

DISTANT WILDFIRE SMOKE CAN IMPACT OUR AIR QUALITY AND OUR HEALTH

Richard Stedman, Air Pollution Control Officer

It's likely most of us in the Greater Bay Area vividly remember the orange skies from wildfire smoke in September 2020 with its sharp smell and taste. A component of wildfire smoke is fine particulate matter (aka PM2.5), which can penetrate deep into our lungs. It is the most deadly form of air pollution in the U.S., according to [Michael Wara](#) of Stanford Woods Institute for the Environment. Exposure leads to greater potential for heart and lung disease as well as cancer.

(continued on next page)

IN THIS ISSUE

Distant Wildfire Smoke Can Impact
Our Air Quality and Our Health

MBARD E-Bike Incentive Program

Compliance Advisory Issued
During Extreme Heat Event

Don't Idle Back to School

Hearing Board Member to Retire
After 15 Years of Service,
What is the Hearing Board?

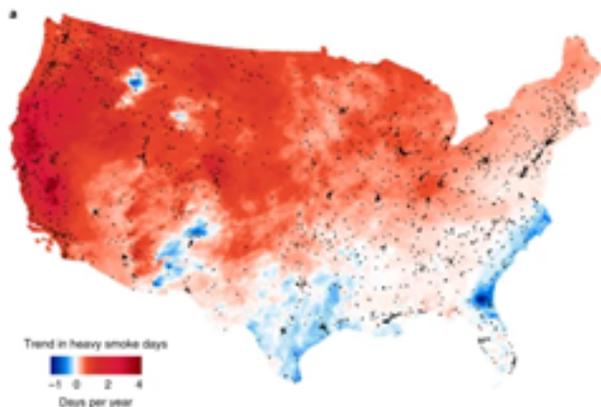
Employee Spotlights
and Board of Directors

DISTANT WILDFIRE SMOKE CAN IMPACT OUR AIR QUALITY AND OUR HEALTH

It's likely most of us in the Greater Bay Area vividly remember the orange skies from wildfire smoke in September 2020 with its sharp smell and taste. A component of wildfire smoke is fine particulate matter (aka PM2.5), which can penetrate deep into our lungs. It is the most deadly form of air pollution in the U.S., according to [Michael Wara](#) of Stanford Woods Institute for the Environment. Exposure leads to greater potential for heart and lung disease as well as cancer.

(continued from front page of newsletter): There are also short-term effects – within hours of exposure to heavy smoke, cognitive function ([such as attention](#)) declines, lasting for several days.

Fig. 1: Trends in smoke exposure across the United States.



Exposure to wildfire smoke is greatest for the Western US States.

The Monterey Bay Air Resources District (MBARD) is dedicated to monitoring and improving our air quality.

Read on to see how to protect yourself and your family, and click here for [many other resources](#).

Burke, M., Heft-Neal, S., Li, J. et al. Exposures and behavioral responses to wildfire smoke. Nat Hum Behav (2022). <https://doi.org/10.1038/s41562-022-01396-6>

How to Know

You can see air quality nationwide for fine particulate matter (PM2.5) at the [AirNow Fire and Smoke Map](#). Locally, MBARD has a wildfire smoke sensor network that measures fine particulate matter coming from wildfire smoke. Please check the MBARD Wildfire Smoke Information [website](#) for a map of the sensor network and for more information on how to protect yourself from wildfire smoke.

DISTANT WILDFIRE SMOKE CAN IMPACT OUR AIR QUALITY AND OUR HEALTH

What to Do About It

Simply staying indoors [may not be enough protection](#) during smoky days because our homes can be leaky. To help prevent smoke from leaking into your home, close and seal doors and windows and set your HVAC or heating system to “circulate” rather than bringing in fresh air. You can use HEPA or MERV13 air filters in your system to filter out smoke. Are you handy? Click here for a [comprehensive how-to](#).

You can create a “clean air room” in your home with an air cleaning device. Be sure the model is not ozone generating – ground level ozone is a pollutant and some air “cleaners” create ozone (check this EPA [site](#) for details and the CARB [site](#) for a list of certified devices).

MBARD recently applied for a grant to fund commercial-grade air cleaners for public spaces such as libraries and school buildings. Hopefully soon, the counties of Monterey, Santa Cruz and San Benito will benefit from Cleaner Air Centers integrated with evacuation and cooling centers available during wildfire events.



Please contact Irene Miranda, Ph.D., Air Quality Planner, at imiranda@mbard.org or (831) 647-9411 for questions.


RICHARD A. STEDMAN
AIR POLLUTION CONTROL OFFICER



MBARD E-BIKE INCENTIVE PROGRAM

On September 15, 2021, the Board of Directors of the Monterey Bay Air Resources District (MBARD) authorized the Electric Bicycle Incentive Program (EBIP) to incentivize the purchase of electric bikes throughout the region. Funding for the program comes from Assembly Bill 2766 (AB2766) revenues which allows the DMV to collect a \$4.00 surcharge on vehicle registrations. These funds are passed on to MBARD for developing programs to reduce air pollution from motor vehicles and for the implementation of the California Clean Air Act.

Electric bicycles (e-bikes) are simply bicycles with pedals and an electric motor (typically limited to 750 watts or 1 hp) which may or may not have a throttle assist. E-Bikes must also be operable by pedaling alone. Most states recognize a 3-class system that is dependent on the e-bike's max speed and the availability of a throttle assist. Please check your local ordinances for guidance on where and what class of e-bikes are allowed on specific recreational trails.

The advantages and benefits of e-bikes over traditional bicycles and single-occupancy vehicles are varied. They offer reductions in air and noise pollution, congestion, and travel while benefiting the health, mobility, and energy security of communities. E-bikes also enable more people to ride a bicycle for longer distances despite physical limitations, difficult terrain, and being laden with cargo. Additionally, a strong potential exists for e-bikes to replace a significant number of vehicular trips. In the most recent U.S. National Household Travel Survey (NHTS), completed in 2017, 35% of trips made in single-occupancy vehicles were two miles or shorter, while 60% of trips were five miles or shorter (Federal Highway Administration, 2022).

MBARD has implemented two iterations of the EBIP to date. A pilot program restricted to only low-income qualified residents of Monterey, San Benito, or Santa Cruz Counties was administered between October 2021 and June 2022. A \$1,000 incentive was awarded to 50 low-income residents who purchased any class of e-bike from a local bike shop. Eligibility was expanded to include all residents for the second iteration of the EBIP which launched on July 1, 2022. All incentive funds were allocated, and the program was closed on August 3rd with 39 of 66 incentives (or 59%) being awarded to low-income qualified applicants.

MBARD E-BIKE INCENTIVE PROGRAM

The MBARD Electric Bicycle Incentive Program was implemented to help mitigate mobile source emissions by encouraging residents to reduce or replace vehicular miles traveled. The response from the community was resounding and clear. EBIP successfully disbursed \$102,500 to 116 residents of Monterey, San Benito, and Santa Cruz Counties in just two application periods, with the vast majority (77%) of incentive funds being awarded to those who were low-income qualified. MBARD's E-Bike Incentive Program was one of the first and one of just a handful of such programs in the nation. MBARD will continue to find innovative and impactful measures to ensure the vision that "all individuals in the MBARD jurisdiction will live, work, and play in a clean air environment" by encouraging choices that promote clean air quality.



MONTEREY BAY AIR RESOURCES DISTRICT

Electric Bicycle Incentive Program

\$500 incentive for the purchase of an electric bicycle for residents of Monterey, San Benito & Santa Cruz Counties

Additional \$500 incentive for qualified low-income applicants

 **LEARN MORE AT [MBARD.ORG](https://www.mbard.org)**
831.647.9411

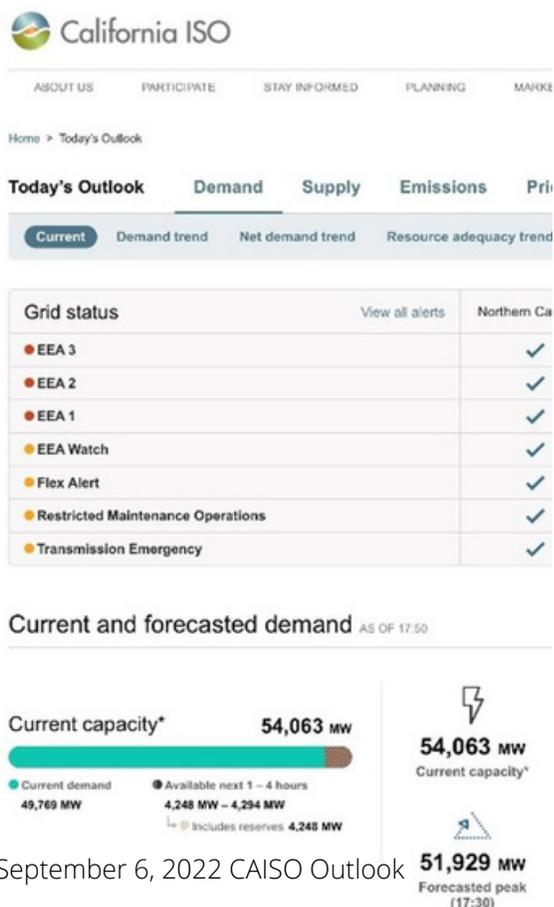


**THE E-BIKE INCENTIVE PROGRAM IS CLOSED.
All funds have been allocated for FY2022-2023.**

COMPLIANCE ADVISORY ISSUED DURING EXTREME HEAT EVENT

In advance of the September extreme heat event, the Governor issued a Proclamation of a State of Emergency concerning electricity reliability for August 31 to September 9, 2022 (extended by Executive Order N-22-15). This was to prepare and notify stationary and portable engine operators along with power plants of the potential need to operate in violation of air district permit conditions to reduce demand on the grid. To support the Governor's Proclamation, MBARD created a compliance advisory and posted it to our website and our inspectors provided copies to permitted sources.

The initial proclamation was followed by two executive orders. On Friday September 2, the Governor updated the State of Emergency Proclamation with Executive Order N-22-14 which allows generators (stationary or portable) to operate at any time of day and at any location when the California Independent System Operator (CAISO) issues an energy emergency alert (EEA) watch or energy emergency alert. Finally, on Tuesday September 6, the Governor released Executive Order N-22-15 which extended the provisions of the Proclamation and Executive Order N-22-14 through September 9, 2022.



MBARD permitted facilities were allowed to operate in violation of permit requirements but were required to notify MBARD within 48 hours of their actions. In addition, the facilities will need to report additional fuel use, additional hours of operation, and energy produced by the additional use to MBARD within 30 days of the Proclamation. MBARD will collect the data and provide to the state, if needed.

DON'T IDLE BACK TO SCHOOL

It's that time of the year again when schools fill with excitement as students return. Along with the smiles that come with students starting the school year, there are emissions from idling gas-powered vehicles when students are dropped off and picked up. You can help reduce emissions and protect public health by incorporating some of the following practices:

- Turn off your engine at school – When you are stopping to drop the kids off in the morning and waiting to pick them up at the end of the school day, please do not idle. Idling more than 10 seconds uses more fuel than restarting the engine.
- Coordinate a carpool or rideshare to get kids to-and-from school.
- Walk or bike with your children to-and-from school.
- Drive zero-emission or low-emission vehicles.
- Keep your vehicle well-tuned – It will pollute less.

The United States Environmental Protection Agency (EPA) has created an “Idle-Free Schools Toolkit for a Healthy School Environment”. If you are interested in an idle-free campaign at your school, visit the [EPA toolkit website](#).



HEARING BOARD MEMBER TO RETIRE AFTER 15 YEARS OF SERVICE



Anne E. Hall, RCE, QSD

MBARD greatly appreciates Hearing Board Member **Anne E. Hall** for 15 years of service to the Board. Anne was appointed to the Hearing Board on April 18, 2007. Anne served as the professional engineer member and will be retiring from the Board when her term expires on November 30, 2022. MBARD thanks Anne for her dedication to protect air quality and willingness to be available when needed to serve.

What is the Hearing Board?



The Hearing Board is a quasi-judicial panel authorized to provide relief from MBARD regulations under certain circumstances. Under state law, Hearing Board members are appointed by but act independently of the MBARD Board of Directors. The Hearing Board consists of five members; a medical professional, a professional engineer, an attorney, and two members of the public. Currently, the Hearing Board meets on an as-needed basis.

The Hearing Board is authorized to hear:

- Petitions by companies for variances;
- Petitions for abatement orders;
 - An abatement order requires a business operating out of compliance to take specific actions or to shut down its operation. This is a severe remedy normally reserved for serious violators.
- Appeals by businesses from the granting of permits, permit conditions, permit denials and suspensions, denials of emission reduction credits and denials of pollution control plans;
- Appeals by third parties.

The most common type of action heard by the MBARD Hearing Board in the past five years is a variance. A variance is an administrative exception to a law allowing a business to continue operating in violation of MBARD rules without penalty while it takes appropriate steps to meet air pollution control requirements. Variances can be granted only by the Hearing Board, not by MBARD inspectors or engineers.

The MBARD Hearing Board currently has the following vacancies; a medical professional, a professional engineer (starting December 1), and a public member. If you are interested in applying, the application is available on the [MBARD website](#).

EMPLOYEE SPOTLIGHTS

Welcome to Our New Staff Kara and Ziggy



Kara Hall
Air Quality Technician



Zigmont "Ziggy" Fafard
Air Quality Inspector

Kara Hall started working in the Planning, Air Monitoring and Compliance Divisions as an Air Quality Technician in August. She has a BS in Public Affairs with a major in Environmental Management from Indiana University. She has extensive work experience in natural resource interpretation, public outreach, and scientific research. Her experience working at the Monterey Bay Aquarium and Point Lobos among other employers gives her a local perspective on community issues. In her spare time, Kara enjoys long-distance running and backpacking.

Zigmont "Ziggy" Fafard started working in the Compliance Division as an Air Quality Inspector in September. Ziggy has a BS in Environmental Sciences from the University of California, Santa Cruz. He has working knowledge of environmental regulations through his coursework and professional experiences through his various employment. In particular, Ziggy has experience working in a restaurant which prepares him to communicate with the public at MBARD.



VISIT OUR WEBSITE FOR GRANTS & INCENTIVES:

[HTTPS://WWW.MBARD.ORG/GRANTS-INCENTIVES](https://www.mbard.org/grants-incentives)

- SERVING MONTEREY, SAN BENITO & SANTA CRUZ COUNTIES
24580 SILVER CLOUD CT. | MONTEREY, CA 93940 | 831.647.9411

Monterey Bay Air Resources District Board of Directors

NAME AND INFORMATION	AREA OF REPRESENTATION
Steve McShane, Chair Councilmember, City of Salinas, Budget Committee Chair	City of Salinas
Ryan Coonerty, Vice Chair Supervisor, District 3 - Santa Cruz County Budget Committee Vice Chair	Santa Cruz County
Sandy Brown Councilmember, City of Santa Cruz	Santa Cruz County Cities
Mary Ann Carbone Mayor, Sand City Budget Committee Member	Monterey Peninsula Cities
Zach Friend Supervisor, District 2 - Santa Cruz County Budget Committee Member (alt.)	Santa Cruz County
Kollin Kosmicki Supervisor, District 2 - San Benito County	San Benito County
Mike LeBarre Mayor, City of King City	South Monterey County Cities
Chris Lopez Supervisor, District 3 - Monterey County Budget Committee Member	Monterey County
John Phillips Supervisor, District 2 - Monterey County	Monterey County
Wendy Root Askew Supervisor, District 4 - Monterey County	Monterey County
Sam Storey Mayor, City of Capitola Budget Committee Member	Santa Cruz County Cities (Rotates every two years with San Benito County Cities)

Richard A. Stedman, Air Pollution Control Officer