California State University Los Angeles (CSULA) recently celebrated the opening of its Hydrogen Research and Fueling Facility, the largest university-operated facility of its kind in the nation. Funded in part by a grant from SCAQMD, the plant uses the most advanced equipment to test the technical and commercial viability of hydrogen produced on-site from water, rather than hydrogen extracted from natural gas. The plant also provides students an applied research experience and a living-laboratory environment.

The new facility becomes the tenth hydrogen refueling station in California, with 16 others under development. A recent announcement that an additional 28 stations will be funded by the California Energy Commission (CEC) will bring the state to 54 stations, more than halfway to its goal of a 100-station statewide network. This so-called “hydrogen highway” will advance SCAQMD’s and the State of California’s commitment to seeing that hydrogen fuel cell vehicles are viable zero-emission options for consumers.

The expansion of hydrogen fueling stations in California comes as Hyundai Motor Co. just launched its Tucson Fuel Cell SUV in June. This is the first mass-produced, hydrogen-powered vehicle to become available in the United States, but it is only available for lease. The first commercially available fuel-cell cars for sale, from Honda Motor Co. and Toyota Motor Corp., are set to hit showrooms in 2015.

With more hydrogen vehicles on the road, the CSULA facility will benefit from its proximity to four major freeways: I-10, I-5, State Route 60 and I-710. The 710 Freeway is the most polluted transportation corridor in California due to heavy truck traffic traveling to and from the Ports of Los Angeles and Long Beach.

Fuel cell vehicles have zero-emissions, using hydrogen to fuel a car and producing only water vapor and heat in the process. They are comparable to gasoline-powered vehicles in that they can also be refueled within 5-7 minutes and have a range of 300+ miles on a single tank.

To find locations of local hydrogen fueling stations download SCAQMD’s smartphone or iPad app from the iTunes Store or Google Play, or visit aqmd.gov.
With an entirely new look and format, SCAQMD has re-launched its website, aqmd.gov. The site now features a cleaner design and streamlined navigation to help businesses, residents, researchers, and government officials more easily find information about local air quality as well as agency rules and regulations, services, and meetings.

In keeping with current web design trends, aqmd.gov has been reconfigured with a contemporary three-part home page. The opening screen provides current air quality readings customizable to the area of the user’s choice, major announcements, and alerts that will appear during air quality and no-burn day events. Below that, a second screen features portals where users can click for information organized under “Community & Health,” “Business,” or “Technology” categories, and scroll through the latest SCAQMD news. Beneath that, a third screen hosts a gallery of informational videos searchable by subject matter.

The new website also showcases the beauty and depth of the Southland. Each screen features background photos of an interesting vista or a notable landmark in the South Coast region.

Since its inception in the mid-1990s, aqmd.gov had been organized to mirror the agency’s internal structure. However, despite containing a vast amount of meaningful information, specific content could be difficult to find. The new website is designed from the public perspective with a cleaner look and feel with more intuitive navigation.

Highlights of the redesign include:

- Compatibility with current versions of the most popular web browsers;
- Improved access for tablets and smartphones;
- A filterable calendar;
- Updated web-based sign-up for e-mail notifications;
- RSS feed capability, and live streaming of meetings and events; and
- A virtual photo gallery, featuring images of clear skies from locations throughout the Southland. Following best practice guidelines, the website has also improved accessibility for the visually impaired.

SCAQMD’s new website has also incorporated system upgrades enabling interactive meetings, conference registration and payment, web-based complaint and comment forms, and an interactive map of regulated facilities.

SCAQMD’s Governing Board adopted annual goals and objectives during its June meeting as part of the agency’s Fiscal Year 2014-2015 budget.

Crafted by SCAQMD Executive Officer Dr. Barry Wallerstein and his Executive Council with input from the Governing Board and the public, the work plan includes several top priorities including implementing measures from the 2012 Air Quality Management Plan (AQMP), preparing for the 2016 AQMP, engaging in community programs and events, actively engaging the public, and continuing to maintain a knowledgeable, professional, and well-trained staff.

Based on these goals, SCAQMD will focus on incentive programs for businesses and residents, additional alternative fuel infrastructure throughout the region, and the initiation of demonstration programs for natural gas and zero-emission technologies for locomotives. Staff will also continue to implement the Clean Communities Program, complete the fourth Multiple Air Toxics Exposure Study, and continue to respond to air quality complaints in a timely manner.

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This year SCAQMD continued its successful effort to replace old, air polluting gasoline-powered lawn mowers with brand-new clean, highly-efficient, rechargeable electric models. This follows the milestone set in 2013, when the agency’s Lawnmower Exchange program replaced its 50,000th mower.

Residents throughout SCAQMD’s region brought their gasoline-powered mowers to one of four separate events held in Long Beach, Pasadena, Riverside, and Anaheim during May and June. Participants’ old mowers were scrapped in exchange for the discounted purchase of brand-new cordless, rechargeable electric mowers. This year, residents were given the opportunity to select between five efficient models with a savings of up to 75% depending on the make and model selected. At the four exchange events, a total of nearly 2,400 mowers were exchanged.

Exchanging a mower is easy and convenient. Upon payment, attendants take the participants’ old mowers from their vehicles, drain them of hazardous fluids, and send the mowers to a metal recycling facility. Customers never have to leave the comfort of their vehicles as attendants replace the old mower with a new, boxed electric model.

Lighter, quieter, and easier to run than their gasoline-powered counterparts, electric mowers operate emission free. Conversely, one gasoline-powered mower can have the same yearly air pollution impact as a car driven over 22,000 miles.

Registration for the SCAQMD’s 2015 Lawn Mower Exchange Program begins next Spring. Visit aqmd.gov or call toll-free 1-888-425-6247 for updates and information.
ACT Expo Showcases Clean Technology Vehicles

The 2014 Alternative Clean Transportation (ACT) Expo took place May 5-8th at the Long Beach Convention Center. Touted as “North America’s Largest Clean Fleet Expo,” it did not disappoint. With over 4,000 attendees, it is the largest event of its type in the United States.

The Expo featured a variety of alternative fuel and clean technology vehicles, workshops, seminars, ride-and-drives, technical tours, and a large exhibit hall. There were over 54 vehicles at the show, with more than 20 of them available to ride-and-drive.

During the Expo, SCAQMD, a presenting sponsor of the conference, held its own forum, titled “Alternative Fuel Toolkit for Local Governments, Fleet Managers, and Employers Workshop,” that provided fleet managers with the opportunity to learn about the incentive programs and funding opportunities.

If you are a fleet manager and are interested in getting one of SCAQMD’s Toolkits, please contact Lourdes Cordova-Martinez at lcmartinez@aqmd.gov or (909) 396-3214.

“Team SCAQMD” Participates in Relay For Life

On June 7th, over 30 SCAQMD employees and their families participated as “Team SCAQMD” in the American Cancer Society’s Relay For Life at Lorbeer Middle School in Diamond Bar. SCAQMD was a Gold Sponsor of the local event that included hundreds of participants from nearby cities. Every year the American Cancer Society organizes over 5,200 Relay for Life events nationwide.

Relay For Life mobilizes communities to celebrate people who have battled cancer, remember lost loved ones, and provide participants with an opportunity to fight back against the disease. A number of the SCAQMD participants were either cancer survivors or walked for family members who battled cancer.

Numerous studies have shown links between air pollution and cancer. The cancer research arm of the World Health Organization (WHO) recently declared both air pollution in general, and particulate matter (a component of air pollution), to be carcinogens. According to WHO, particulate matter pollution is estimated to be the cause of about 16% of lung cancer deaths worldwide.

2016 Air Quality Management Plan Process Kicks Off

SCAQMD staff recently began the process of developing the 2016 Air Quality Management Plan (AQMP), which must demonstrate how the region will attain federal clean air standards for the Southland. An integrated AQMP is prepared every four to six years and the 2016 plan will focus primarily on how the region will meet federal ozone standards by the upcoming deadlines.

As was done for past plans, advisory groups made up of a diverse group of community, environmental, business, academia and government stakeholders are convening to assist in the 2016 AQMP’s development. However, what is different this time is that a series of white papers will be prepared to lay out the technical and policy issues concerning interlocking disciplines on air quality, climate, energy and transportation and to initiate dialogues with stakeholders regarding development strategies. Staff will collaborate closely with the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), the County Transportation Commissions and Councils of Governments in preparing the reports.

The 2016 AQMP will incorporate the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy, and updated emission inventory methodologies for various source categories.

The draft plan is expected to be made available for public review and input by late spring or early summer of 2016. Public workshops and hearings will be held during the review period. SCAQMD’s Governing Board is scheduled to hear the plan in September 2016, after which it will be submitted to CARB for approval, followed by submittal to U.S. EPA by December 2016.

For more information on the 2016 AQMP, visit the Plan’s webpage at aqmd.gov/home/about/groups-committees/aqmp-advisory-group or contact Susan Nakamura at SNakamura@aqmd.gov or (909) 396-3105.
SCAQMD Adopts Drought Management and Water Conservation Plan

Following the State of Emergency declared by Governor Jerry Brown in January due to the state’s drought, SCAQMD approved a plan to address drought conditions while maintaining air quality. The plan, adopted on June 6, seeks to ensure that businesses will continue to operate without further increasing water shortages resulting from the drought.

Application of water is one of the predominant measures used to control fugitive dust in the South Coast Air Basin and Coachella Valley. SCAQMD’s Drought Management and Water Conservation Plan consists of promoting water-sparing alternatives such as paving unpaved roadways and using vacuum sweepers instead of water to remove dust from paved roadways.

The plan will also help facilitate the permitting and use of certain equipment required to address emergency drought conditions. Water shortages can lead to an increased chance of wildfires, smoke exposure, and particulate matter levels, which not only impact air quality, but also threaten the public health of the region’s population.

The plan is effective immediately and also includes water conservation measures that will be implemented at the SCAQMD headquarters. Visit aqmd.gov to review all measures included in the plan.

For more information, contact Mohsen Nazemi at (909) 396-2662.

Bike to Work Day a Success

A record-breaking 34 SCAQMD employees participated in the agency’s 15th annual Bike to Work Day event on May 15th. Besides bicyclists riding in from nearby communities such as Diamond Bar, West Covina and Rowland Heights, others rode from as far away as Long Beach, Murrieta, Pasadena and Riverside. While Bike to Work Day is an annual one-day event, some employees commute by bicycle on a regular basis. Among these individuals are Cynthia Carter, Vianne Setiadi, Ernest Lopez, Joe Vail, and Gilbert Vita who are registered participants in SCAQMD’s Rule 2202 program and ride their bicycles to work.
What Happens When You Call 1-800-CUT-SMOG?

In its continuing effort to clean the air and protect public health in the South Coast Air Basin, SCAQMD relies on the public’s participation. One of the methods available to engage Southland residents is 1-800-CUT-SMOG (1-800-288-7664), the toll-free number to contact SCAQMD about air quality concerns.

Callers to 1-800-CUT-SMOG have the option of reporting smoke, dust, excessively smoking vehicles, unusual odors, other air contaminants, or to check the real time air quality conditions for a local area. The 1-800-CUT-SMOG service is available 24 hours a day.

Those that call during SCAQMD business hours (7:00 a.m. – 5:30 p.m., Tuesday through Friday) are given the option of being routed to an attendant or using an automated system to assist them. Those calling outside normal SCAQMD business hours will all be served by the automated system.

All calls to 1-800-CUT-SMOG are taken seriously and are handled as expeditiously as possible. Air quality complaints are forwarded to an inspector to be investigated, while vehicle owners whose cars have been reported as smoking vehicles (emitting excessive amount of exhaust smoke) will be sent a letter advising them that their vehicle was reported to be smoking and recommending they have it repaired to eliminate excessive emissions or they could face a fine of $100 to $250 for first-time offenders.

To get connected and find out more about how together everyone can help to clean the air that we breathe, go to aqmd.gov or download the SCAQMD smartphone or iPad app from the iTunes Store or Google Play.

Fire Season/Smog Season Now Underway: Take Proper Steps to Protect Your Health!

During the fire/smog season, there are measures individuals can take to protect their health from harmful pollutants filling the air. Ash and smoke from fires can irritate the eyes and airways, cause coughing and/or a scratchy throat. They can also irritate sinuses, cause headaches or a runny nose. In addition to short-term effects, there may also be long-term effects that significantly impact public health.

While ash and smoke are visible reminders, persons must be even more cautious of the fine particles that are too small to see. These invisible particles bypass a human’s natural defense system and lodge in the lungs. They can cause irritation, and over the long term can cause decreased lung function. They also make one more susceptible to developing diseases such as asthma, bronchitis, emphysema and possibly cancer.

Children are more sensitive to air pollution for several reasons. First their respiratory systems are still developing. Children breathe more air per pound of bodyweight than adults and they are more active outdoors, thus increasing exposure to outdoor pollutants. Seniors are also more susceptible to air pollution because they are more likely to have medical conditions such as chronic pulmonary disease, emphysema, and bronchitis. High air pollution levels can worsen their health.

For more information, visit SCAQMD’s web site at aqmd.gov and view SCAQMD’s Fire Safety Alert tips at aqmd.gov/home/library/public-information/publications for additional fire safety and health information.
The following proposed amended rules and regulations are tentatively scheduled for hearings at upcoming Governing Board meetings. This information is subject to change. For the most current information go to 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 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces**
Amendments may be necessary to reflect the findings of the ongoing technology assessment.
For more information contact Joe Cassmassi at jcassmassi@aqmd.gov or (909) 396-3155.

**Rule 1151 - Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations**
The proposed amendments will remove language associated with outdated requirements and may also be necessary to reflect further findings relative to recordkeeping requirements for tertiary butyl acetate (TBAc), as well as include minor clarifications.
For more information, contact Naveen Berry at nberry@aqmd.gov or (909) 396-2363.

**Rule 1531.1 – Emissions of Oxides of Nitrogen from Commercial Food Ovens**
Proposed Rule 1153.1 will establish equipment-specific nitrogen oxides emission limits and other requirements for the operation of commercial food ovens.
For more information contact Joe Cassmassi at jcassmassi@aqmd.gov or (909) 396-3155.

**Rule 1168 - Adhesive and Sealant Applications**
The proposed amendments will partially implement stationary source control measure CTS-02 of the 2012 AQMP and reflect improvements in adhesive and sealants technology, as well as remove outdated provisions and include minor clarifications.
For more information contact Naveen Berry at nberry@aqmd.gov or (909) 396-2363.

### October

**Regulation XX – Regional Clean Air Incentives Market**
Proposed amendments to Regulation XX will seek to implement a minimum contingency measure CMB-01 of the 2012 AQMP and possibly Phase II of the control measure if the technology assessment can be completed within the allotted time for this rulemaking.
For more information contact Joe Cassmassi at jcassmassi@aqmd.gov or (909)-396-3155.

**Rule 415 – Odors from Rendering Plants**
Proposed Rule 415 will address odors from rendering plants.
For more information contact Phil Fine at pfine@aqmd.gov or (909) 396-2239.

**Rule 1161 - VOC Reductions from Mold Release Agents**
The proposed rule will establish requirements for mold release products used in composite, fiberglass, metal and plastic manufacturing, and concrete stamping operations.
For more information contact Naveen Berry at nberry@aqmd.gov or (909) 396-2363.

**Regulation IX & X - Standards of Performance for New Stationary Sources (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAPS)**
The proposed amendments will incorporate, by reference, the latest federal revisions.
For more information, contact Naveen Berry at nberry@aqmd.gov or (909) 396-2363.

### New Tier 3 Emission Standards Issued for Fuels and Vehicles

In April, the US Environmental Protection Agency (U.S. EPA) approved strengthened ‘Tier 3’ clean vehicle and fuel standards beginning in 2017. This program requires manufacturers to meet a fleet-average emission standard for their vehicle fleet in a given model year, and lowers the sulfur content of gasoline. U.S. EPA continues to harmonize federal standards with California’s Low Emission Vehicle program in an attempt to maximize economic public health and air quality benefits.

The vehicle standards reduce both tailpipe and evaporative emissions from passenger cars, light-duty trucks, medium-duty passenger vehicles, and some heavy-duty vehicles. The gasoline sulfur standard will make emission control systems more effective for both existing and new vehicles, and will enable more stringent vehicle emissions standards since removing sulfur allows the vehicle’s catalytic controls to work more efficiently.

Lower sulfur gasoline also facilitates the development of some lower-cost technologies to improve fuel economy and reduce greenhouse gas (GHG) emissions, which reduces gasoline consumption and saves consumers money. U.S. EPA’s action was a response to President Obama’s 2010 memorandum to develop new standards to reduce GHG emissions and improve fuel economy for cars and trucks.

Visit U.S. EPA’s Office of Transportation and Air Quality (OTAQ) website at epa.gov/otaq/tier3.htm for more information on the Tier 3 final rule, regulations and related documents.
Family of Owls Fascinates

The SCAQMD logo may feature a white dove, but recently it is an owl that has earned the fascination of many air district employees.

Since early this year, staffers have enjoyed a special view of nature right outside a window of the SCAQMD headquarters. After numerous spectacular aerial battles between a pair of great horned owls and ravens, the owls won and took over the ravens’ nest on a third floor ledge. A few weeks later, two fuzzy owlets appeared.

On personal time and during lunch breaks, owl lovers on each floor posted owl facts, photos and updates. One SCAQMD employee, Rick Lee, regularly photographed and posted YouTube videos of the owl family. Unfortunately, both of the owlets fell out of the nest (or were pushed out by ravens) and required human intervention. They were taken to the Wild Wings of California bird rescue center in San Dimas. Wild Wings is a nonprofit rehabilitation center for sick and injured native birds. Both owlets are reported to be doing well and feasting on frozen rats and other delicacies. They are expected to be released back into the wild in early October.

Great horned owls, also known as hoot owls, cat owls or winged tigers, occupy the most extensive range of any owl species. Mainly nocturnal birds, they have few natural predators and are long-lived. Great horned owls live in a wide variety of habitats, but they do not build their own nests. Instead, they seek out existing sites such as the nests of other birds, squirrel nests, tree holes, crevices in rocks and nooks in buildings.

Is There a Doctor in the House? Five New Ph.D.’s Hired in Planning

This year SCAQMD welcomed five new Air Quality Specialists, Kalam Cheung, Payam Pakbin, Scott Epstein, Olga Pikelnaya, and Elaine Shen, to its Planning, Rule Development and Area Sources Division. What distinguishes this fact is that all of these employees have earned their Ph.D.

Originally from Iran, Dr. Pakbin earned his Ph.D. in Environmental Engineering from the University of Southern California. Dr. Epstein, who grew up in New Jersey, earned his Ph.D. in Chemical Engineering from Carnegie-Mellon with an emphasis in Atmospheric Particulate Matter. He was a postdoctoral scholar at the University of California, Irvine in the Department of Chemistry before joining the District. Dr. Pikelnaya, who earned her Ph.D. from UCLA’s Department of Atmospheric and Oceanic Sciences, studied halogen chemistry and, examined the interactions of marine air with urban pollution using remote sensing. After completing her PhD, Dr. Pikelnaya worked on the application of remote sensing techniques for fenceline monitoring of petrochemical facilities. Dr. Shen has a Ph.D. in Economics from the Université catholique de Louvain in Belgium. Prior to joining SCAQMD, she held positions at the Milken Institute and a research and consulting firm where she led research on regional economics and workforce development. Dr. Cheung, originally from Hong Kong, received her Doctorate in Environmental Engineering and looked at the effects of particulate matter in the South Coast Basin. She completed postdoctoral studies at Hong Kong Polytechnic University.

In addition to their many years of education the new Air Quality Specialists have immersed themselves in their field through conference, publication, and research opportunities.

Each individual comes with years of scholarly and occupational experience that will contribute to their competitive field. Bryan Bradford, Human Resources Manager, emphasized the detailed nature of the hiring process, “We are always looking for who is the most competitive, the most qualified. We have an application review process that takes place. We then have a blind review of the supplemental questionnaires where responses to questions are reviewed without any names attached. Following that, candidates engage in two in-person interviews; a panel interview and then a placement interview.

The competition to obtain these positions is strong but candidates do not receive extra points for having earned higher degrees. Human Resources strives to ensure individuals are selected based on what the individuals can bring to the particular position SCAQMD takes pride in hiring people who have an aspiration and fervor to work at the District. For instance, Dr. Shen has been enjoying her SCAQMD experience as she has acquired a deeper knowledge of chemical compounds and examined the socioeconomic impacts of exposure to them within our basin.

For Dr. Cheung, being hired by SCAQMD has been a long-time personal goal. “I have always aspired to work at SCAQMD and I now feel professionally content with my position here,” she explained. “The Agency’s engagement in various activities and staff’s diverse knowledge and expertise are what make it so unique.”

Dr. Cheung, Dr. Pakbin, Dr. Epstein, Dr. Pikelnaya, and Dr. Shen are looking forward to continuing to grow and learn as the year progresses. They are very eager to see where their SCAQMD experience takes them.
Further information on Rule Compliance Training Classes can also be found at aqmd.gov/home/regulations/compliance, on the Compliance web page, Training Classes & Workshops page.