California Clean Air Day
October 7, 2020
Take the Pledge!

For a brief period in March 2020, California achieved some of the cleanest air in the Country. After the Independence Day holiday, we had some of the worst. Collectively we have the power to change the world and can choose to do so in ways that help, not harm, all Californians. California Clean Air Day is built on the idea that shared experiences unite people to action to improve our community health. By joining together for a unified day of action we can create new habits to clear the air for all members of California’s diverse communities. California Clean Air Day is a project of the Coalition for Clean Air. Find out more and take the Clean Air Pledge at www.cleanairday.org.

Visit us on our social media sites!
Here along the Central Coast, we enjoy some of the cleanest air in the nation. Our climate is the envy of world and I'm proud of the important role the Monterey Bay Air Resources District (MBARD) plays to keep it that way. The public is more aware of air quality than ever given the recent fires we have experienced. This newsletter is one our ways of connecting with the public we serve. We hope that we're able to shine light on the good work we do.

Our job is significant and we work closely with business and government. The District permits and inspects more than 2,000 stationary sources of air pollution. This includes oil fields, manufacturers, power plants, gasoline stations, auto body shops, dry cleaners, and standby generators. MBARD is funded by both fees and grants. One of our most important roles is to provide education to inform the general public about local air quality issues and about steps we can take to reduce air pollution. That's where this newsletter comes from.

We are especially excited about some of the grants we administer including our EV incentive program and our programs directed at both agriculture and diesel engines. MBARD is committed to working with the community and industry in an effort to maintain clean air alongside a healthy environment. Air quality is especially important during the pandemic since impaired air quality can exacerbate COVID-19 health effects.

We appreciate you checking out this newsletter and I hope you will learn more on our website at www.mbard.org.

Message From the MBARD Board of Directors
Steve McShane, Chair

Board of Directors Approves Revisions to Rule 426: Architectural Coatings

On September 16, MBARD's Board of Directors approved revisions to Rule 426 Architectural Coatings. Rule 426 reduces Volatile Organic Compounds (VOCs) from architectural coatings by establishing VOC limits for coating categories. Architectural coatings are applied to stationary structures and their accessories and include house paints, stains, industrial maintenance coatings, and traffic coatings.

The revised Rule 426 establishes more stringent VOC limits for ten existing coating categories, adds new limits for three new categories and colorants, and includes a new stand-alone section for Photovoltaic Coatings with a sunset date of January 1, 2028. Overall, the rule changes are anticipated to reduce VOC emissions by approximately 44 pounds per day.

www.mbard.org
In 2016, MBARD launched the AB923 funded “Plug-In Monterey Bay EV Infrastructure Program”. The program was developed to install EV charge stations over a five-year period throughout Monterey, Santa Cruz and San Benito counties. EV charge station infrastructure, which is designed to include multiple charging outlets, are strategically located at workplaces, destinations, multi-unit developments and along major corridors.

The two types of charging infrastructure being deployed are direct-current fast charge (DCFC) and dual port Level 2 stations using 240 volts with expansion stub outs for future installation of additional charge stations and ancillary equipment. The DCFC charge stations are designed to accommodate two different connector configurations based on current EV models (SAE CCS combo and CHAdeMO). The DCFC stations are able to charge most electric vehicles to near full charge in ten to twenty minutes.

Placing multiple stations on roadway corridors encourages the use of electric vehicles and reduces “range anxiety”. The most recent installation and activation of two DCFC stations is at 560 Canal Street in the King City Center Shopping Mall, King City. Both stations are open to the public 24/7 and offer up to 62.5 kWh of charging energy. A dual Level 2 station is also available at the site. An additional third DCFC station is scheduled to be operational by the end of 2020. The location offers EV drivers convenience shopping with several restaurants available while charging. A nominal fee is assessed for the use of both the DCFC and Level 2 stations based on pricing structure from the manufacturer, Chargepoint Inc. The EV driver can easily navigate to the stations via the Plugshare or Chargepoint online locaters:

www.plugshare.com/location/220175  https://na.chargepoint.com/charge_point
During the recent wildfires there were naturally many questions about air quality and how to read and understand the Air Quality Index (AQI). A large concern was assisting the Spanish speaking community in using the AQI.

Responding to this need, MBARD has produced a Spanish language information video that will be a valuable support the community. The video is available on MBARD’s website and on the Monterey Bay Air Resources District's YouTube Channel.

The video was narrated by Isael Rubio-Salazar, MBARD Air Quality Compliance Inspector and produced by Ann O’Rourke, MBARD Executive Assistant and Outreach Coordinator.

In September, MBARD will be launching a Wood Stove Change Out Program (WSCOP) throughout Monterey, Santa Cruz and San Benito counties. This program is part of a statewide Woodsmoke Reduction Program supported by California Climate Investments which provides billions in grant money to invest in clean technologies to reduce greenhouse gas (GHG) emissions, strengthen the economy, and improve public health and the environment—particularly in disadvantaged communities and low-income areas.

MBARD’s WSCOP helps households replace non-EPA-certified wood stoves, wood inserts, or open hearth fireplaces used as a primary source of heat with a cleaner burning and more efficient heating device. The WSCOP will offer incentives toward the purchase and installation of a qualifying device. Additional grant incentives are available for qualified low-income households. Priority enrollment will be provided to qualified low income households and those who live within disadvantaged communities and low-income areas. For more information, please visit the MBARD Wood Stove Change Out webpage at: https://www.mbard.org/wood-stove-change-out-program

The Mission of the Monterey Bay Air Resources District is to Protect Public and Environmental Health while Balancing Economic and Air Quality Considerations

Spanish Air Quality Index Video
After weeks of planning and developing safe and healthy protocols, MBARD welcomed staff’s return to the office, on a limited basis, on June 29. With the exception of workers classified as essential and required in the office on a daily basis, schedules were staggered to accommodate social distancing while working. Procedures were in place for safe navigating of the building’s halls, restrooms, and break areas and signs were posted throughout the office. Sanitizing stations were also set up in strategic locations.

In a July 13 press conference, Governor Newsom ordered the statewide closure of indoor activities for certain counties in California, which included Monterey County. Once again MBARD staff was working from home with the exception of essential workers.

This time MBARD was prepared with home offices and computer connections already in place. MBARD staff remains available to the public via email and phone. MBARD is proud of its staff’s continued commitment to give the best possible service in less than ideal circumstances!

New Automated Accounts Payable Process

Earlier this year, the Administrative Division began work with Laserfiche on the development of a paperless and automated Accounts Payable process. In August, we began implementation of the new system to capture invoice data electronically and securely store related financial information for faster and easier retrieval. The process will make invoice review and approval more efficient, reduce the amount of physical space used to store documents, apply required retention periods to stored items, and make it easier to retrieve information for audit purposes.

A designated email has been set up in preparation for this transition. Vendors are able to submit their invoices electronically to accountspayable@mbard.org where they will be received and processed.
Emerging air quality sensors – with general traits of being more compact, directly reading pollutants, and lower in cost than traditional methods - have a wide appeal to professional researchers, community groups, students, and citizen scientists alike. Since this technology is still under development, little information exists on the quality of data that these sensors produce. EPA, the South Coast Air Quality Management District and MBARD, among others, have evaluated many of these sensors and determined that, in general, some of them perform well while a number of them can be considered random number generators.

Why is my air quality sensor reading a different concentration or Air Quality Index than what is being displayed on MBARD’s website? This is a question we are receiving from many citizens on a daily basis. Here are a few reasons for these differences.

First off, there is a big difference between an air quality monitor and a portable sensor. MBARD is using a federally approved and certified monitoring device. This device is not sold on Amazon.com and typically costs in the tens of thousands of dollars. Most of the air quality sensors available to the public cost less than $300 and are not engineered to resist the elements or to be used for continuous operation. In fact, they may be intended for indoor use only. Also, although MBARD’s monitors are robust and designed to stand up to the elements, they are calibrated and serviced on a weekly basis by MBARD monitoring specialists. Some of the portable sensors we’ve tested do not last more than a few weeks, especially in locations next to the coast.

Your air quality may be different at your location. Unless you have your sensor right next to our monitor, it stands to reason that our readings may be different. Air quality varies due to meteorology and geographic conditions. Dispersion of smoke is not homogeneous, so monitor and sensor data may be different from one another. Many of the sensors are designed to be used indoors. Indoor air quality can be significantly different from ambient air. MBARD does not monitor indoor air quality. Furthermore, some people are using sensors as mobile smoke detection devices. The initial location of these devices are typically geocoded at one location and are not intended to be moved around. Moving the sensor may provide results that are inconsistent with its documented location.

The technologies used to detect air pollution (particulate matter) are different. The federally approved monitoring devices use well established technology to collect information. These devices are the gold standard by which air sensors are compared. Many of these sensors behave inconsistently in different

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environments and smoke concentrations. For instance, a sensor may over-report particulate matter concentrations at the coast and under-report concentrations in an inland setting. We have found that in situations of high smoke concentrations a number of sensors typically over-report particulate matter concentrations.

Air quality standards for particulate matter are based on exposures that are 24 hours in duration. There are no health-based air quality standards for shorter term exposures. MBARD’s monitoring device calculates particulate matter concentrations on a 24-hour rolling average. The AIR Quality Index (AQI) which depicts particulate matter levels on a graphical and color coded basis are intended to represent 24 hours of exposure. Although adverse health effects can be observed with durations of exposure shorter than 24 hours, some of the monitoring devices are showing particulate matter concentrations on a minute to minute basis. Thus an average value can be different than an instantaneous reading.

Knowing their shortcomings, do air quality sensors serve a purpose? Yes, since these sensors are relatively inexpensive, a greater number of them can be used to obtain a more complete picture of air quality down to the personal and neighborhood level. Traditional monitors are used to evaluate airsheds on a more regional level. Many of these devices transmit their data directly to a web-based mapping program that depicts concentrations based on the AQI. These maps can be used to see the range of areas impacted by smoke to make decisions on where to go to find cleaner air.

As technology develops the accuracy and precision of these sensor devices will continue to improve. MBARD is looking to sensor technology to use in the development of a wildfire smoke emissions monitoring network. MBARD will be testing new sensor technology in the coming months. This technology should help MBARD monitor wildfire smoke emissions in every city and county throughout our region. We intend to display real time sensor air quality values along with the 24-hour AQI. This should be a huge step forward in understanding wildfire smoke impacts throughout our three-county jurisdiction.

For more information:
https://www.epa.gov/air-sensor-toolbox/evaluation-emerging-air-sensor-performance
http://www.aqmd.gov/aq-spec

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