Update on the California Air Resources Board's Review of the San Diego Air Pollution Control District

June 2021

Enforcement Division California Air Resources Board

Executive Summary

AB 423[1] (Gloria, Chapter 744, Statutes of 2019) requires the California Air Resources Board (CARB) to perform a review of the San Diego Air Pollution Control District (SDAPCD or District). One of the major components of the review requires travel to the District to perform facility inspections, and review physical files, both of which have been significantly impacted by the COVID-19 pandemic. Therefore, CARB staff are not able to perform a complete and comprehensive review by the original legislative deadline of June 2021. Instead, CARB staff are providing this interim report with a status of the review and an updated review schedule.

The goal of the District program review is to meet the requirements of AB 423 by evaluating key District programs (permitting, regulatory, compliance, planning, monitoring, and incentives), and identifying potential program improvements. To accomplish this goal, CARB staff are assessing the District's rules, policies, and practices, documenting findings, and preparing recommendations to increase the District's effectiveness. As required by AB 423, the review is focused on, but not limited to, calendar years 2013 – 2018. While this interim report provides an update on the status of the ongoing review, the final report will provide CARB staff's complete analysis, results, findings, and recommendations for improvement.

CARB staff are conducting a multi-disciplinary review of the District, while taking into account the context of the programs with respect to improving the air quality in San Diego County. CARB staff plan to continue to work cooperatively with the District throughout the review, and as the District implements any potential future commitments resulting from this review.

The California Health and Safety Code (H&SC) establishes CARB as the state agency in charge of coordinating efforts to improve air quality in California. The H&SC also establishes CARB's role in oversight of the 35 California local air districts' role.

The H&SC establishes the local air district's authority over permitting stationary sources and air quality planning commitments. Air district responsibilities include regional air quality planning, air monitoring, stationary source and facility permitting, and enforcement. Districts vary by attainment status, population, population density, demographics, area, topography, meteorology, and industry. Therefore, each air district establishes programs that are designed to best address the unique conditions of its jurisdiction.

In this review, CARB staff are examining District programs related to air monitoring, facility emission inventory reporting and review, permitting, rule development, financial incentives, California Environmental Quality Act, Assembly Bill 2588 Air Toxics

[1] Assembly Bill No. 423, October 11, 2019, http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB423

"Hot Spots" Information and Assessment Act ("Hot Spots" Program) requirements, and compliance and enforcement.

Additionally, CARB staff are reviewing and evaluating specific data and actions related to approximately 50 facilities. CARB staff carefully selected the facilities to gain an understanding of how the District implements various key programs over a variety of facilities. During the facility selection process, CARB staff focused on facilities of various sizes located throughout San Diego County. Facilities were chosen in part for their "Hot Spots" Program prioritization scores, location with respect to the Portside Environmental Justice Community, and California Environmental Protection Agency initiative category.

Key Issues and Next Steps

CARB staff are reviewing District permitting practices, enforcement practices, and general policies to determine the effectiveness of these programs and policies at creating an equitable, compliant, and successful regulatory program/agency. To date, CARB and District staff have identified the following key issues to further evaluate and assess as part of the review:

- Demonstrating transparency to the public of the District's operations, including emissions levels, background data in setting permit conditions and enforcement actions;
- Evaluating the District's responses to complaints;
- Ensuring appropriate quantification and control of emissions from welding operations;
- Evaluating the "Hot Spots" emissions program implementation for timely and accurate reviews of health risk assessments; and
- Assessing the adequacy of the air monitoring in response to the fire on the *USS Bonhomme Richard*

These key issues are discussed in more detail later in the report. As the review progresses, CARB staff may identify additional key issues and the scope of the review may change. CARB staff are continuing to work on the review, which will include a public process. CARB staff plan to release the final report in the spring of 2022.

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Update on the California Air Resources Board's Review of the San Diego Air Pollution Control District

June 24, 2021

Introduction and Goals

AB 423[2] (Gloria, Chapter 744, Statutes of 2019) requires the California Air Resources Board (CARB) to perform an audit of the San Diego Air Pollution Control District (SDAPCD or District). AB 423 also restructures the District's governing board to an 11-member board comprised of county supervisors, council members or mayors from specified cities, and members of the public. Prior to the restructuring of the governing board, the Board consisted of the 5 San Diego County supervisors. AB 423 imposes specified duties on the District, including requirements related to transparency and public availability of specific programmatic data on its website. AB 423 effectively broadens the governance of the District to support increased representation of the County's diverse residents and businesses.

Unrelated to AB 423, in July 2020, the State Auditor released a report[3] concluding that the amount the District collects for permitting fees does not comprehensively cover the costs of the permitting program. In lieu of such fees, the District had been using funds from other sources to subsidize the program. The audit also stated that the District and its Board had not taken adequate steps to encourage public participation when making decisions regarding regional air quality improvements and had not properly documented or investigated complaints in a timely manner. While the State Auditor report is separate to the requirements of AB 423, CARB staff have taken the Auditor findings and recommendations into consideration during the AB 423 review.

The goal of the District review is to meet the requirements of AB 423 by evaluating key District programs (permitting, regulatory, compliance, planning, monitoring, and incentives), and look for areas for potential improvement. To accomplish this goal, CARB staff are assessing the District's rules, policies, and practices in these program areas, documenting findings, and preparing recommendations to increase the District's effectiveness. This review is focused on, but not limited to, calendar years 2013 – 2018, as required by AB 423. The final report will provide CARB staff's complete analysis, results, findings, and recommendations for improvement.

[2] Assembly Bill No. 423, October 2019, http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200AB423

[3] Auditor of the State of California Report 2019-27 & Fact Sheet, July 2020, https://www.auditor.ca.gov/pdfs/reports/2019-127.pdf; https://www.auditor.ca.gov/pdfs/factsheets/2019-127.pdf

The review is currently well underway. CARB staff established a website[4] for the review that contains information related to the public process, updates, and reports. Stakeholders can also submit questions and comments to the project email address, *SanDiegoReview@arb.ca.gov*. To initiate the review, and as part of the public process, CARB staff held a remote workshop to take public comment on staff's work plan on November 12, 2020 and presented the work plan to the Community Air Protection Program Portside Steering Committee on January 19, 2021. CARB staff will continue to meet regularly and collaborate extensively with District staff until the review is complete.

One of the major components of the review requires travel to the District to perform facility inspections, and review physical files, both of which have been significantly impacted by the COVID-19 pandemic. This report provides an update on the status of the ongoing review and provides a general schedule for its completion.

Air Pollution Control Framework

1) Framework

In California, federal, State, and local agencies work together to improve and protect air quality. The primary agencies, the United States Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB), and air pollution control districts and air quality management districts (air districts), all share the task of achieving air quality improvements and ensuring all Californians breathe clean air.

a) Federal

The Clean Air Act (CAA) is the federal law that regulates emissions from stationary and mobile sources and requires federal, state, local, and tribal governments to implement programs to reduce pollution. The CAA requires the U.S. EPA to establish national ambient air quality standards (NAAQS) and grants the U.S. EPA legal authority to regulate pollution.

The U.S. EPA adopts emission limitations for stationary sources, area sources, and motor vehicles. The CAA establishes a permitting program for major sources of air pollution referred to as the Title V permitting program. Facilities that are classified as major sources are required to obtain a Title V permit. Major sources are generally determined by the amount of pollution a facility could potentially emit. However, some facilities are considered major sources simply due to the type of facility, regardless of size.

[4] California Air Resources Board SDAPCD Program Review Webpage, https://ww2.arb.ca.gov/our-work/programs/san-diego-program-review

b) State

The California Health and Safety Code (H&SC) establishes CARB as the State agency in charge of coordinating efforts to attain and maintain ambient air quality standards, research the causes of and solutions to air pollution, and address the impacts from mobile sources. CARB is the lead agency for climate change programs and oversees all air pollution control efforts in California.

CARB is responsible for adopting motor vehicle standards, including standards for trucks and buses. In addition, CARB also adopts State or California ambient air quality standards (CAAQS). CAAQS typically have different thresholds and averaging periods than NAAQS and are generally more stringent. CARB is also responsible for regulating fuels and consumer products, maintaining emission inventories, approving air quality plans, creating greenhouse gas reduction programs, managing climate change, developing control measures for toxic air contaminants, managing wildfire smoke, and air district oversight.

c) Air Districts

California is divided into 35 air pollution control districts (APCDs) and air quality management districts (AQMDs), which are referred to as air districts. Each air district is an independent governmental body. They range in size from small single or fractional county districts such as Mariposa County APCD or Northern Sonoma County APCD to multi-county agencies such as the South Coast AQMD. Air districts are governed by local boards and are staffed with engineers, planners, inspectors, technicians, and attorneys, depending on their needs.

The H&SC grants air districts the primary authority over stationary sources. California's air districts are also responsible for regional air quality planning, monitoring, permitting, and enforcement. Each air district tailors its programs to the unique conditions of its jurisdiction. Districts vary by population, population density, demographics, area, topography, meteorology, and industries and therefore establish programs that best address their needs to work towards cleaner air in their specific district.

2) CARB Oversight

While air districts have flexibility in designing and implementing their programs, the programs are still required to meet State and federal statutes. Air quality regulations are regularly promulgated to address the latest health findings, technological improvements, monitoring data, and climate changes. Although the air in California has improved steadily, California’s geography, population, and climate create challenges towards attaining the federal and State ambient air quality standards.

CARB coordinates air districts’ efforts to meet or attain the federal and State ambient air quality standards (AAQS). CARB’s role includes oversight responsibilities for the air

districts, as established in the H&SC. CARB support and oversight of districts spans several areas, which include: review and support of air districts permitting and compliance programs, review of rules and regulations, review of incentive programs, and review of monitoring activities. As part of this oversight role, CARB staff conduct program reviews, generate reports, and provide recommendations to local districts.

3) Air District Implementation

An air district's attainment status is the basis for many requirements in its programs. The attainment status is also referred to as a designation. The air district's attainment status/designation is determined on a per-pollutant basis using ambient air quality data collected from monitoring stations. For some pollutants, the attainment status/designation includes a range of classifications. For example, an ozone non-attainment designation includes levels or classifications such as transitional, maintenance, marginal, moderate, serious, severe, and extreme. These designation levels trigger different regulatory requirements for local air district programs.

a) Rules

An air district's attainment status drives local and regional air quality planning. Air districts develop air quality plans that address a variety of air quality issues including achieving attainment with the federal and State AAQS. Each air district that is designated as nonattainment is required to develop a plan called a State Implementation Plan (SIP), outlining how the district will attain the federal standards. In addition, air districts adopt rules and regulations that provide emission reductions. These rules and regulations are used to demonstrate progress with the SIP and compliance with State requirements.

Local air districts are responsible for developing, implementing, and enforcing rules to address local sources of emissions and meet State and federal requirements. There are several types of air district rules with distinct purposes, such as establishing permitting requirements or reducing emissions from a specific category of equipment. The following list includes a sample of the different types of air district rules and purposes.

- New Source Review (NSR) Rules: General permitting rules outlining procedures and requirements for obtaining permits to operate for applicable equipment.
- Prohibitory Rules: Rules with limits to reduce emissions from a specific category of pollutant; or specific to a type of source or technology.
- General Rules: Procedural rules and rules that do not fit into other categories such as fees and definitions.
- Airborne Toxic Control Measures (ATCM): Measures developed to reduce exposure to toxic air contaminants.
- Financial Incentives: Rules that define incentive or credit programs.
- Federal: Rules developed at the federal level covering requirements for federally designated sources, hazardous air pollutants, acid rain, etc.

- Transportation Control Measures: Rules for transportation sources.

CARB reviews air district rules and regulations to ensure they meet State requirements. CARB is also responsible for compiling these rules from the 35 air districts and submitting the SIP to the U.S. EPA.

b) Permits

State law and local rules require every significant stationary source of air pollution or, in some cases, air pollution control devices, to be permitted by an air district before they are constructed and throughout their operation. The equipment is permitted according to the air district's rules and regulations.

Air districts' NSR programs are required by the H&SC and CAA. NSR serves to ensure that emissions from new or modified emission sources do not interfere with progress towards attainment or maintenance of the State and federal ambient air quality standards. While NSR rules can vary from district to district, specific elements are included in each NSR rule and all NSR rules describe the air district's requirements for evaluating emissions from proposed equipment and operations.

Air districts review proposed equipment, operations, emissions, and emission controls to determine if the proposed operation would comply with federal, State, and local requirements. Some permit applications require additional evaluations, such as ambient air quality impact analyses and health risk assessments.

Key components of permit application reviews include a rule compliance analysis, application of best available control technology (BACT) or lowest achievable emission rate (LAER), an analysis of any emission offset requirement, an air quality impact analysis (AQIA), a health risk assessment (HRA), and public notice. Not all of these components are a part of every permit evaluation. Which elements are required depends on the amount and types of emissions associated with the process being permitted.

c) Emission Inventories

Federal statutes, State law, and air district rules require stationary sources to provide data on actual emissions to the air district on a regular basis. Air districts compile this information and annually transmit it to CARB and U.S. EPA.

d) Monitoring

CARB partners with the air districts, universities, community members, and industry to monitor ambient air throughout California[5]. The State regulatory monitoring network, under CARB and air district jurisdiction, includes over 250 stations in selected locations. These stations are assembled with a suite of analytical instruments dedicated to measuring criteria pollutants (ground-level ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead). In addition, California has approximately 35 air toxic monitoring stations, and multiple greenhouse gas monitors. CARB has collaborated with air districts on special studies, including community-scale monitoring to improve the understanding of air quality in impacted areas. California's extensive monitoring network provides information that is used to track progress in air quality and determine public health priorities.

The monitoring network is designed to meet a variety of regulatory requirements including specifications from federal programs. Air districts play a crucial role in establishing and managing a network along with generating data of appropriate quality for comparison with national standards and determining attainment status. Air districts are generally responsible for network design, monitoring station installation, equipment procurement, monitoring equipment operation, data management, sample collection and transport, quality control verifications, data validation, routine maintenance of monitoring equipment and stations, equipment calibration, training staff, developing monitoring plans, periodically assessing, and modifying the network, etc.

e) Air Toxics "Hot Spots" Program

Air districts implement the "Hot Spots" Program) which was enacted in September 1987 and requires stationary sources to report the types and quantities of toxic air contaminants (TACs or air toxics) their facilities routinely release into the air. District facility toxic air contaminant inventories are used to screen, prioritize, and further assess the human health risk that may result from these emissions.

The goals of the "Hot Spots" Program are to:

- Collect emission data;
- Identify facilities having localized impacts;
- Determine health risks from identified facilities;
- Notify nearby residents of significant risks; and
- Reduce emissions from facilities that pose significant risks.

[5] Annual Network Plan, CARB July 2020 https://ww3.arb.ca.gov/aqd/amnr/2020anp.pdf?_ga=2.81398167.1043799275.1616421888-478229140.1604334983

When a facility's emission levels or ambient health impacts exceed certain threshold levels, the "Hot Spots" Program requires additional actions be taken, which may include the notification of nearby residents and risk reduction plans to reduce exposure to air toxics. The Emission Inventory Criteria and Guidelines (EICG) document issued by CARB on September 26, 2007 provides requirements for the collection of air toxics emissions data that are used for evaluation under the program.

f) Compliance and Enforcement

Air districts are responsible for ensuring that the regulated community complies with all air pollution rules and regulations. Air districts accomplish this through a combination of business assistance (e.g., preventative education) and direct enforcement activities. Direct enforcement activities include facility compliance inspections, complaint investigations, and violation resolution through settlement programs including litigation when necessary. Through working cooperatively with businesses, air districts can improve compliance programs and achieve widespread compliance.

All air districts include core compliance assurance activities. These activities include:

- Compliance Assistance: Working with businesses to understand air district programs and facilitate compliance.
- Inspections, Investigations, Source Tests, and Record Reviews: Air districts use these enforcement tools to determine if a person or business is operating in compliance with applicable federal, State, and local rules and regulations.
- Violation Documentation: When violations are found, air district staff document the circumstances and collect evidence needed to substantiate that a violation has occurred.
- Violation Settlement: With well documented violations, air districts compel the return to compliance and deter future violations by establishing penalties and other corrective actions through a mutual settlement process.

g) Incentives

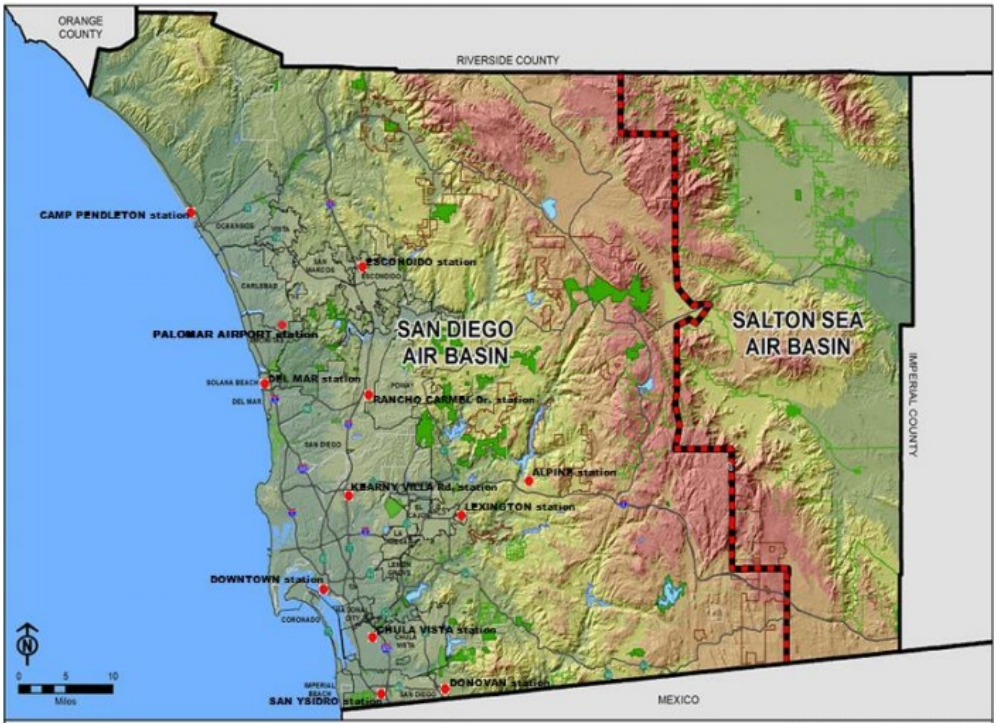
H&SC sections 39500, 39808, 44286 and 44291 grant CARB the authority and direction to oversee the implementation of financial incentive programs run by air districts. CARB staff work with air districts that implement and provide financial incentives to clean the air by advancing lower-emitting engines and technologies. Districts offer a range of incentive programs targeting businesses, community members, and local government. District incentive programs include but are not limited to engine upgrade and replacement, wood stove and fireplace change-out, electric lawn and garden equipment, community air protection, furnace upgrades and replacements, and vehicle retirement.

Overview of San Diego Air District Programs

1) General Description

The District was established in 1955 and has regulatory authority over all of San Diego County. San Diego County is approximately 4,300 square miles[6] and encompasses the entirety of San Diego Air Basin and a portion of the Salton Sea Air Basin. The following map shows the boundaries of the District.

Figure 1. – Map Showing San Diego Air Basin and District Boundaries[7]



In terms of total population, San Diego County is the second largest county in California with a total population of over 3,300,000 million[8]. The District has the fourth highest population of all air districts in the State[9].

AB 617 (California Assembly Bill 617, C. Garcia 2017) requires focusing efforts at the community level to reduce air pollution and improve public health in areas that

[6] SDAPCD Geography Webpage, SDAPCD, accessed March 23, 2021 https://www.sandiegocounty.gov/hhsa/statistics_geography.html
[7] Annual Air Quality Monitoring Network Plan 2016, SDAPCD, June 30, 2017, https://www.epa.gov/sites/production/files/2017-10/documents/caplan2017-sandiegocounty.pdf
[8] Annual Air Quality Monitoring Network Plan 2016, SDAPCD, June 30, 2020, https://www.sandiegocounty.gov/content/dam/sdc/apcd/monitoring/2019_Network_Plan.pdf
[9] San Joaquin Valley Air Pollution Control District Air Monitoring Network Assessment, San Joaquin Air Pollution Control District, June 29, 2020 http://www.valleyair.org/aqinfo/Docs/2020-Air-Monitoring-Network-Assessment.pdf

experience disproportionate burdens from exposure to air pollutants. The Portside Environmental Justice Community (Portside Community) includes the neighborhoods of Barrio Logan, Logan Heights, and Sherman Heights in the City of San Diego, and West National City within National City. This community was selected by CARB for inclusion in CARB's Community Air Protection Program, after it was identified and proposed by the District as having some of the highest CalEnviroScreen 3.0 ratings in California[10].

In 2018 the Portside Community was selected for an air pollution monitoring program, and the Portside Community Steering Committee was formed to include the local community in decision making during the development and implementation of the Community Emissions Reduction Plan.

The San Diego Air Basin is classified as a transport recipient of ozone, oxides of nitrogen (NOx), and volatile organic compounds (VOC). Depending on wind direction, these pollutants are transported into the air basin from the South Coast Air Basin (north) and Mexico (south). In addition to pollutant transport issues, dry summer winds can result in firestorm conditions[11]. Wildfires can cause high levels of air pollution well above ambient air quality standards.

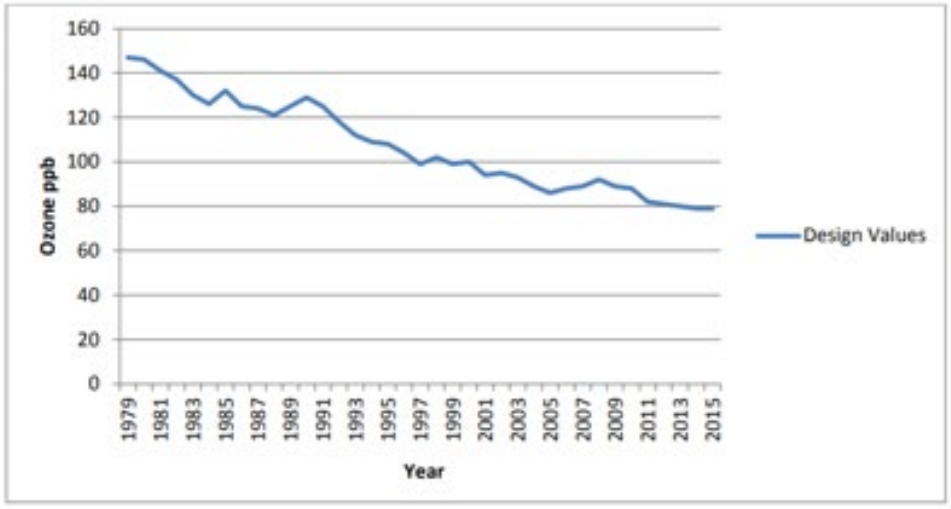
a) Air Pollutant Concentration and Trends

The District ozone values have been steadily trending downward since 1979 towards the attainment value of 70 parts per billion (ppb). The following figure shows this steady improvement in ambient ozone levels.

[10] SDAPCD Community Emissions Reduction Plan Phase II Draft, April 2021, https://www.sdapcd.org/content/dam/sdc/apcd/PDF/AB_617/Community%20Emissions%20Reduction%20Plan%20CERP%20DRAFT%20%20April%202021.pdf

[11] Annual Air Quality Monitoring Network Plan 2016, SDAPCD, June 30, 2017, https://www.epa.gov/sites/production/files/2017-10/documents/caplan2017-sandiegocounty.pdf

Figure 2. – Ozone Values for San Diego County 1979 - 2015[12]



b) Attainment Status

San Diego County is currently designated as nonattainment with the federal and State AAQS for ozone, and State AAQS for particulate matter less than 10 microns (PM_{10}) and particulate matter less than 2.5 microns ($PM_{2.5}$). For all other federal and State AAQS, San Diego County either meets the standard or is not classified. Areas that are not classified are treated as if they are in attainment.

c) Types of Sources

The District includes a variety of industry and pollution sources including larger facilities such as power plants, landfills, port facilities, and military operations. The District has approximately 30 facilities classified as a "major source" and approximately 4,000 existing permitted sources.

2) District Program Areas

a) Monitoring

The District collects ambient air pollutant data from locations with diverse combinations of topography, meteorology, and emission sources in an attempt to accurately represent the ambient air quality in this region. The District monitoring network is operated in accordance with federal monitoring requirements (Title 40, CFR, Part 58, Appendix A).

[12] CARB Review of the 2008 8 hr Ozone Attainment Plan for San Diego, CARB, February 2017 https://ww3.arb.ca.gov/planning/sip/planarea/sansip/2016ozone.pdf

According to the most recent District network plan published in 2020[13], the District operates nine criteria pollutant monitoring stations and has two additional stations under construction. District monitoring stations measure ambient concentrations for various criteria pollutants (ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and /or lead) and most measure meteorological parameters (temperature, humidity, wind speed, etc.) Some of the District monitoring stations also monitor for toxic compounds. In addition, the District operates a mass analysis laboratory that measures particulate matter from samples collected at the monitoring stations.

b) Emission Inventories

Emission inventories provide an estimation of the amount of pollution emitted from sources in a particular area. The District uses stationary source emissions of criteria pollutants and their precursors (e.g. reactive organic gases, oxides of nitrogen, etc.) to model (predict) the contribution of emissions from stationary sources and effectiveness of the control measures. The District also reviews emission contributions from mobile, natural, and other sources.

The District evaluates toxic chemical emissions to determine their impact on the health of the community. They also use meteorological data to determine the contribution from various sources to the measured ambient air. The District uses this data to determine appropriate mitigation actions to improve air quality.

The District uses criteria pollutant emissions from stationary sources along with meteorological data to model the emission concentrations of various pollutants at a specific location. The data and models can be used to determine appropriate approaches for managing emissions from various sources.

The toxic air contaminant emissions can also be modeled in the same way to predict the localized concentrations of these pollutants. Based on these ambient concentrations, it is possible to determine the resulting risks to human health due to inhalation exposure at specific locations and areas.

c) Air Toxics "Hot Spots" Program

As part of the "Hot Spots" Program, District staff review facility HRAs in partnership with the Office of Environmental Health Hazard Assessment (OEHHA). The District has developed *Supplemental Guidelines for Submission of "Hot Spots" Program Health Risk Assessments (HRAs),* dated May 2019. These supplemental guidelines incorporate the 2015 OEHHA guidance methodology and outline other HRA requirements,

[13] Annual Air Quality Monitoring Network Plan 2019
https://www.sandiegocounty.gov/content/dam/sdc/apcd/monitoring/2019_Network_Plan.pdf

including modeling specific and user default options for the risk evaluation incorporated into the Hot Spots Analysis and Reporting Program (HARP).

Once HRAs are reviewed by OEHHA and approved by the San Diego Air Pollution Control Officer (APCO), facility operators must notify all exposed persons of the HRA results if the District determines that there is a potentially significant health risk associated with emissions from the facility. Facilities with potentially significant risks are required to reduce emissions to acceptable levels within 5 years of the approval of a required risk reduction plan.

The District's Rule 1210 (adopted and effective June 12, 1996) addresses the requirements associated with public notification and risk reduction audits and plans as they pertain to the "Hot Spots" Program. This rule is applicable to each stationary source required to prepare an HRA pursuant to H&SC section 44360.

d) Rules and Planning

The District uses the stationary source criteria pollutant emission inventory data to determine what actions to take to meet air program requirements and achieve attainment of the ambient air quality standards. The District uses the criteria pollutant inventories to develop short- and long-term plans to address nonattainment of air quality standards.

The District sets forth rules through a public process, to limit or reduce air pollution. The District rules include limitations on specified activities and emission control requirements for a variety of devices and processes. Federal and State law and guidelines determine certain approaches that must be employed by the District when establishing control requirements for various facilities and industrial activities.

The District regulates stationary emission sources by adopting and enforcing rules. The District has over 150 rules, some which apply to specific types of equipment (for example, gas turbines, internal combustion engines, and boilers), others apply to specific industries (for example, municipal solid waste landfills and pharmaceuticals and cosmetics manufacturing), and others more broadly apply to all sources (for example, the nuisance rule, and a rule limiting visible emissions). With regards to source specific/prohibitory rules, the rules achieve emissions reductions by setting emission standards, requiring controls, or requiring work practices that minimize emissions and strengthening these standards over time. While the District determines what those standards will be, federal and State law require the standards to meet minimum requirements.

i) RACT/BARCT Requirements

Federal requirements stipulate areas that are classified as nonattainment for federal ozone AAQS must implement reasonable available control technology (RACT). RACT is the lowest emission limitation that an emission source is capable of meeting by using control technology that is reasonably available, considering technological feasibility and cost effectiveness.

The H&SC requires districts that are classified as nonattainment for State AAQS to implement best available retrofit control technology requirements (BARCT). BARCT is similar to RACT, but as the term "best" implies, BARCT is intended to be more technology forcing to ensure the best technology is employed to control air pollution.

e) Permitting and New Source Review

Generally, all significant stationary sources of air pollution in the District are permitted according to their NSR regulations. The District issues permits containing emission limits and controls for each source based on the applicable regulations. Before constructing any new source of air pollution or modifying/replacing an existing source of air pollution, the source must obtain approval from the District through an Authority to Construct (ATC) permit. The ATC allows for the construction/installation of the source in question and allows for the temporary operation of the source. After an ATC is issued and the source is constructed/installed, the District will perform an inspection of the source. If it finds that the source complies with its ATC, the District will issue a permit to operate (PTO).

i) Engineering Evaluation

Once a complete application (i.e., contains sufficient information to perform an analysis of the proposed permitting action) has been received for a new source or modification of an existing source, the District reviews the project to ensure that it complies with all applicable requirements. This review is recorded in a document referred to as the ATC engineering evaluation. The ATC engineering evaluation typically consists of a review of all new/modified/replaced equipment at the facility and includes a calculation of emissions associated with this equipment. Based on the results of the emission calculations, the District is to determine which source specific/prohibitory rules are applicable to the project and which elements of the NSR permitting thresholds have been exceeded.

Once the District determines that a proposed project has met all applicable regulatory requirements, the District issues an ATC that includes a number of requirements including equipment specifications, operating limits, emission limits, monitoring/testing requirements, and recordkeeping and reporting requirements. For some projects, the District posts the draft ATC publicly to allow for public comments.

ii) New Source Review

The District NSR permitting program is established in District Rules 20.1 through 20.8. NSR has three key elements: BACT/LAER, Offsets, and AQIA.

The District requires BACT for oxides of nitrogen, volatile organic compounds, oxides of sulfur, and PM_{10} on projects where the post-project potential to emit is 10 pounds per day[14] or greater.

The District maintains a BACT guideline[15] to clarify the requirements for permit applicants. As part of the ATC engineering evaluation, the District staff perform a complete, step-by-step, or "top-down" BACT analysis per the BACT guidelines. As part of this evaluation, District staff review BACT guidelines prepared by other air districts and the U.S. EPA to determine the applicable emission control level. For projects that trigger LAER, District staff review U.S. EPA LAER determinations and select the most stringent for the equipment under review.

The District's Emission Reduction Credit (ERC) program establishes procedures for issuing and using ERCs to mitigate or offset a project's emissions once certain levels have been exceeded.

The District's NSR rules[16] require specific projects to perform an AQIA to determine the effect of a project on ambient air quality. The purpose of the analysis is to ensure a project will not cause a local violation of air quality standards.

iii) Enforceable Conditions

Permits to operate are only effective if they are enforceable. To accomplish this, District staff include process limits, different averaging limits, monitoring and data collection requirements, testing requirements, and reporting and record keeping requirements in issued permits. The most effective permits reference applicable U.S. EPA, CARB or district approved test methods for verifying those requirements. The District is unique from other districts in that it has its own source testing division. In many cases, the District source testing group has established its own source testing methods.

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[14] Rule 20.2 New Source Review, Non-Major Stationary sources, SDAPCD, October 16, 2020 https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Permits/APCD_R20.2.pdf, and Rule 20.3,New Source Review, Major Stationary Sources and PSD Stationary Sources, SDAPCD, October 16, 2020 https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Permits/APCD_R20.3.pdf

[15] New Source Review Requirements for Best Available Control Technology (BACT) Guidance Document, SDAPCD, June 2011, https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Misc/APCD_bact.pdf

[16] Rule 20.2 New Source Review, Non-Major Stationary sources, SDAPCD, October 16, 2020 https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Permits/APCD_R20.2.pdf, and Rule 20.3,New Source Review, Major Stationary Sources and PSD Stationary Sources, SDAPCD, October 16, 2020 https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Rules_and_Regulations/Permits/APCD_R20.3.pdf

f) Enforcement

The District compliance division's primary job is to ensure compliance with local, State, and federal air pollution control regulations. The District compliance division staff are supported by staff in the Monitoring and Technical Services Division (MTSD), which is responsible for conducting and observing source tests at permitted facilities.

The District takes a policy-based approach to implementing compliance assurance activities within their enforcement program. District enforcement policies guide District staff on how they conduct their work, provide the regulated community with information on what to expect during an enforcement action, and enable the public to hold the District accountable.

The District compliance division conducts facility inspections to determine the compliance status with applicable regulations and facility permits. The role of the inspector is to periodically perform site inspections and to verify that operations are complying with requirements. During facility inspections, District staff review records, check the facility to ensure that only permitted and permit-exempt equipment is installed and operated, verify compliance with permit conditions, and provide compliance assistance to the regulated community. Facility inspections are usually conducted unannounced in order to observe operations that are representative of normal business practices. The District maintains a comprehensive set of compliance policies and inspection forms that its staff use on a routine basis.

The District responds to air pollution complaints from members of the public. The types of complaints the District receives often include excessive smoke, dust, or odors. The District receives complaints from the public[17] by phone, email, an online complaint form, and through the County of San Diego's "Tell Us Now" web app.

g) Incentives

The following are descriptions of the various incentive programs implemented by the District. Note: this list only includes the incentive programs where CARB has administration authority:

- Carl Moyer Program: The Carl Moyer Program funds cleaner-than-required vehicles and equipment to help reduce air pollution. Funded projects must achieve early, or extra emission reductions not otherwise required by law or regulation. Funding sources for the Carl Moyer Program include tire replacement and vehicle registration (smog abatement) fees. CARB develops statewide implementation guidelines, distributes funds to air districts, and conducts periodic oversight. Air districts choose which project types to fund

[17] Reporting Party information is kept confidential, except when the District is legally obligated to release the information (e.g., in response to a court order). District inspectors take care in the field to avoid identifying the Reporting Party.

from a variety of eligible categories, including on-road and off-road vehicles and equipment, marine engines, shore power, locomotives, stationary agriculture pumps, emergency equipment, lawn and garden equipment, and light duty vehicle scrap. Similar to other large and medium-sized air districts in California, the District contributes matching funds as required by the Carl Moyer Program.

- CAP Incentives: Community Air Protection incentives facilitate emission reductions through clean air projects in disadvantaged and low-income communities that are heavily impacted by air pollution. Community engagement is key to project selection. While CARB develops statewide implementation guidelines, distributes funds to air districts and conducts oversight, the air districts must conduct a transparent and meaningful public process, including community outreach and public meetings, to guide funding decisions. Funding for CAP incentives comes from the Greenhouse Gas Reduction Fund, with spending in accordance with the goals of AB 617 and requirements of California Climate Investments. CAP incentives fund emission reducing mobile source vehicle and equipment projects, infrastructure projects, stationary source projects and other community-identified projects, with a priority on zero-emission projects.
- Goods Movement Program: The Goods Movement Program offers grants to owners of equipment used in freight movement to fund the purchase of cleaner technologies that quickly reduce air pollution emissions and health risks from freight movement along California's trade corridors. The Goods Movement Program is funded by bonds authorized by Proposition 1B and is implemented by local agencies that apply to CARB for grants to fund specific project categories. At the discretion of the implementing agency, the project categories may include heavy duty trucks used in goods movement through specific corridors or serving seaports or railroad intermodal transportation hubs, locomotives, ships at berth and commercial harbor craft, and cargo handling equipment. CARB develops guidelines, awards grants to fund projects proposed by air districts and seaports and conducts periodic oversight.
- FARMER Program: The FARMER Program provides funding through local air districts for agricultural harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, and other equipment used in agricultural operations. In September 2017, CARB received $135 million to reduce emissions from the agricultural sector from AB 134 (Committee on Budget, Chapter 254, and Statutes of 2017) and AB 109 (Ting, Chapter 249, Statutes of 2017). Since then, the program has received subsequent appropriations in FYs 2018-19 and 2019-20 from the California Legislature. Funding sources for the program have included the Greenhouse Gas Reduction Fund, the Air Quality Improvement Fund, the California Tire Recycling Management Fund, and the Alternative and Renewable Fuel and Vehicle Technology Fund. CARB staff worked with local air

districts and stakeholders through a public process to develop the FARMER Program Guidelines, which set the minimum requirements for the program and ensure that the projects funded will provide the intended emission reductions.

Review Methods and Evaluation Metrics

The goal of this review is to determine the District's performance in several key program areas. This requires an understanding of how the District implements its programs and how other districts implement similar programs. CARB staff developed a workplan for the review with the following key components:

- Identify and evaluate key District programs, policies, and practices;
- Determine if programs meet legal requirements;
- Review program implementation;
- Review specific facility data across a variety of emission sources;
- Compare programs and implementation with other districts; and
- Make recommendations for program improvements.

1) Data Collection and Comparison

As part of the collaborative review process, and as the result of numerous virtual meetings, phone calls and emails, the District has sent documents necessary for CARB staff's review. This includes documents related to over 50 facilities. In addition, the District has provided emission inventory data, attainment plans, compliance documents, rule development information, NSR and permitting guidelines, and budgeting documents. The District also provided access to the Open Application and Trust Report, which provides general information regarding the timelines and status of permit applications.

CARB staff continue to work extensively with District staff to gather necessary information to complete this review. As part of this process, CARB staff regularly submit new information requests to the District as issues are identified. This ongoing process of requesting follow-up information from the District allows CARB staff to increase their understanding of the District programs.

2) Evaluation of Program Documents:

CARB staff subject experts are evaluating the District's implementation of key programs, including but not limited to: emission inventories and toxic air contaminant programs, permitting and NSR, rule development and planning, air monitoring, incentives, and enforcement. As part of this review, CARB staff are evaluating District policies, rules, and guidelines for consistency and adequacy.

3) Evaluation of Facilities

The District has approximately 4,000 permitted facilities, which includes approximately 30 designated as federal major sources, with all of the facilities collectively holding approximately 7,000 District permits. CARB staff are reviewing and evaluating the permitting and enforcement actions related to approximately 50 specific facilities from 2013 to present to strengthen CARB's understanding of how the District administers key programs. Every effort will be made to review the same facilities in all program areas.

In an effort to select a representative sample, CARB staff selected facilities across various locations and industries. CARB staff analyzed a full list of facilities in the District, and made their selections based on a variety of data provided by District staff. The following factors were taken into consideration during the selection process:

- Balance between major sources and non-major sources;
- Public health impacts due to toxic or criteria pollutant emissions;
- Location within the Portside Environmental Justice Community; and
- CalEPA initiatives (oil and gas, landfill/composting, and metal shredding).

CARB staff selected the remainder of the facilities at random to reflect a broad mix of facilities within the District. The list of facilities can be found on CARB's San Diego Program Review website, under "project files."[18]

With respect to these facilities, CARB staff are thoroughly reviewing selected ATCs, PTOs, engineering evaluations, permit renewals, correspondence, inspection reports, source test results, NOVs, District policies and guidance documents, facility compliance rates, and more for compliance with all federal, State, and local requirements. During this review CARB staff will focus on a number of issues including the following topic areas:

- Accuracy, clarity, completeness, and transparency of engineering evaluations and permits;
- Accuracy of emission calculations and emission factors;
- Inclusion of all applicable federal, State, and local requirements (National Emission Standard for Hazardous Air Pollutants, ATCM, NSR, etc.);
- ERCs granted in accordance with all applicable regulations and policies (surplus, quantifiable, permanent, enforceable, appropriate multipliers);
- Application of BACT relative to both minor and major sources, including adherence to Federal and State requirements, as well as District policies;
- Public notice requirements;
- Enforceability of permit conditions;

[18] CARB's San Diego Program Review, https://ww2.arb.ca.gov/our-work/programs/san-diego-program-review

- Facility compliance rates;
- Documentation of investigations and inspections;
- Source test evaluations;
- Consistent penalty assessment;
- Handling of minor violations;
- Enforcement case closure rates;
- Enforcement of asbestos abatement requirements; and
- Enforcement of agricultural burn requirements.

4) District Comparison

CARB staff's analyses will involve a high-level comparison of program level attributes at multiple air districts, including (but not limited to) the San Joaquin Valley Air Pollution Control District (SJVAPCD), Bay Area Air Quality Management District (BAAQMD), and South Coast Air Quality Management District (SCAQMD). However, air district programs are highly variable and cannot always be directly compared.

CARB staff are tailoring the specific program and facility evaluation methods and metrics to compare program effectiveness and implementation with other districts. Districts generally differ in programs and implementation. Each air district has many factors which make it unique, including population, size, topography, attainment status, nearby sources of air pollution transport, types of industry, climate, and weather patterns, etc. This results in air district programs with varying requirements that are tailored to specifically meet the different needs of each district. Each district uses comprehensive programs made up of many individual parts to accomplish their own air quality goals and progress towards attainment. While many of the high level, base components of each district are relatively similar, details and implementation do vary. This makes comparison of various district programs complicated, in that some basic components can sometimes be compared, but not all components of district programs are directly comparable. While district comparisons can yield useful information if done correctly, this uniqueness should always be taken into account when attempting any kind of comparison between districts.

5) Evaluation Metrics

a) Monitoring

CARB staff are reviewing instrument audit results compiled annually from a select number of District monitoring sites. The review includes a determination of whether monitoring stations undertook routine verifications, quality control checks, maintenance, and if calibrations were completed at the required frequency. With regards to the District laboratory review, CARB staff are examining operating practices at the lab.

With regards to siting criteria, CARB staff are focusing on the proper installation and placement of monitoring station instrumentation to ensure sampling is representative of the ambient air composition.

In addition, AB 423 requires the District to develop a comprehensive air monitoring program by December 2021. As part of this review, CARB will work cooperatively with the District to review the development of the air monitoring program and provide feedback on the program.

b) Emission Inventories

As part of the District program review, CARB staff are evaluating the District's practices regarding the collection, reporting, quality, and availability (transparency) of the District's emission inventory data. CARB staff are reviewing how the District collects and quantifies emissions data, the frequency of data collection, and the methods used to quantify and analyze emissions data. CARB staff are analyzing District practices to evaluate conformance with federal, State, and local emission data collection requirements and guidelines; and comparing the quality of the District's emission inventory to that of other large air districts in California. During the review of the District's emission inventory data, CARB staff are focusing on the implications of inventory data quality related to managing the attainment of regional ambient air quality standards and addressing the analysis and mitigation of human health risk connected to the emissions of toxic air contaminants.

Of the 50 facilities of interest, CARB staff are evaluating the implementation of documented practices related to collecting and reporting facility emissions. The evaluation includes whether permitting and reporting thresholds are reasonable and compliant with State and federal law ("Hot Spots" Program, 40 CFR, Part 51, CARB Regulation for Criteria Pollutant and Toxics Emission Reporting (CTR), ATCM, etc.) and CARB guidance (Emission Inventory Guidance), whether and how the District enforces its own rules and policies, and how the District's practices compare to other large air districts in the State. Evaluation metrics for emission inventory review includes the following:

- Ensure that the District's general permitting thresholds for criteria pollutants are compliant with existing rules including U.S. EPA thresholds for major sources, Title V sources, and for reporting emissions under 40 CFR, Part 51.
- Review the permitting thresholds for common facility types (gas stations, stationary diesel-powered engines, dry cleaners, auto body shops and other coating facilities), and other facilities that emit toxic air contaminants, to ensure that the District has appropriately prioritized and evaluated the potential for human health risk pursuant to the requirements of HS&C Sections 44344, 44344.4, 44344.5, 44344.6, 44344.7, 44360 and 44363.

- Evaluate the District's requirements regarding the frequency (e.g., annually, triennially, quadrennially) facilities collect and report emissions data, and how the requirements are monitored and enforced. Resources dedicated to the District's management of inventory data will be compared to other districts' practices and compared to the District's actual costs for collecting and reporting inventory data to determine appropriate funding levels.
- Examine District requirements for when and how facility emissions from various facility types are updated and reported to the District. CARB staff will evaluate reasonableness, enforcement of requirements, and consistency with State and federal policy (e.g., "Hot Spots" Program, CARB CTR regulation).
- Methods used to quantify emissions, reasonableness of the methods, and
- consistency of reporting requirements (frequency, chemical list, methodology, etc.) for emissions of toxic air contaminants will be compared to State law ("Hot Spots" Program). The District's practices will be compared to those of other air districts.

CARB staff are evaluating rules and permit requirements that support data collection efforts for the National Emissions Inventory (NEI, 40 CFR, Part 51), CARB CTR emission data reporting, "Hot Spots" Program emission inventory requirements, and the methods used by the District to estimate these emissions.

c) Additional Air Toxics Program Requirements

As part of the "Hot Spots" Program requirements specified in H&SC 44360-44362, CARB staff are reviewing facility files to evaluate the timeliness of HRA submittals and approvals, and check if the appropriate OEHHA methodology was used. CARB staff are reviewing facilities required to perform public notifications and risk reduction audits to ensure they have met the requirements mandated under the "Hot Spots" Program requirements as specified in H&SC 44362, H&SC 44390-44392, and District Rule 1210.

The District is required to publish an annual report summarizing their HRA program. The report includes the District's ranking of facilities according to the cancer risk posed, the identification of facilities posing non-cancer health risks, and description of the status of the development of control measures. The District distributes the report to various government agencies and holds a public hearing. CARB staff are evaluating the District's annual report and related activities to determine if they have met the requirements specified in H&SC 44363.

d) Rules and Planning

CARB staff are reviewing the District's practices and documentation with established and planned rulemakings and evaluating the adequacy of District rules in addressing known air quality issues. CARB staff are reviewing District planning and rule development policies/guidelines/procedures to ensure the following topics are adequately addressed:

- Rule development policies and procedures: Confirm that the District has established planning and rule development policies and that the planning/rule development procedures used by the District are transparent and unambiguous. Review the elements of the rule development process to ensure that appropriate science and engineering data are used to guide development.
- Rule development staff report accuracy and thoroughness: Confirm that the District staff report provide sufficient information on related State and federal law and that the District staff report include an analysis of air quality issues and impacts from new or revised rules.
- Rule development public process: Confirm that the public process is clearly defined in District planning/rule development policies, the approaches used by the District during the planning/rule development process ensure public input, and public outreach is adequate (number of public meetings, length of comment periods, etc.).
- CEQA procedures: Confirm that the District planning/rule development process properly addresses applicable CEQA requirements.

CARB staff are in the process of reviewing a number of District planning activities and rule development/revisions to confirm that these activities address applicable federal and State law. For this review, CARB staff are using the following evaluation metrics:

- Adequacy of District rule-making process regarding public participation: Confirm that the outreach methods used by the District adequately informed the public and provided a clear mechanism for the public to provide inputs/comments and that the District considered and addressed any public concerns/comments.
- Planned revisions of District plans currently in place: Confirm that the frequency of revisions/updates to planning activities and rule development are adequate.
- Likelihood of District rules and plans to accomplish stated goals: Confirm that the costs and benefits of the rule development activities are properly analyzed, the costs and benefits analysis is provided to the public for review, the planning/rule development activities include a review of emissions and/or ambient air quality monitoring data to evaluate the effectiveness of District rules, and the methods used by the District to project air quality improvements associated with planning/rule development are complete, reasonable and justified.

- District collaboration with State, federal, and local agencies (CARB, U.S. EPA, OEHHA, etc.): Review the interactions between the appropriate regulatory agencies during the planning/rule development process to ensure that any agency feedback was properly documented and considered.
- Sufficiency of District emission and monitoring data to develop and implement effective regulatory programs: Confirm that the ambient air quality data collected by the District monitoring system and the emissions data collected as part of the District criteria pollutant/TAC inventory programs are adequate to evaluate the effectiveness of the planning/rule development process.
- Sufficiency of District finances and staffing to carry out its planning and rule development programs: Confirm that the District collects enough funding through fees to carry out its planning and rule development activities. Determine whether there are other sources of reliable funding used to fund District planning/rule development programs.
- District measurement of progress towards protecting and improving air quality: Review the metrics used by the District to evaluate progress towards the achievement of federal and State air quality standards, confirm that these measurements representative of actual conditions, and evaluate how progress is measured and communicated.

In addition, AB 423 requires the District to consider the adoption of an indirect source rule to address mobile source pollution associated with stationary sources, such as ports, warehouses, and distribution sources. As part of his review, CARB staff will review programs and provide recommendations for incorporating mobile source pollution control requirements.

i) CEQA Projects

CARB staff will conduct interviews with District staff to discuss the process in which the District reviews and comments on CEQA projects, specifically related to freight and goods movement. CARB staff will evaluate the District's CEQA commenting process using the following metrics:

- The amount of resources (i.e., manpower and time) dedicated to reviewing and commenting on CEQA projects;
- The number of CEQA comment letters submitted, for industrial and goods movement projects;
- Criteria used to select a CEQA project for review and comment; and
- Public accessibility to CEQA comment letters submitted.

e) Permitting and New Source Review

At the programmatic level for permitting and NSR, CARB staff are thoroughly reviewing District guidelines, policies, and data relevant to the following topics:

- Documentation of decisions, including rationale for those decisions;
- Consistency in application of the District's permitting program; and
- Legality, adequacy, and consistency of District regulations and policies.

CARB staff are in the process of reviewing permitting actions for the facilities chosen. Staff are reviewing these actions to determine:

- Timeliness: The District completes permit application completeness determinations and final actions in a timely manner according to the requirements of District Rule 18 (e.g., 30 days for completeness/incompleteness determination and 180 days for final action);
- Accuracy: Engineering evaluations are complete/clear and contain accurate basic elements, such as emission calculations, rule evaluations (including NSR – BACT and offsets), and other necessary components. With regards to emission calculations, confirm that the math is correct, proper selection of emission factors, equipment ratings, operating levels were used. For BACT and offsets, confirm that a BACT review was performed and confirm that the proper amount of offsets were required/obtained when a project's emissions exceed the applicable trigger levels in District Rules 20.2 and 20.3;
- Consistency: ATCs/PTOs are complete, clear, and consistent with the engineering evaluations. Confirm that the ATCs/PTOs include accurate equipment descriptions and emission limits that match the calculations in the engineering evaluations and include enforceable permit conditions with corresponding testing/monitoring/recordkeeping/reporting requirements;
- Transparency: Permitting process ensures that all of the detailed information needed for each step of the project review was provided or cited, including supporting documents for all assumptions used in analysis such as correspondences with the applicant and/or equipment vendors, equipment specifications/data sheets, emission guarantees, basis for emission factors, copies of compliance test reports, etc. Make sure any changes or discrepancies between an application and evaluation are well documented and supported. Finally, confirm that the public outreach required under District Rules 20.2 and 20.3 for applicable permitting actions was performed properly.

f) Enforcement

As part of the program review, CARB staff are reviewing key enforcement policies established by the District and program-level documentation maintained by the District to determine if the District policies and actions are sufficient to effectively ensure compliance. The District policies CARB staff are in the process of reviewing include:

- General policies related to inspector conduct;
- Inspection process policies that describe methods and frequencies of inspections by District staff;
- Rule-specific compliance and enforcement policies; and
- Violation issuance and settlement policies.

By reviewing these policies, CARB staff will be able to understand the goals of the District's compliance and enforcement program and the techniques and practices that the District has established to achieve those goals.

With this understanding in place, CARB staff will review program-level compliance data to determine if the District is meeting its own goals. Using this data, CARB staff will be able to determine if the policies and practices of the District are sufficient to ensure its compliance and enforcement program is effective and businesses subject to local, State, and federal air quality management are compliant.

As described previously, CARB staff are reviewing policies and program-level data to understand the effectiveness of the District's compliance and enforcement program. This data is important to understand the overall effectiveness of the District's programs. Specifically, CARB staff are evaluating:

- The frequency that permitted or otherwise regulated facilities undergo routine inspections;
- The response time for District inspectors to begin investigations of air pollution complaints;
- The amount of time the District takes to resolve violations;
- The proportion of asbestos-related demolition and renovation projects that are inspected annually;
- The proportion of inspections and violations identified at facilities in disadvantaged communities; and
- The proportion of emission source tests that are conducted or observed by the District annually.

CARB staff are also in the process of reviewing compliance records for the 50 facilities of interest permitted by the District. This review will result in a detailed analysis/summary of specific activities (e.g. documenting inspections, reviewing submitted reports, identifying violations) undertaken by District compliance and

enforcement staff during their work. CARB staff will compare facility-specific compliance and enforcement data to the program-level data, as determined during the program-level review described above.

g) Incentives

CARB staff will implement its regular fiscal and programmatic audit procedures of the District and publish results as part of its regular audit program. A summary of those findings will be included in the final District program review report.

CARB staff will use the following objectives in evaluating the District's incentive program:

- Consistency: Implementing programs according to the applicable laws and guidelines. The applicable laws/regulations include H&SC Sections 44275 through 44299.2 (Carl Moyer Program), 44391.4 (Community Air Protection Program), 39625 through 39627.5 (Goods Movement Program), and 39013, 44270.3, 44271, 44272, 44274 (FARMER Program). The applicable policies/guidelines include the Carl Moyer Program 2017 Guidelines Volumes I and II April 27, 2017, Community Air Protection Incentives Guidelines 2019, Funding Agricultural Replacement Measures for Emission Reductions Program Guidelines March 23, 2018, and Goods Movement Program Guidelines 2015;
- Effectiveness: The funds are achieving the expected emission reductions. CARB and the District track the emission reductions through the Carl Moyer Program Clean Air Reporting Log (CARL) database system and the California Climate Investments Reporting and Tracking System (CCIRTS). These database systems along with the program requirements such as enforceable contracts, engine replacement/scrapping verifications, and fiscal compliance audits ensure that the funds are achieving expected emission reductions;
- Transparency and Accountability: Ensure the results of the program reviews are publicly available;
- Collaboration: Identify program strengths that can be shared with other districts, provide stronger outcomes for incentive programs statewide; and
- Program Development: Identify training needs for District staff.

Key Issues and Public Concerns

During the development of the initial work plan for the District program review, CARB staff gathered background information associated with the development of AB 423 including bill analysis, as well as stakeholder comments, questions, and concerns. District staff are working cooperatively with CARB staff to identify issues that warrant further evaluation during the review.

CARB staff are reviewing District permitting practices, enforcement practices, and general policies to determine the effectiveness of these programs and policies at creating an equitable, compliant, and successful regulatory program/agency. To date,

CARB and District staff have identified the following key issues to further evaluate and assess as part of the District program review process:

- Transparency
- Complaint Response
- Welding Emissions and Regulation
- "Hot Spots" Program Implementation
- Incident Air Monitoring – *USS Bonhomme Richard* Fire/Smoke Response

As the District review progresses, CARB and District staff may identify additional key issues and the scope of the review may change.

1) Transparency:

Transparency promotes accountability and builds public trust. In addition, transparency supports public participation and encourages collaboration.

AB 423 addresses District transparency and includes requirements for the District to provide more information to the public about their general operation. Related to transparency, AB 423 specifically requires the District to:

- Summarize and report District actions taken on permit applications to evaluate if District rule amendments are needed to provide adequate opportunity for public comment;
- Create and maintain a District website separate from the San Diego County website;
- Move all existing information to the new website by December 2021, including agendas and minutes of the governing board, current facility permits, permit applications, settled enforcement actions, cover sheets of notices of violation, documents related to the "Hot Spots" Program (facility emission inventories, health risk assessments, public notices, health risk reduction plans), and the District budget with actual and projected revenues and expenses;
- Post permit information and enforcement actions in a format that is searchable and downloadable;
- Consider all public comments received before approving the applications;
- Develop a comprehensive air monitoring program with data accessible to the public, and
- Publish an annual air quality report that identifies air pollution levels, enforcement actions taken, revenues secured, program outcomes and emissions reduction progress.

The State Auditor's review[19] found the District has not taken adequate steps to encourage public participation. The report identified opportunities to improve both

[19]Summary of the California Auditors Office review of San Diego Air Pollution Control District, Report Number 2019-127, July 16, 2020 http://auditor.ca.gov/reports/2019-127/summary.html

public outreach and public engagement. As part of the District program review, CARB staff are evaluating transparency in all District programs (incentives, monitoring, NSR/Permitting, compliance/enforcement, inventory, etc.). In addition, CARB staff are reviewing District efforts to support public participation.

2) Complaint Response

The State Auditor report[20] identified concerns regarding the transparency and effectiveness of the District's complaint program. Specifically, the State Auditor report noted the District could not provide the public with information on how complaints are addressed. The State Auditor report recommended the District establish time frames for verifying that complaints are properly addressed, and complaint investigation reports are reviewed. In addition, AB 423 requires the District to evaluate their current public complaint process and provide a recommended plan for updating the public complaint process by December 2021. As part of this review, CARB staff are examining the District's complaint response, taking into consideration the State Auditor report recommendations to ensure all complaints are properly addressed and reviewed. CARB staff will also work cooperatively with the District to review the complaint program and provide feedback for updating the complaint process.

3) Welding Emissions and Regulations

Clean air advocates (regulatory and community) have become increasingly concerned with impacts on Environmental Justice communities. Advocates have expressed concerns regarding the health impacts from welding operations. Welding operations involving material such as stainless steel and copper/nickel alloys can emit toxic air contaminants including hexavalent chromium. In San Diego, there are Environmental Justice communities in close proximity to welding operations associated with portside ship repair/building operations. The District recently (November 2020) issued a welding operations information request to various facilities in the San Diego area. The District requested a variety of information including the type and amount of welding occurring and the distance between these operations and nearby residences. The information is intended to facilitate the District in evaluating and permitting welding operations associated with elevated toxic air contaminants. CARB staff are reviewing the District's efforts and confirming that welding operations are being regulated/controlled according to applicable District regulations. CARB staff are also reviewing the District NSR permitting thresholds to determine if further controls for welding operations are needed.

[20]Summary of the California Auditors Office review of San Diego Air Pollution Control District, Report Number 2019-127, July 16, 2020 http://auditor.ca.gov/reports/2019-127/summary.html

4) Air Toxics "Hot Spots" Program Implementation:

There are several key issues surrounding the implementation of the "Hot Spots" Program. Specifically, the timeliness of HRA approvals. When an HRA is not approved in a timely manner, the result is a corresponding delay in public notification and risk reduction requirements. Additionally, the public has expressed concern over the risk reduction thresholds. The concern being that these levels are not adequate for public health protection, especially in disadvantaged communities where the public is exposed to high cumulative impacts.

5) Incident Air Monitoring - *USS Bonhomme Richard* Fire/Smoke Response:

Members of the community near the site of the fire onboard the USS Bonhomme Richard voiced concerns with the District's air monitoring response and the fire's impact to their health at a July 21, 2020 AB 617 Portside Steering Committee meeting. The Environmental Health Coalition, a local non-profit environmental organization, requested CARB conduct an after action review (AAR). In response, CARB staff are working with the District, local, State, and federal agencies, as well as local community groups and the general public, to address those concerns and prepare a report to summarize the District's response process, identify strengths and weaknesses, and provide recommendations for the District to improve their incident air monitoring response program.

The *USS Bonhomme Richard* AAR will assess the effectiveness of the District's response to the smoke impacts of the July 2020 fire aboard the Navy vessel on downwind communities. AARs are conducted to review incident responses in order to provide observations and learning opportunities that agencies can use to better prepare for future incidents and strengthen air monitoring responses for future events.

The report will include an analysis of the air monitoring results that the public can use to further understand the impact of the fire's smoke. Lastly, for those concerns that are beyond the District's role, the report will identify additional resources that may be of interest to the impacted community. While the report will be published and made available to the public as a standalone document, the results of the report will also be included in CARB's review. CARB staff are using the following review metrics for this evaluation:

- Response: Incident timelines and response actions of District and partner agencies.
- Analysis: Air monitoring data collected during the incident and comparison with historical patterns, and assessment of health impacts.
- Preparedness: Adequacy of District's response plans, response exercises in the port and other industrial areas, and hazard evaluation throughout the District.

- Coordination: Clarity on District staff roles and responsibilities and how they complement other agency roles and responsibilities, and communication conventions during unanticipated air quality events.
- Operations: Adequacy of resources to monitor, analyze, and report air quality data and results from air quality events, and clarity on District capabilities.
- Public Communication: Quality of information communicated during the incident (actionable, timely, easy for the public to understand, presented in multilingual formats, clear infographics, and imagery).

Next Steps

CARB staff will continue reviewing the various District program areas and will begin assembling the results of this review into a draft report. Once the review process is finished and the draft report completed, CARB staff will make the draft report available to the public and will hold a public workshop to consider the draft report. The preliminary schedule plans for the draft report to be completed in April 2022 with the public workshop occurring during the same month. Following the collection/review of comments from the District and the public, CARB staff will prepare the final District program review document and hold a Board meeting in June 2022 to discuss the results of the review.

ACRONYMS

AAQS	Ambient Air Quality Standards
AAR	After Action Review
AB 423	California Assembly Bill 423 (Gloria, 2019)
AB 617	California Assembly Bill 617 (C. Garcia, 2017)
APCD	Air Pollution Control District
APCO	Air Pollution Control Officer
AQIA	Air Quality Impact Analysis
AQMD	Air Quality Management District
ATC	Authority to Construct
ATCM	Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BARCT	Best Available Retrofit Control Technology
BCMS	Business Case Management System
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEPA	California Environmental Protection Agency
CAP	Community Air Protection
CAR	Corrective Action Report
CARB	California Air Resources Board
CARL	Carl Moyer Program Clean Air Reporting Log
CCIRTS	California Climate Investments Reporting and Tracking System
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CTR	Regulation for Criteria Pollutant & Toxics Emission Reporting
ED	Enforcement Division of CARB
EICG	Emission Inventory Criteria & Guidelines

EJ	Environmental Justice
EPA	Environmental Protection Agency
ERC	Emission Reduction Credit
FARMER	Funding Agricultural Replacement Measures for Emission Reductions
GHG	Greenhouse Gas
HARP	Hot Spots Analysis & Reporting Program
H&SC	California Health and Safety Code
"Hot Spots" Program	Assembly Bill 2588, The Air Toxics "Hot Spots" Information and Assessment Act
HRA	Health Risk Assessment
LAER	Lowest Achievable Emission Rate
MTSD	Monitoring and Technical Services Division
NAAQS	National Ambient Air Quality Standards
NEI	National Emissions Inventory
NESHAP	National Emission Standard for Hazardous Air Pollutants
NOV	Notice of Violation
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standards
NSR	New Source Review
NTC	Notice to Comply
NTR	Notice to Repair
OEHHA	Office of Environmental Health Hazard Assessment
PM	Particulate Matter
PM_{10}	Particulate Matter Less than 10 Microns
$PM_{2.5}$	Particulate Matter Less than 2.5 Microns
P&P	Policies & Procedures
PPB	Parts per Billion
PSD	Prevention of Significant Deterioration

PTO	Permit to Operate
QA/QC	Quality Assurance & Quality Control
RACT	Reasonably Available Control Technology
SCAQMD	South Coast Air Quality Management District
SDAPCD	San Diego Air Pollution Control District
SDAB	San Diego Air Basin
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
TAC	Toxic Air Contaminant
TPY	Tons per Year
U.S. EPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound(s)