



# DESERT BREEZE

VOLUME XI ISSUE III

SEPTEMBER 2023

## Pollutant of the Quarter: 1-Bromopropane

1-Bromopropane (1-BP), also referred to as n-propyl bromide, is a colorless liquid with a sweet odor. 1-BP is used in spot removers, coin cleaners, spray adhesives, and as a solvent in the aerospace, electronics, medical, and optics industries. It has also been used as a replacement for perchloroethylene as a dry cleaning solvent, but has largely been phased out from the sector.

In 2007, the US EPA had approved use of 1-BP under the Significant New Alternatives Policy (SNAP) as a replacement for ozone depleting chemicals. In 2013 however, the US National Toxicology Program unanimously recommended 1-BP be classified as a 'reasonably anticipated human carcinogen', and the EPA announced it would begin a full risk assessment of 1-BP. On November 23, 2015, the US EPA determined 1-BP met the criteria under the Emergency Planning and Community Right to Know Act (EPCRA) to require reporting of releases and spills. In January of 2022, the EPA added 1-BP to the list of Hazardous Air Pollutant (HAP), requiring releases into the air be quantified and reported by facilities using 1-BP.

1-BP has been shown to have cancer and non-cancer health impacts: lung cancer and reproductive toxicity can result from overexposure to 1-BP; the nervous system can also be negatively affected, and cause in the following symptoms:

- Confusion, slurred speech, dizziness, paresthesia (tingling/prickling/burning sensation)
- Difficulty walking, joint pain, and muscle twitching
- Unusual fatigue and headaches, visual disturbances (difficulty focusing), and transient loss of consciousness



### EPA ADDS 1-BROMOPROPANE TO LIST OF HAZARDOUS AIR POLLUTANTS

This is the first time since 1990 that EPA has granted a petition to add a hazardous air pollutant to the Clean Air Act



While the District does not have a rule specifically targeting emissions of 1-BP into the atmosphere, the District would include 1-BP in its evaluation of potential risk from facilities under the AB2588 Air Toxics "Hot Spots" Program. Under the program, the District evaluates certain facilities each year for the potential health risk they pose to off-site receptors from their emissions of toxic pollutants; 1-BP is one of the hundreds of substances required to be quantified and reported by a facility. Each year the District creates a report on the potential risk from evaluated facilities, makes the report available to the public on its website and offices for public viewing, and presents the report to its Board of Directors during a public board meeting.

In addition, the AB617 Criteria and Toxics Reporting (CTR) program is being phased in for the District between 2025 and 2029; the program will require the vast majority of facilities in the District to report their toxic air emissions on an annual basis once fully implemented.

The EPA is also evaluating whether their existing regulations for HAP need to be amended or if new regulations need to be created to address the risk of 1-BP; more information can be found by going to the EPA's Fact Sheet webpage for 1-BP.

<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-1-bromopropane-1-bp>

By: Samuel Johnson, Air Quality Engineer

## Fall Grant Programs

Three of the District's most popular grant programs will begin on October 1, 2023. Funding is limited and these grant programs have historically become oversubscribed. The Wood Smoke Reduction Program and DMV Vehicle Voucher Program are awarded on a first-come first-serve basis until all funding has been allocated. The DMV Grant Program, which includes road paving projects, has a five-month application submittal period with a hard deadline of February 23, 2024. All DMV Grant Program project proposals will be evaluated at the close of the application period to determine eligibility and funding awards.

### Wood Smoke Reduction Program

The Wood Smoke Reduction Program (WSRP) is funded by California Cap and Trade revenues. The California Air Resources Board (CARB) determines project criteria and program eligibility guidelines that the District must follow. The 2024 guidelines allows eligible homeowners in Eastern Kern to receive up to \$5,000 to replace their existing woodstove or fireplace, with a new EPA certified wood stove or fireplace insert. Natural gas and propane stoves or inserts will not be eligible for funding under the new CARB guidelines.



### DMV Vehicle Voucher Program

Eastern Kern residents can receive a \$4,000 voucher to be used for the purchase of a new electric vehicle (EV). There is no requirement to replace or retire an existing vehicle. In order to be eligible for funding, the grantee must reside in

Eastern Kern County and the new EV must be purchased not leased.



### DMV Grant Program

Grantees can receive up to \$50,000 for an eligible project that reduces emissions from on-road motor vehicle related activities. Eligible projects include road paving, installation of Level II or Level III public accessible EV charge station, installation of a public accessible CNG refilling station, public education courses geared toward reducing emissions, vanpool implementation, construction of a park & ride facilities, and construction of a bike path.



Guidelines and applications for all three of these grant programs will become available on the District's website [www.kernair.org](http://www.kernair.org) beginning October 1, 2023. Please review the guidelines of the program you are interested in applying to for complete requirements and conditions.

*By: Jeremiah Cravens, Senior Air Quality Specialist*

# Onboard Refueling Vapor Recovery

Onboard refueling vapor recovery, or “ORVR”, is a vapor emission control system installed in vehicles. In 1998, the Environmental Protection Agency began phasing in the ORVR system into all passenger, light duty, and medium sized duty vehicles. The ORVR system prevents harmful volatile organic compounds (VOCs) from entering the atmosphere. The capture of VOCs is essential to prevent diminishing air quality and accumulation of ozone.

Prior into the implementation of ORVR, vapors were captured through Phase I and Phase 2 vapor recovery. The vapors that form in a vehicle gas tank would be removed through Phase II nozzles. The vapors are then stored in the gasoline storage tank and controlled through pressure management devices. ORVR enables vehicles to retain the vapors formed and use them as fuel or purify them.

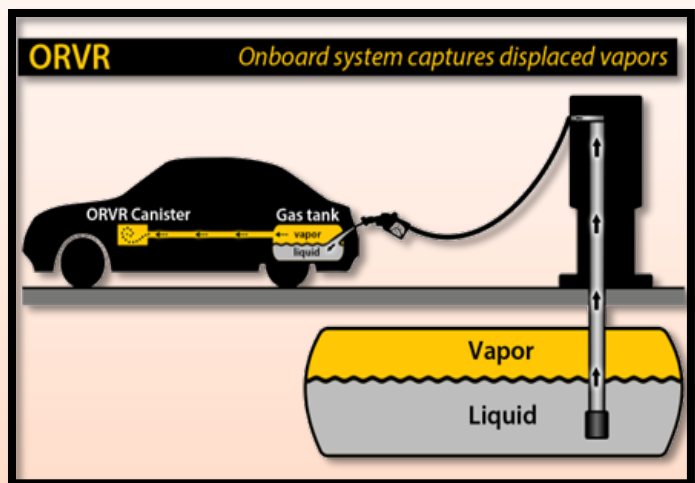
## Components

1. Vehicle Fuel Pipe → Gasoline is transferred from the underground storage tank through the Phase II nozzle, and through the vehicles fuel pipe, into the vehicle gasoline tank.
2. Carbon Canister In-take → As the gas tank fills, the existing vapors get pushed into the carbon canister and is held there until fueling is complete
3. Carbon Canister Release → Once the vehicle is started-up, the carbon canister

purges the collected vapors as purified air into the atmosphere.

4. Vapor Usage → Any remaining vapors left in the carbon canister will be used as fuel for the vehicle.

Phase II and ORVR can be viewed as redundant. The emission reductions from ORVR are equivalent to Phase II. This prompted the EPA to allow states with qualifying attainment districts to discontinue ORVR. The state of California continues the usage of ORVR and Phase II systems. ORVR has 98% efficiency compared to the 62-92% of Phase II and has less expenses due to lower maintenance and longer lifespan.



*By: Melissa Atkerson, Air Quality Specialist*

## Promotion and New Staff Members

**Katie Lantz**, originally from Tehachapi, California, joined the District in August 2018 as an Air Quality Support Specialist undertaking administrative duties. While working with the District, she returned to school and earned a Bachelor of Science degree in Environmental Resource Management from CSU Bakersfield in 2022. Katie promoted to an Air Quality Specialist in April 2023 and transitioned in her new role while helping train incoming staff. Though living in Bakersfield, she is pleased to continue working with her colleagues in her new capacity and being a part of the District’s mission to maintain the air quality of the Eastern Kern communities of her childhood.

*By: Katie Lantz, Air Quality Specialist*

**Doreatha Foots**, who likes to go by Dee, is originally from the Metropolis of Wasco, California. She attended school at Santa Barbara Business College where she received a Diploma in Business Administration. She later received a Bachelor of Science degree in Health Administration from the University of Phoenix. Doreatha has worked in the past as an Administrative Assistant. She is new to the District as an Air Quality Support Specialist. Doreatha is proud to be part of the District’s mission to improve the air quality of the Eastern Kern communities.

*By: Doreatha Foots, Air Quality Support Specialist*

### **Board of Directors**

Michael Davies, Chairman (Councilman, Tehachapi)  
Zack Scrivner, Vice-Chair (KC 2nd District Supervisor)  
Phillip Peters (KC 1st District Supervisor)  
Kyle Blades (Councilman, Ridgecrest)  
Jim Creighton (Councilman, California City)

Board of Directors usually meet once every two months starting in January at the District's Board Room, 414 W. Tehachapi Blvd., Suite D, in Tehachapi. The Meeting Agenda can be located on the District website [www.kernair.org](http://www.kernair.org), under the "Board" tab.

### **Air Pollution Control Officer**

Glen E. Stephens, P.E.

### **Hearing Board Members**

Doris Lora  
Chris Ellis  
Benjamin Dewell  
Brett Moseley  
Brenton Smith



For news updates and other information, please visit the Eastern Kern APCD website at [www.kernair.org](http://www.kernair.org)

EASTERN KERN APCD  
2700 M STREET, SUITE 302  
BAKERSFIELD, CALIFORNIA 93301

