



# DESERT BREEZE

VOLUME IX ISSUE I

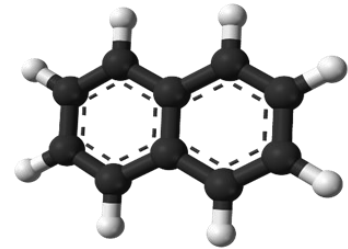
MARCH 2021

## Pollutant of the Quarter: Naphthalene

**N**aphthalene is a chemical substance that is derived from coal tar. The name naphthalene comes from the word naphtha, meaning flammable. The molecular structure of Naphthalene is  $C_{10}H_8$  which visually is two benzene rings bonded. When distilled and dried, it forms a white crystalline solid which has a very pungent odor. Naphthalene has many uses in industrial settings as well as in the household. In industry, naphthalene is mostly used as a precursor to other chemicals, more importantly, for the chemical phthalic anhydride. Phthalic anhydride is used in the production of plasticizers for plastics. Creosote, which is used to coat wood to preserve it (for instance railroad ties), contains naphthalene. In the household, naphthalene can be used as a fumigant for moths (use of moth balls) and rodents. Naphthalene is also formed when things burn, for instance, it is in the smoke of wildfires, car exhaust, and

cigarette smoke.

Along with some of its uses comes some health effects. When inhaled, ingested or in contact with skin, Naphthalene can cause major health effects. In high doses it can be very toxic to humans and animals. Some of the acute effects of inhalation and/or ingestion are nausea, vomiting, headaches, and dizziness. Exposure to large amounts of naphthalene can kill red blood cells and cause many disorders; one being hemolytic anemia which hinders the red blood cells' ability to carry oxygen and causes fatigue and other health issues. Kidney and liver damage can also occur with naphthalene exposure and it is a possible human carcinogen, causing laryngeal and colorectal cancer. It can also cause cataracts and other retinal damage in humans.



Limiting exposure to products containing naphthalene is recommended due to its toxicity. Some alternatives to using mothballs are using cedar blocks or lavender and storing clothing in sealed containers. If you have to use a product containing naphthalene, make sure to limit the exposure with protective clothing and minimize the time exposed.

*By: Nicole Dickerson*

## Blowing Dust

**S**trong winds blowing across the dry open desert landscape with little to no vegetation can generate large plumes of dust. From a distance, a dust storm might look a lot like smoke from a wildfire, smog, or fog, but it is not the same. Blowing dust can reduce visibility and worsen local air quality. The reduced visibility makes tasks such as driving much more dangerous and increases the likelihood of being involved in an accident.

### Dust Storm Driving Safety Tips

- ◇ Avoid driving into or through a dust storm if possible.
- ◇ Close all windows and exterior vents.
- ◇ Do not wait until poor visibility makes it difficult to safely pull off the roadway (do it as soon as possible).
- ◇ Look for a safe place to pull completely off the paved portion of the roadway.
- ◇ Do not stop in a travel lane or in the emergency lane.
- ◇ After pulling off the roadway, turn off all vehicle lights. You do not want the other vehicles approaching from behind to use your lights as a guide, possibly crashing into your parked car.
- ◇ Put on a mask, goggles, or glasses if you have them.
- ◇ Wait out the storm.



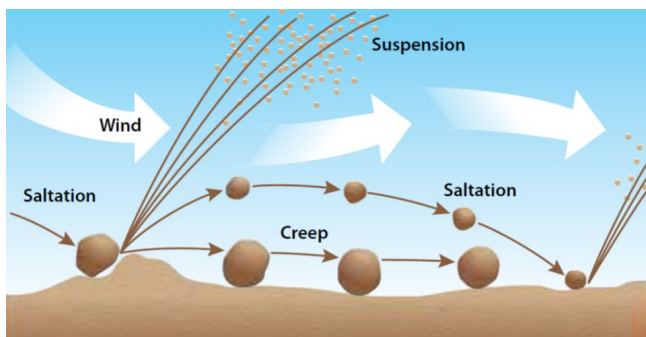
In addition to the environment affects, blowing dust can pose a significant health threat. Depending on its size and composition, airborne dust particles (less than 10 microns in diameter {PM<sub>10</sub>}) can penetrate deep into the lungs and impair the respiratory processes.

***Did You Know? Blowing dust can transport organic chemicals, airborne bacterial species, trace metals, and other toxic compounds that can also cause a wide range of acute and chronic health effects.***

People with heart or lung diseases, older adults, and children are the most likely to be affected by fine particulate exposure. However, even a normally healthy adult may experience temporary symptoms from exposure to elevated levels of particle pollution.

### Dust Storm Home Safety Tips

- ◇ Close all of your windows and any outside vents, including your chimney flue.
- ◇ Turn off swamp cooler or air conditioner (if unit does not recycle air).
- ◇ Stow lawn furniture and other items that might be carried off by the wind (if you have time).
- ◇ Use an indoor air purifier.
- ◇ Since fine particulates can still get inside, take the same precautions you would if you were caught outside, including protecting your nose, mouth, and eyes.
- ◇ Do not attempt to go outside until the storm is over.



Blowing dust is a normal phenomenon in Eastern Kern County and it can occur at any time. Please practice the tips listed above and remember that your primary concern is safety.

*By: Jeremiah Cravens*

## ROAD PAVING GRANTS

The Eastern Kern Air Pollution Control District (District) is currently evaluating projects to provide grant funds from the DMV Grant Program. The Program awards up to \$50,000 per project, to reduce atmospheric dust (i.e. particulate matter- PM<sub>10</sub> and PM<sub>2.5</sub>), through the paving of public dirt roads. The District accepted applications beginning October 1<sup>st</sup>, 2020 until February 26<sup>th</sup>, 2021 at 5:00 p.m., and determines the funding awards based upon the submittals collected during the application period. Some criteria for evaluation are: frequency of use, and the number of homes that utilize the roadway. The road paving projects are required to connect to an existing paved road, (which is in a well maintained condition). The grant application needs to include a cost estimate of work to be performed, photographs of the proposed road area, specifications of surface being paved and type of surfacing being applied (i.e. asphalt, palliative, gravel, etc.). If the program is oversubscribed, District Staff will use a random selection method to select from the

qualified projects. At the District's May Board Meeting, the Governing Board selects projects to be awarded, from Staff recommendations, and funds are distributed upon verification of completion of the project. The application submittal period is currently closed, but if you are interested in participating in the Grant Program next year, an application can be found on the Air District website beginning in October 2021.

*By: David Arokiasamy*



## Burn Permit Portal

Beginning in February 2021, the District and the Kern County Fire Department (KCFD) coordinated to bring the hazard reduction pile burning permit process online, using the Community Connect program. Residents living within the District jurisdiction are able to obtain hazard reduction pile burning permits through Community Connect, which is a free, secure, and easy way for District residents to provide the KCFD with critical information about their home and also to obtain a Burn Permit; thereby eliminating the need to drive to the fire station to obtain a permit. You can use your Community Connect account to access, manage, and seek approval for hazard reduction pile burning from the District and KCFD right from the comfort of your home.

Additionally, Community Connect is a free, secure, and easy way for District residents to provide the KCFD with critical information about your property, as well as the people and animals who live there. By providing the information you feel is important for emergency response personnel to be aware of, you can help them provide better protection and service in the unfortunate event there is an emergency in your household.

Kern County residents can access Community Connect using the following URL:

<https://www.communityconnect.io/info/ca-kerncounty>

*By: Sam Johnson*

**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. The location, along with 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  
Charles Arbaut  
Benjamin Dewell



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

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