well as the need to operate portable equipment. Inspectors in this team are assigned facilities, some of which are in WCLWB.

The **Industrial team** focuses on the widest variety of sources, ranging from dry cleaners to large manufacturing facilities to idling truck sweeps. Inspectors in this team are assigned a geographic region and normally spend much of their time in the field. From this team, 4 inspectors regularly conduct compliance activities in WCWLB.

The **Major Sources team** focuses on sources that are in the REgional CLean Air Incentives Market (RECLAIM)* program. Examples of these sources include power plants, oil production sites, and large manufacturing facilities. Inspectors in this team are assigned by facility, with each inspector assigned a set of facilities, some of which are in this community.

The **Refinery team** Focuses on all the refineries, auxiliary hydrogen plants, and marine terminals in the South Coast Air Basin. Inspectors in this team are assigned by facility, with each inspector dedicated to a refinery and auxiliary plants. From this team, 8 inspectors regularly conduct compliance activities in WCWLB. This team is based full-time in the Long Beach Field Office to ensure close proximity to the refinery sources that it regulates.

The **Service Station team** Focuses on gasoline service stations that serve the public, which can emit volatile organic compounds (VOCs). Inspectors in this team are assigned a geographic region. From this team, 2 inspectors regularly conduct compliance activities in WCWLB.

The **Toxics team** focuses on facilities that emit Toxic Air Contaminants, including hexavalent chromium, lead, and other toxic metals. Examples of these facilities include landfills, waste treatment facilities, water treatment facilities, lead acid battery manufacturers, and chromium plating and anodizing shops. Inspectors in this team are assigned a geographic region, and 2 inspectors regularly conduct compliance activities in WCWLB.

Figure 4-5. South Coast AQMD Enforcement Program teams

*RECLAIM, for REgional CLean Air Incentives Market, is a program that requires participating facilities to manage their total nitrogen oxides (NOx) and/or sulfur oxides (SOx) emissions (which reduce over time) by adding pollution controls, changing their equipment or processes, or buying credits from other RECLAIM facilities that have lower emissions than their cap. The program is currently being transitioned to a command-and-control regulatory program

CARB Enforcement's Program Structure

Through targeted enforcement or public complaints, CARB identifies a potential violation. CARB then contacts the responsible party to explain the enforcement process and to obtain additional information. Enforcement staff evaluates the information collected and works with CARB's Legal Office to determine violations of statutory and/or regulatory requirements. When violations are substantiated, CARB can take enforcement action, at which point the responsible party is provided an opportunity to discuss the violation.

This outcome includes taking appropriate enforcement action within the scope of CARB's enforcement authority, which may include issuing cease and desist orders, Notices of Violation, mitigation, or pollution prevention actions. Cases can be resolved via civil and criminal litigation. In lieu of litigation, cases typically are settled through CARB's mutual settlement program. Penalties are sought that provide adequate deterrence to future non-compliance or public nuisance.

For example, in 2017, settlement agreements were made with Union Pacific Railroad Company (UP) and BNSF Railway regarding drayage truck regulations. Under CARB's Drayage Truck Regulation, California ports and Class I rail terminals must report noncompliant heavy-duty diesel trucks entering their facilities. For years, BNSF and UP failed to accurately report to CARB information on noncompliant trucks entering their facilities, which hampered CARB's ability to enforce the regulatory requirements. The settlements resulted in UP turning away noncompliant trucks from their facilities and BNSF accurately reporting truck data to CARB for enforcement, resulting in reduced diesel emissions from heavy-duty diesel trucks around both UP and BNSF facilities.[8]

During the settlement process, violators have the opportunity to allocate up to 50% of their penalties to a supplemental environmental project (SEP)[4]. Community-proposed projects are funded by the violators to help improve public health, reduce pollution, increase environmental compliance and bring public awareness to air pollution issues. Additional SEPS are possible in the WCWLB community through the proposal process.[9] CARB has over 50 enforcement programs that focus on specific source types. A few of the programs that are relevant to enforcement activity in WCWLB community are:

[4] Other examples of enforcement settlement cases can be found in CARB's Annual Enforcement Reports (https://www.arb.ca.gov/enf/reports/reports.htm).

CARB Enforcement's Program Structure

CARB conducts **Idling** sweeps to ensure regulatory truck and bus idling limits are not exceeded.

Drayage vehicles move goods by certified heavy-duty vehicles (HDV). HDV that enter the port or intermodal facility are required to be certified to meet clean emission standards.

Ocean Going Vessels regulation is designed to reduce particulate matter (PM), nitrogen oxides (NOx), and sulfur oxides (SOx) from ocean-going vessels.

Shore Power reduces emissions from auxiliary diesel engines on passenger, cargo, and refrigerated-cargo ships through the At-Berth regulation.

Commercial Harbor Craft regulation is intended to reduce particulate matter (PM) and NOx from diesel engines on commercial harbor craft operated within 24 nautical miles of the CA coast. The regulation includes requirements for new and in-use (existing) engines.

Cargo Handling Equipment investigations are led by CARB to identify opportunities to reduce emissions from idling at ports and intermodal rail yards.

For the **Heavy-duty Vehicle Inspection Program**, CARB regularly conduct inspections for:

- Diesel Emission Fluid (DEF): a liquid used as a reductant in heavy duty diesel engines to reduce NOx emissions.
- Emission Control Label (ECL): Engine certification labeling requirements
- Smoke/Tampering: Requires heavy duty trucks/buses to be inspected

Statewide Truck and Bus program requires all vehicles with 2009 or older engines weighing over 14,000 pounds to reduce exhaust emissions by upgrading to 2010 or newer engines by 2023. Non-compliant vehicles will be denied DMV registrations.

Figure 4-6. CARB Enforcement Program teams relevant to the WCWLB community

How the Public Helps Reduce Air Pollution

Members of the public play an important role in communicating air quality concerns to both South Coast AQMD and CARB. The complaint process helps both agencies identify issues that are directly affecting the WCWLB community. The most effective way to contact the agency is through the complaint hotlines. In addition to South Coast AQMD's mobile application, both agencies can be contacted by phone and online:

CARB - Mobile Sources	South Coast AQMD - Stationary Sources
Automobiles, Trucks, Off-road Equipment, or other Vehicles	Odors, Smoke, Dust, or other Air Contaminants
Phone: 1-800-END-SMOG	Phone: 1-800-CUT-SMOG
Online: calepa.ca.gov/enforcement/complaints	Online: https://www.aqmd.gov/home/air-quality/complaints

Both CARB and South Coast AQMD value input from those who live and work every day in the community, and communicating air quality issues directly to the agencies with the information above is the best way to address an air pollution concern. Letting us know of an issue when it is occurring rather than after the fact really helps our ability to find the source of the problem.

An effective complaint should contain information with specific details. This information helps inspectors conduct a thorough investigation and take appropriate enforcement action. The following information is valuable to a thorough complaint investigation:

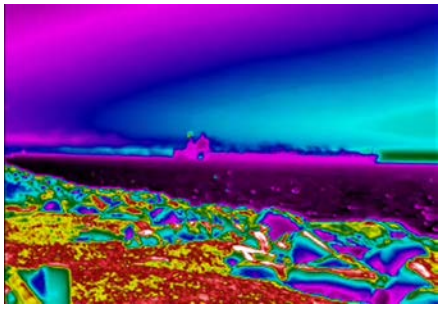
- Type of air quality concern (odor, smoke, dust, etc.)
  - Odors: description of odor
  - Smoke: color of smoke; does the smoke disappear or hang in the air?
  - Dust: type of dust
- Location of air pollution concern
- Name or address of potential source
- Time of day that the air quality issue began, and is the concern still occurring?
- Has the concern occurred before, and do other people in your community experience it as well?
- Contact information for the person reporting the complaint[5]

[5] Although anonymous complaints are accepted, staff have found that having contact information helps with getting additional information to help with the investigation

Technology

Both South Coast AQMD and CARB enforcement staff have embraced the use of technology as a means for more efficient and effective inspections. South Coast AQMD inspectors have access to advanced instruments to help identify air pollution issues in real-time. The following portable instruments are available to inspectors:

Toxic Vapor Analyzers (TVA): Inspectors can use TVAs to provide information about the level of certain gases in a specific area. This includes methane and volatile organic compounds (VOCs), which are emitted by petroleum sources and other types of sources.



Infrared Cameras: Inspectors can use specialized infrared cameras to view emissions of gases (including methane and VOCs) that would otherwise be invisible to the naked eye. This equipment enables inspectors to scan areas for emissions and quickly check for any large leaks at a facility.

X-Ray Fluorescence (XRF): Inspectors can use this handheld instrument to identify the types of chemicals that are on a surface or in a dust pile. This tool helps identify potential pollutants that are particles. For example, an XRF can be used to scan surfaces at a facility to identify which specific toxic metals may be deposited in that location, and which locations that have the highest levels of those toxic metals.

H_2S Analyzers (Jerome Meters): Inspectors can use this handheld instrument to measure hydrogen sulfide gas levels in the air. This information can be used to identify a potential source of rotten egg type odors.

Figure 4-7. Portable instruments used by South Coast AQMD inspectors in the field

In addition, inspectors are trained on how to collect field samples, including air samples, liquid samples, or bulk material samples. These samples can then be provided to the South Coast AQMD laboratory or contract laboratories for analysis. The results of these analyses can be used as evidence to support investigations and/or Notices of Violation issued to air pollution sources.

South Coast AQMD regulates over 25,000 facilities, receives approximately 10,000 public complaints per year, and operates a vast air quality monitoring network; and CARB regulates mobile sources throughout the state. Analyzing the data that results from these efforts can provide insight into the trends and sources of air pollution as well as new enforcement opportunities. Both agencies use information technology to enhance the ability to conduct investigations and enforce regulations. As an example, for CARB's truck fleet enforcement program, the traditional approach was to inspect several thousand trucks annually through fleet-based inspections. Starting in January 2018, CARB began the Streamlined Truck Enforcement Process (STEP), and is now able to conduct 20,000 to 25,000 inspections per year through the use of a data-driven approach, noncompliance letters, and a scheduled settlement process. South Coast AQMD's investigation of crude oil tankers is another example of using information technology in enforcement activities. Inspectors used mapping software, weather data, and ship databases to help identify an oil tanker as a potential source of emissions. The oil tanker was later issued a Notice of Violation when it berthed at a port near this community. These multi-faceted approaches can be applied to address other air pollution concerns in WCWLB. Providing transparent access to the information that both agencies possess will lead to a stronger partnership with the community.

The Interagency Approach

CARB and South Coast AQMD are committed to working with other agencies on joint initiatives that will directly result in cleaner air. The combined resources, expertise, and legal authorities of different agencies can create a well-rounded approach to the regulatory process that leverages their respective strengths to address issues that cumulatively impact public health. For example, the Los Angeles County Oil and Gas Strike Team is a group of multiple agencies that conducted crude oil production (oil well) inspections throughout Los Angeles County. Representatives from multiple agencies conducted inspections together, covering not only compliance with air, but also water, public health, and code enforcement. Both South Coast AQMD and CARB have demonstrated experience working in close collaboration with other regulatory agencies, cities and counties, public health agencies, and local police and fire departments to conduct investigations and provide public information about local air pollution sources.

Figure 4-8. Examples of agencies that routinely collaborate with South Coast AQMD and CARB

CARB partners with local agencies to create memoranda of understanding (MOUs), such as an agreement with South Coast AQMD to enforce CARB's greenhouse gas standards at certain facilities. In addition, CARB has already established partnerships with California DMV working on implementing registration holds for non-compliant trucks and buses, California Highway Patrol (CHP) to conduct roadside inspections, and other state and regional agencies to ensure we are supporting each other's enforcement efforts.

The compliance process seeks to ensure that all rules and regulations are followed through a fair and robust enforcement program, resulting in reduced air pollution emissions. Adaptability is crucial, whether in the program's overall, or in day-to-day, operations, to ensure that community concerns are addressed quickly and that enforcement action is taken when violations are identified. Both CARB and South Coast AQMD enforcement teams will continue to search for innovative strategies, lead in community transparency, and take swift action for non-compliance.