Working Together



2018 ANNUAL REPORT



Dear Friends,

Since our inception in 1977, the South Coast Air Quality Management District's fundamental mission has been to clean the air and protect the health of all residents living in the South Coast Air Basin (Basin).

However, in spite of these improvements, there is still much work to be done. We must continue our efforts in cleaning the air.

In 2018, South Coast AQMD launched its efforts to implement community air initiatives through Assembly Bill (AB) 617, an unprecedented undertaking focused on collaboration with environmental justice communities. Through the program, residents of underserved communities have the opportunity for their voices to be heard by shaping emission reductions plans focused on their air quality concerns. We are also providing the resources needed to lay the groundwork for enhanced monitoring that will benefit these communities.

South Coast AQMD also committed to making information more accessible for those living in the Basin through the launch of a new mobile phone application for iOS devices and a soon-to-come Android mobile phone application. Residents across the Basin can now gain access to real-time air quality data on their mobile phones with a touch of their finger.

As you read through this year's annual report, please remember that the South Coast AQMD will continue to work hard every day to improve the air for you, your families and future generations to come.

Sincerely,

Dr. William A. Burke



We have kept true to our mission. The air quality in this region has improved significantly in the last several decades. The number of days each year that failed

to meet current federal clean air standards has decreased by more than 115 days since the 90s, and fine particulate matter levels have also decreased by more than 50 percent in the last 20 years.

Community-Based Initiatives

South Coast AQMD led the way for multiple programs to assist neighborhoods most impacted by sources of air pollution.

The agency's on-going efforts in the cities of Paramount and Compton set new standards for community-based air toxic investigations through the use of first-of-its-kind application of air monitoring technologies, intergovernmental coordination, community engagement, rulemaking, and compliance and legal actions.

In 2018, South Coast AQMD's Air Quality Sensor Performance Evaluation Center (AQ-SPEC) program continued making measurable progress in implementing the U.S. EPA STAR Grant to "Engage, Educate, and Empower California Communities on the Use and Applications of Low-Cost Air Monitoring Sensors." AQ-SPEC is now working with 14 community groups in California (10 in the Basin) on the use and applications of low-cost sensors for community monitoring. More than 350 sensors were installed to monitor and measure criteria pollutants (mostly fine particulate matter, but also ozone and nitrogen dioxide) in these California communities. Lessons learned from these new community-based monitoring efforts will be shared with the public through a series of outreach activities after the projects are completed.



Engaging with the Community

South Coast AQMD continues to seek opportunities to provide and receive information from members of the community and businesses. The agency hosts and participates in meetings, events, and forums throughout the Basin which includes the urban portions of Los Angeles, San Bernardino, Riverside, including the Coachella Valley, and all of Orange County. There are more than 17 million residents living in the Basin covering more than 10,743 square miles.

In 2018, South Coast AQMD hosted or participated in 72 events and meetings. The agency also provided 32 presentations and/or tours through the Visiting Dignitaries and Speaker's Bureau program.

Media played a critical role in community engagement through nearly 1,000 press interactions, 39 news releases, and 34 Smoke Advisories, Odor Advisories, and Noburn Alerts. A strong complement to the media communications program was the continued use of social media that resulted in critical information such as "Check Before You Burn" alerts or wildfire information, some of which reached more than 162,000 people via a single tweet.



Community Air Initiatives

In 2018, South Coast AQMD launched its efforts to implement Community Air Initiatives under AB 617, which focuses on reducing air pollution in communities that experience disproportionate burdens from air pollution, and other environmental, social and economic factors. Using this opportunity, the agency is bringing new resources and engaging with some of the most underserved and disadvantaged communities in the Basin, to ensure that areas with the worst air quality see meaningful improvements and benefits. To lay the groundwork for implementing community emission reduction plans, South Coast AQMD conducted extensive outreach focusing on specific environmental justice areas to develop the initial implementation schedule. For the first year, the three communities were: (1) Wilmington, Carson, West Long Beach; (2) San Bernardino, Muscoy; and (3) Boyle Heights, East Los Angeles, West Commerce. Additional communities will be designated each year for participation in this program. Community involvement and input are guiding the design of the air monitoring and community emission reduction plans. By listening to the voices in each community and using a tailored suite of strategies, these collaborative efforts will further reduce the air pollution impacts in these communities.







Transparency and Public Accessibility

South Coast AQMD is committed to providing the public easy access to information. In this spirit, the agency developed a new air quality mobile application in 2018. The vision was to create a one-stop app where residents in the Basin could easily access information about air quality, weather, and alternative fuel stations in their neighborhoods.

Currently available through the full range of Apple iOS devices, the mobile app features include:

- · Hourly updates on current air quality including next day forecasts for multiple cities;
- An interactive map providing real time air quality information;
- · Search for alternative fuel source stations and driving directions to their locations; and
- Direct contact with South Coast AQMD through the 1-800-CUT-SMOG line.

Since the release of the iOS version, the mobile app has received positive feedback, scoring 4.8 out of 5 stars from users. The success of the iOS app has also generated interest for an Android version which is now scheduled for launch in the late Spring of 2019.

South Coast AQMD also upgraded its website with a new GIS Open Data Portal. The new GIS Open Data Portal provides a public platform for exploring and downloading open data, building apps, and engaging to solve air quality issues. Improved maps for air quality continue to allow for better visualization of pollutants and additional information on key topics of interest (e.g., AB 617 implementation as well as ongoing efforts in Paramount and Compton) were added at community member request.

In 2018, the agency responded to more than 4,900 public records requests and continues to do so in an efficient and transparent manner. Board and Committee meetings continue to be webcasted and printed materials are available for review in advance of these and other meetings. South Coast AQMD makes every effort to make its staff available for speaking requests as well as attending and participating in community events to inform residents and businesses about the impacts of air quality on public health.



ADDITIONAL FEATURES

- Configurable air quality notifications
- Integrated temperature
- Animated weather background
- Interactive air quality map
- Alternative fuel
- Call 1-800-CUT-SMOG at the touch of a button



SOUTH COAST AQMD MOBILE APP

The South Coast AQMD Mobile App has been completely redesigned for Apple iOS devices. The new mobile app features a totally redesigned interface that is both modern and intuitive.



POINT YOUR CAMERA HERE TO DOWNLOAD THE SOUTH COAST AQMD MOBILE APP NOW





Clean Air Policy

South Coast AQMD actively participates in local, state and federal policy discussions to promote clean air and a green economy, protect public health, and work towards attainment of federal clean air standards by the upcoming deadlines.

In 2018, the agency saw continued support on the state and federal level for clean air, resulting in increased appropriations to help fund efforts to reduce air pollution and toxics at a regional and localized level, including:

- expedite fleet turn-over to cleaner engines.
- to reduce air pollution in nonattainment areas including the Basin.
- vehicles and equipment and reduce emissions in disadvantaged communities

In addition, South Coast AQMD's sponsored bill, SB 1502, relating to public notice requirements, was signed into law by the Governor. This bill allows more modernized methods of public notice, including the use of electronic mail. It will reduce costs, increase efficiency, and allow for increased public awareness and participation.

Finally, South Coast AQMD secured amendments to SB 1260, an omnibus fire prevention and forestry management bill signed into law by the Governor. The amendments allow the agency to issue controlled burn permits for open outdoor fires in mechanized burners within Los Angeles County, to promote fire hazard mitigation in a manner that also reduces air pollution.

• An increase in Diesel Emissions Reduction Act nationwide funding from \$60 million to \$87 million to

• An increase in nationwide funding for Targeted Airshed Grants from \$30 million to \$52 million for projects

• \$245 million in statewide incentive funding to local air districts to help accelerate turnover to cleaner

• An increase from \$27 million to \$50 million in statewide funding for local air districts to fund implementation of AB 617 to air emissions in disproportionately impacted communities.

Innovative Strategies

Nitrogen Oxide (NOx) is the key pollutant for South Coast AQMD to control to meet federal air quality standards. More than 80 percent of the Basin's NOx emissions are from mobile sources. With a limited ability to regulate emissions from mobile sources, the agency must continue to develop and implement innovative strategies to clean the air.

The 2016 Air Quality Management Plan included a series of measures to reduce air pollution from mobile sources associated with the facilities that attract them – called indirect sources. An example are the emissions from trucks associated with warehouses. In 2018, through South Coast AQMD's authority to regulate indirect sources, work began to develop rules for warehouses and rail yards and evaluating potential rules for new and redevelopment projects. In addition, the agency is also developing voluntary agreements with the ports and airports to reduce their emissions.

South Coast AQMD is also looking at new ways to use incentives to reduce emissions through collaborative efforts. The agency is exploring opportunities with ports and governmental authorities around the Pacific Rim to develop joint incentive programs to attract cleaner ships to all of our ports, as well as working with engine manufacturers and shipping lines to develop the technology for cleaner ship engines. Working together through these collaborative efforts can achieve emission reductions and cleaner air faster than regulations alone.



Moving Forward

South Coast AQMD continues its efforts to reduce air pollution from sources such as airports, ports, rail yards, new and redevelopment projects and warehouses. In 2018, South Coast AQMD implemented many programs from incentives to research, development and demonstration to move further along the road to clean air.

Incentive Program	Funding Amount	No. of Equipment	NOx (tpy)	PM2.5 (tpy)
Carl Moyer & SOON	\$35,559,645		415	7.8
AB 134	\$49,060,072	558		
Near-Zero Trucks with CEC Grant, Ports, and AB 134 funds	s \$14,000,000	140	63.2	-
Near-Zero Emission School Buses	\$35,638,000	206	27.1	1.5
Enhanced Fleet Modernization (EFMP)	\$8,257,730	1,023	14.4	-
Voucher Incentive Program (VIP)	\$2,745,000	65	44.2	0.12
TOTAL	\$145,260,447	1,992	563.9	9.4



Technology Demonstrations

The Clean Fuels Program, along with establishment of the Technology Advancement Office, is an integral part of South Coast AQMD's effort to achieve the significant NOx reductions necessary to meet the federal clean air standards. The Clean Fuels Program is as a public and private partnership with industry, technology developers, academic institutions, research institutions and government agencies that has allowed for the advancement of medium and heavy-duty transportation, and offroad technologies, with an emphasis on zero and near-zero emission vehicle and fuel technologies. 2018 highlights include:

- 18 new contracts and 4 contract amendments were executed totaling \$351 million.
- Funding was awarded to the top two largest truck manufacturers in North America—Daimler Trucks and Volvo Trucks. Both projects will develop, demonstrate and commercialize battery electric heavy-duty trucks.



Ocean Going Vessels Technology Forum

In December 2018, South Coast AQMD held a technology forum focused on retrofit technologies to reduce NOx emissions from Ocean Going Vessels (OGVs). OGVs will soon be the largest source of NOx emissions in the South Coast. Reducing NOx emissions are essential for achieving federal air quality standards in the Basin. Retrofitting OGV engines can provide a path to reducing NOx emissions quickly and cost-effectively. South Coast AQMD convened this forum to gather experts from around the world to better understand state-of-the-art OGV retrofit technologies, and opportunities for future collaboration.

Over 100 people attended the forum in person, including a delegation from the Chinese government, with many more participating via webcast. The forum brought together experts from marine engine manufacturers, shipping lines, local and international ports, industry associations, and government agencies to assess and discuss some of the promising technically feasible and economically viable NOx retrofit technologies for these vessels. The expert panels also discussed the critical role of incentive programs and international partnerships to achieve additional reductions beyond existing regulatory programs, and South Coast AQMD's concept for a potential collaboration with Pacific Rim ports to incentivize cleaner vessels. As a result of the forum, two major OGV engine manufacturers and one shipping line agreed to work with South Coast AQMD to develop projects demonstrating different types of retrofit technologies.



- 43+ air monitoring sites
- 12,000 miles driven
- 275 air monitors
- 22,265 data points per week

South Coast Air Basin Monitoring Network

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• Particulate, gas and toxics monitoring

Regulatory Milestones

South Coast AQMD has the responsibility to adopt rules and regulations to reduce criteria pollutant emissions from stationary and indirect sources to achieve state and federal air quality standards. One of the most significant stationary source control measures is the transition of the largest NOx emitting facilities in the Basin from a market-based program called the Regional Clean Air Incentives Market (RECLAIM) to a traditional regulatory structure. Six rules were adopted in 2018 to establish NOx Best Available Retrofit Control Technology emission standards, with additional rule amendments on the horizon.

In addition to rules to reduce criteria pollutants, South Coast AQMD has a robust air toxics program to reduce local air emissions that have cancer and non-cancer health effects. The agency uses a multi-faceted approach to reducing air toxics that includes a leading-edge toxics regulatory program, community air monitoring, the Multiple Air Toxics Exposure Study, and the AB2588 Toxics Hot Spots Program. In 2018, South Coast AQMD worked with stakeholders to further reduce hexavalent chromium emissions from plating facilities. Through the Toxics Hot Spots Program, significant reductions in hexavalent chromium were achieved for two facilities in Paramount to provide greater public health protection to communities surrounding these facilities.

South Coast AQMD develops rules and regulations through a public process which includes working with all stakeholders - businesses, environmental groups, community organizations, and other public agencies. Stakeholder input is key to developing rules that meet air quality needs for the region, provide health protection for local communities, and reasonable compliance pathways for facilities.

Key Rules

Rule 1146

Control of Emissions from Boilers, Steam Generators, and Heaters

Rule 1135

Control of Emissions from Electric Power Generating Systems

Rule 1469

Hexavalent Chromium Emissions from **Electroplating and Anodizing Operations**



There are more than 27,000 businesses in the Basin with South Coast AQMD permits.

South Coast AQMD's focused inspection programs are one way the agency ensures businesses are complying with air quality rules and regulations. There are more than 27,000 permitted businesses in the Basin.

Protecting Public Health

Number	Compliance Activity Description
379	Title V inspections completed
256	RECLAIM audits completed
7,030	Other stationary source inspections completed
3,800	Portable Equipment Registration Program (PERP) inspections completed
10,000	Complaints investigated
923	Breakdowns investigated
2,519	Notices of Violation issued
3,551	Notices to Comply issued

Permitting Milestones

South Coast AQMD is working to provide efficient and effective services to entities and businesses seeking air quality permits. In July 2016, the agency initiated a major effort to improve, streamline and modernize its permitting process with the goal of reducing its pending application backlog by 50 percent by mid-year 2018. South Coast AQMD successfully met and exceeded this goal, while ultimately achieving a 30 year low in the overall pending applications inventory for the agency. More specifically, in Calendar Year 2018:

- Processed more than 8,700 permit applications;
- Issued more than 2,000 Permits to Construct;
- Reduced pending applications to less than 3,500; and
- Uploaded more than 50 percent of the Title V Permits online.

As part of our process to modernize permit processing, additional advancements were made towards developing online tools in 2018 that will dramatically reduce permit processing times and improve customer service and satisfaction. South Coast AQMD issued its first online permit for gasoline dispensing facilities in the fourth quarter of 2018.



Air Quality Historical Timeline





Annual Budget

South Coast AQMD's annual budget adopted for Fiscal Year 2018-19 was a balanced budget with revenues and expenditures of \$162.6 million.

South Coast AQMD is focused on sound fiscal management. The agency received the Government Finance Officer's Association's awards for the Annual Budget, Comprehensive Annual Financial Report, and Popular Annual Financial Report in 2018.





Members of the Governing Board: Chairman Dr. William A. Burke Speaker of the Assembly Appointee Vice Chairman Ben Benoit Joe Buscaino

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March Mary

Mayor, Wildomar Cities of Riverside County

Lisa Bartlett Supervisor, Fifth District County of Orange

Council Member, 15th District City of Los Angeles Representative

Michael A. Cacciotti Council Member, South Pasadena Cities of Los Angeles County/ Eastern Region

Vanessa Delgado Senate Rules Committee Appointee

Janice Hahn Supervisor, Fourth District County of Los Angeles

Larry McCallon Mayor, Highland Cities of San Bernardino County

Judith Mitchell Mayor Pro Tem, Rolling Hills Estates Cities of Los Angeles County/ Western Region

V. Manuel Perez Supervisor, Fourth District County of Riverside

Dwight Robinson Council Member, Lake Forest Cities of Orange County

Janice Rutherford Supervisor, Second District County of San Bernardino

Vacant Governor's Appointee

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KEY PHONE NUMBERS OTHER CONTACT INFORMATION



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ic Information Center	(909) 396-2001
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