Clean Technology and Clean Fuels Programs Continue to Improve Southland Air Quality

This year marks the 20th and 30th anniversaries of two complementary clean air programs that have directed more than $2 billion toward improving Southland air quality by developing dozens of clean air technologies and deploying thousands of clean vehicles.

Southern California has the smoggiest air in the nation due to its natural geographic and climatic conditions, along with a population of 17 million, and hazardous emissions from more than 11 million vehicles and tens of thousands of stationary sources. Mobile sources are responsible for about 88 percent of NOx emissions in the region while stationary sources emit the remaining 12 percent of NOx in the region.

Thousands of zero and near-zero-emission vehicles have replaced older, dirty diesel vehicles in the Southland due to funding and research partnerships with SCAQMD, government, academia, businesses, and industry.

These new technologies are creating a substantial reduction in hazardous emissions. This year marks the 20th year of the statewide Carl Moyer Memorial Air Quality Standards Attainment Program and the 30th year of SCAQMD’s Clean Fuels Program. Together, these programs have funded the research, development and commercialization of clean transportation technologies and the subsequent accelerated deployment of these technologies into the region’s fleets.

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Clean Fuels Program

Since the Clean Fuels Program was signed into state law on Sept. 29, 1988, it has provided SCAQMD with a total of $310 million from a $1 annual DMV registration fee. In addition, a portion of SCAQMD stationary source emission fees has contributed an additional $10.5 million for a total funding of $320.5 million over the program’s 30-year history.

SCAQMD has successfully increased that funding five-fold by leveraging contributions from government, industry and private companies to provide a total of $1.5 billion in funding.

The program has significantly advanced clean-air technologies in four key areas:

**Plug-in hybrid vehicles** - SCAQMD has supported many aspects of full battery electric vehicle (BEV) and fuel cell electric vehicle (FCEV) development, and with its project partners, leveraged technology in commercially available hybrid-electric vehicles to develop some of the first proof-of-concept plug-in hybrid electric vehicles (PHEVs). This early effort identified early market demand and quantified fuel economy and emissions benefits, eventually leading to the full commercialization of these vehicles by major automakers. There are now approximately 420,980 PHEVs and BEVs operating in California, with a total of 44 such models available in CA from almost all light-duty vehicle manufacturers.

**Low- and near-zero emission heavy-duty natural gas engines** – Over the past 20 years, SCAQMD, the U.S. Department of Energy and engine manufacturers have collaborated on the development, demonstration, deployment and certification of the first heavy-duty natural gas engines, initially demonstrated in school and transit buses as well as refuse trucks, with significant implementation in a broad range of vehicle platforms. More recently, SCAQMD has successfully led efforts to commercialize heavy-duty near-zero natural gas engines achieving greater than 90 percent reduction in smog-forming nitrogen oxide (NOx) emissions from the existing certification levels.

**Hydrogen refueling stations** -- SCAQMD and its partners sponsored the early development and demonstration of hydrogen stations for fuel cell vehicles, which helped develop standards for safety and dispensing. With funding from the California Energy Commission, 35 hydrogen refueling stations are now operating in California, including 20 throughout the South Coast Air Basin, which refuel more than half of the state's 4,926 fuel cell cars.

**Fuel cell transit buses and trucks** -- In the early 1990s, SCAQMD started developing the world’s first fuel cell transit bus with Vancouver-based Ballard Power Systems. Early prototype fuel cell buses were successfully demonstrated at SunLine Transit in the Coachella Valley and Los Angeles County Metropolitan Transportation Authority (Metro). Many of these fuel cell buses have been deployed in Northern California and elsewhere, with recent larger scale deployments offered by several transit bus manufacturers. This development effort has more recently been transferred to other heavy-duty uses, including Class 8 big-rig trucks.

Carl Moyer Program

Since its inception on Aug.18, 1998, the Carl Moyer program has awarded SCAQMD a total of $467.1 million, which the agency has used to replace 6,708 older diesel engines with newer, cleaner models. The cleaner vehicles and equipment included heavy-duty trucks, transit buses, refuse vehicles, public agency vehicles, construction equipment, agricultural equipment, marine vessels, shore power, cargo handling equipment, and locomotives. As a result, SCAQMD has removed 7,598 tons of smog-forming NOx emissions and 222 tons of fine particulate matter per year from the Southland's air.

In 2001, the Lower-Emission School Bus Program was established as part of the Carl Moyer Program. Under this program, SCAQMD has provided $280 million in funding to replace 1,600 diesel engine school buses with compressed natural gas engines. SCAQMD also retrofitted an additional 3,400 diesel school buses with diesel particulate filters.

Carl Moyer is funded through a portion of state motor vehicle registration, Smog Check and tire purchase fees.

“Strong public-private partnerships are necessary for us to continue our clean air gains and reduce public health hazards,” said Nastri. “Millions depend on our collective efforts to clean the air as we continue to ensure stationary and mobile sources do their part.”

For more information, please visit www.aqmd.gov/home/technology.
SCAQMD Launches Home Furnace Rebate Program

Fall is a great time to get ahead on your home maintenance, and save money in the process. If you need to replace your home furnace, then this program is a win-win for you and air quality.

The South Coast Air Quality Management District has launched its CleanAir Furnace Rebate Program to encourage consumers to purchase low-emission, natural-gas central heating furnaces to help reduce air pollution. The funding is provided, in part, by fees collected from furnace manufacturers who have sold units that do not yet meet the lower emission limits.

Consumers who purchase the first 6,000 lower-emitting furnaces will receive a $500 rebate per furnace. After the first 6,000 rebates, consumers will receive $300 for each condensing furnace, and $200 for each compliant non-condensing, weatherized or mobile home furnace. The rebate program will end when the funds are exhausted. Program participants can expect to receive their rebate check four to six weeks after purchasing a lower-emission furnace. Manufacturers expect to sell nearly 150,000 furnaces in the region this year.

Furnaces emit nitrogen oxides that contribute to the formation of ozone, or smog, and fine particulate matter. These pollutants damage cells in the lungs and airways, and can cause inflammation and swelling. For some people, it reduces the ability to remove foreign particles and fight infections in their respiratory system, can worsen respiratory and cardiovascular disease and increases mortality.

For more information, including a list of qualifying furnaces, and to apply for the CleanAir Furnace Rebate program visit www.cleanairfurnacerebate.com.
Current Air Quality Map More Responsive to Changes in Pollution

This summer, you may have noticed that during the afternoon, the current air quality map on aqmd.gov has been showing more orange and red areas compared to last year. For the most part, this is not because air quality levels are worse, but instead due to a change in the methodology used to calculate the air quality index (AQI). The AQI is used to translate concentrations of all criteria pollutants into a single metric that is relevant for public health. Starting in June, we switched to the U.S. EPA’s NowCast method for calculating real-time AQI values. The benefit of using the NowCast method is that it is more responsive to rapidly changing air quality conditions. Therefore, when ozone concentrations rise in the afternoon, the AQI value will be more reflective of these recent levels. This improvement helps inform the public about current air quality, which is more relevant when deciding when to exercise outdoors or take measures to protect your health.

Subscribe to air quality alerts at www.AirAlerts.org or download SCAQMD’s mobile phone app on your iPhone and Android.

GOOD (0 TO 50)
Air quality is considered satisfactory, and air pollution poses little or no risk

Moderate (51 TO 100)
Unusually sensitive people should consider limiting prolonged outdoor exertion

Unhealthy for Sensitive Groups (101-150)
The following groups should limit prolonged or heavy outdoor exertion:
- People with heart disease
- Children and older adults
- People who are active outdoors
- People with lung disease, such as asthma

Unhealthy (151-200)
Everyone may begin to experience some adverse health effects (e.g. difficulty breathing and throat irritation), and members of the sensitive groups may experience more serious effects. The following groups should avoid prolonged time outdoors:
- People with heart disease
- Children and older adults
- Pregnant women
- People with lung disease, such as asthma
- Everyone else should limit prolonged outdoor exertion.

Very Unhealthy (201-300)
This would generate a health alert suggesting that everyone may experience more serious health effects. The following groups should avoid all outdoor physical activity:
- People with heart disease
- Children and older adults
- People who are active outdoors
- People with lung disease, such as asthma
- Everyone else should limit prolonged outdoor exertion.
What to Do When You Have an Air Quality Complaint

Often people see a building or vehicle polluting the air, or they smell something foul but don’t quite know what to do. If you ever face this situation, contact the South Coast Air Quality Management District to help protect your, and the public’s, health. Call 1-800-CUT-SMOG (1-800-288-7664) or visit SCAQMD’s online complaint system at aqmd.gov/contact/complaints to report your observations. Use these resources to report cars or trucks that are belching out noticeable tailpipe fumes, excessive odors, smoke, dust, or other possible air pollutants.

Before contacting the agency be prepared to share the following information:

• The nature of the air quality complaint (smoke, dust, odor, or other),
• The time the incident occurred and if it is still continuing,
• Where it is occurring (if you know),
• Whether you’ve experienced this type of problem in the past,
• A description of the problem, and
• Your contact information.

Think of ways to best describe the problem. For example, does it smells like rotten eggs, spoiled cabbage, burned plastic, ammonia, chlorine, garlic, asphalt, or some other familiar odor.

Your contact information is kept confidential, unless needed later for a legal hearing. While we accept anonymous complaints, inspectors cannot provide you additional details or advise you of findings, if any, from follow-up investigations if they don’t have your phone number or email address.

SCAQMD accepts air quality complaint calls 24 hours a day, 7 days a week. During its business hours (7:00 a.m. – 5:30 p.m., Tuesday through Friday) your call is answered by an attendant and on-line complaints are received by staff. Calls placed during non-business hours are answered by an automated voice system.

NEW! Electric Lawn Mower Rebate Program
Receive a rebate of up to $250 with the purchase of a cordless, battery electric lawn mower. Purchase must include mower, battery and charger. Eligibility is limited to residents of Southern California who reside within the South Coast AQMD’s four-county jurisdiction. Participants must also scrap a working gas mower in order to qualify for the rebate. For eligibility and program details, please visit www.aqmd.gov/lawnmower. Thanks for mowing down air pollution.

What You’ll Need: Proof of purchase and signed scrap certificate.

The rebate program is first-come, first-served and rebates will continue until all program funds have been exhausted.

For questions, please call the SCAQMD toll-free (Tuesday-Friday) at 888-425-6247 or email lawnmower@aqmd.gov.

What You’ll Need: Proof of purchase and signed scrap certificate.

The rebate program is first-come, first-served and rebates will continue until all program funds have been exhausted.

For questions, please call the SCAQMD toll-free (Tuesday-Friday) at 888-425-6247 or email lawnmower@aqmd.gov.
Aliso Canyon Gas Leak Settlement to Fund Air Quality Improvement Projects

In August, a $119.5 million settlement was reached between SoCalGas, the city and county of Los Angeles, and the state of California resulting from the 2015 massive gas leak at SoCalGas’ Aliso Canyon storage facility.

Under the settlement, SCAQMD will administer $7.1 million to install air filtration systems in Los Angeles Unified School District schools, as well as schools in disadvantaged communities within county of Los Angeles. Air filtration systems have been shown to be highly effective in removing ultrafine particulate matter, or PM2.5 in classroom and enclosed environments in schools.

The settlement also set aside $3 million for enhanced air monitoring and environmental reporting in Porter Ranch and one or more environmental justice communities in Los Angeles County; designated $25 million toward a research study on the long-term health effects of the incident; and allocated $3 million to purchase electric school buses. SCAQMD is working closely with the City and County to ensure that our efforts are well-coordinated and complementary.

For more information, please contact Patricia Kwon at pkwon@aqmd.gov.

Rule Compliance Promotion Classes

Rule 403 – Dust Control in the South Coast Air Basin Training
Where: - Every third Wednesday of the month, January through November (8:30 a.m. – 11:30 a.m.) No classes are held in December
Where: - SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765
Cost: - $168.96
Register: Pre-registration is required & walk-in registrations are not allowed. Visit aqmd.gov/home/programs/business/training-403-403-1-fugitive-dust (and click on “south coast” near the top of the page) for class and registration information. To register, e-mail dustcontrol@aqmd.gov or call toll-free 1-866-861-3878.

Rule 403 & 403.1 – Dust Control in the Coachella Valley Training
Where: - Every third Thursday of the month, January through November (1:00 p.m. – 4:30 p.m.) No classes are held in December
Where: - Coachella Valley Association of Governments, Room 115, 73-710 Fred Waring Dr., Palm Desert, CA 92260
Cost: - No fee
Register: Pre-registration is required & walk-in registrations are not allowed. Visit aqmd.gov/home/programs/business/training-403-403-1-fugitive-dust (and click on “coachella valley” near the top of the page) for class and registration information. To register, e-mail dustcontrol@aqmd.gov or call toll-free 1-866-861-3878.

Rule 461 – Gasoline Transfer and Dispensing Training (See Below for Specific Courses, Fees & Dates)
Where: - October 12, 2018 – Periodic Compliance
   - SCAQMD, Room CC6, 21865 Copley Drive, Diamond Bar, CA 91765
   Cost: - See above
Register: Pre-registration is required & walk-in registrations are not allowed. Visit aqmd.gov/home/programs/business/training-403-403-1-fugitive-dust (and click on “south coast” near the top of the page) for class and registration information. Please contact Rule 461 Assistance at (909) 396-3546 or email Rule461Assistance@aqmd.gov for additional information.

Rule 463 & Rule 1178 – Certified Person Compliance Assistance Class
When: - January 2019 (Date to be determined)
Where: - SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765
Cost: - $82.13 per person
Register: Payment by cash or check to SCAQMD prior to the start of class at the cashier located in the lobby. Proof of payment and California Driver’s License/ID Card are required to attend classes.

Rule 404 – Asbestos Demolition and Renovation Compliance Training
When: - October 17, 2018 - December 19, 2018
Where: - SCAQMD, Room CC6, 21865 Copley Drive, Diamond Bar, CA 91765
Cost: - $83.38
Register: Pre-registration is required & walk-in registrations are not allowed. Visit aqmd.gov/home/programs/business/training-1403-asbestos-demolition for class and registration information.

Rule 469 – Compliance Assistance: Mandatory Hexavalent Chromium Training Certification
When: - September 20, 2018 - November 15, 2018
Where: - SCAQMD, Room CC6, 21865 Copley Drive, Diamond Bar, CA 91765
Cost: - $35.09 per person
Register: Enrollment is limited. Pre-registration is required and walk-in registrations are not allowed. Visit aqmd.gov/home/programs/business/training-1469-hexavalent-chromium for class and registration information. Contact Tori Oroz via email at toroz@aqmd.gov for additional information.

Rule 1176 Sumps & Wastewater Separator Inspector
When: - January & July 2019 (Dates to be determined)
Where: - SCAQMD, Room C6, 21865 Copley Drive, Diamond Bar, CA 91765
Cost: - $63.47 per person
Submit payment either with cash, check or money order (payable to SCAQMD) to our Cashier (located in the SCAQMD lobby) upon arrival.

Certificate Training
When: - January & July 2019 (Dates to be determined)
Where: - SCAQMD, Room C6, 21865 Copley Drive, Diamond Bar, CA 91765
Cost: - $56.47 per person
Submit payment either with cash, check or money order (payable to SCAQMD) to our Cashier (located in the SCAQMD lobby) upon arrival.

Rule 2202 - Employee Transportation Coordinator (ETC) Training
When: - September 27, UC Irvine - October 11, SCAQMD Headquarters, Diamond Bar - October 25, Marriott Riverside - November 8, SCAQMD Headquarters, Diamond Bar - November 29, LA Metro, Los Angeles - December 5, SCAQMD Headquarters, Diamond Bar
Cost: - $783.32 per person
Register: Enrollment is limited. Pre-registration is required and walk-in registrations are not allowed. Visit aqmd.gov/home/programs/business/training-2202-etc for class and registration information. To register, e-mail etctraining@aqmd.gov or call (301) 233-7002 for more information and to register.

For more information, please contact Patricia Kwon at pkwon@aqmd.gov.
Rule Update

The following proposed amended rules and regulations are tentatively scheduled for hearings at upcoming Governing Board meetings. To verify whether scheduling changes have occurred, visit the SCAQMD website at aqmd.gov/home/library/meeting-agendas-minutes and check the Rules and Control Measure item on the Governing Board meeting agenda or call the Clerk of the Board’s Office at (909) 396-2500.

Copies of SCAQMD rules and regulations can be downloaded from the website at aqmd.gov/home/regulations or obtained from SCAQMD’s Public Information Center at (909) 396-2039.

September

Rule 1469 - Hexavalent Chromium Emissions from Chromium, Electroplating and Chrome Acid Anodizing Operations
Proposed Amended Rule 1469 will further reduce hexavalent chromium emissions by establishing new requirements for certain hexavalent chromium tanks that are currently not regulated and further address potential fugitive emissions from hexavalent chromium electroplating and chromic acid anodizing operations. For more information, contact Jillian Wong at jwong1@aqmd.gov or (909) 396-3176.

October

Proposed Amended Rule 2001 RECLAIM – Applicability
Proposed Amended Rule 2002 RECLAIM – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx)
Proposed Amended Rules 2001 and 2002 will incorporate provisions for facilities that elect to opt-out of RECLAIM and include provisions for facilities that exit RECLAIM through use of a compliance plan. For more information, contact Tracy Goss at TGoss@aqmd.gov or (909) 396-3106.

November

Rule 1135 – Emissions of Oxides of Nitrogen from Electric Power Generating Facilities
Proposed Amended Rule 1135 will incorporate requirements for electric power generating facilities that are to transition from NOx RECLAIM to command-and-control. For more information, contact Michael Morris at mmorris@aqmd.gov or (909) 396-3282.

Rule 1407.1 – Control of Emissions of Toxic Air Contaminants from Chromium Alloy Melting Operations
Proposed Rule 1407 will require emissions testing and a submittal of data to better quantify toxic air contaminant emissions. For more information, contact Michael Morris at mmorris@aqmd.gov or (909) 396-3282.

People

SCAQMD Summer Internship Program

Every year, SCAQMD’S Governing Board selects highly qualified high school and college students to participate in the agency’s summer internship program. The internship program places students in departments throughout the agency to gain real world experience by working alongside chemists, engineers, public affairs specialists, information technology experts and many other areas. Interns also learn about air quality within the South Coast Air Basin, air pollution’s effects on human health, clean fuel vehicles and other clean air technologies, and SCAQMD’s incentive and rebate programs for residents and businesses to help clean the air.

“I enjoy working for the Legislative, Public Affairs and Media department because it focuses on the importance of getting various communities involved with knowing more about their air quality,” said Yarely Ortiz, student intern. “I also attend a lot of government relations meetings that deal with state and federal legislation in regards to clean air.”

Robbie Paud, an intern in Telecommunications added, “I have a lot of fun fixing technical problems and installing software programs for each department in SCAQMD.”

The SCAQMD Internship program is an excellent way to gain hands-on work experience during the summer. This year, SCAQMD received 110 applications for the summer internship program; of those, 35 students were selected.

For more information, please contact Kajeja Shenghur at kshenghur@aqmd.gov.