FROM THE AIR PROGRAM

The Hazardous Pollutants of Trash Burning

The following is a list of toxic and hazardous pollutants documented as produced in combustion of average household trash. *(This is *archived* information from the US EPA.)*

⇒ **Metals in ash: mercury, lead, arsenic, chromium** Inhaled, or consumed via eating from garden or water. Kidney damage, brain damage, cardiovascular problems.
⇒ **Carcinogenic compounds: present in polycyclic aromatic hydrocarbons (PAHs)** Product of incomplete combustion. Inhaled. Some PAHs are cancer-causing.
⇒ **Dioxins** Consumed via eating animal fats after animals eat polluted plants. Highly toxic and known to be produced in large quantities in household waste burning.
⇒ **Carbon Monoxide** Product of incomplete combustion. Inhaled. Outdoor burning produces non-lethal levels which may cause to headache, fatigue, nausea.
⇒ **Volatile organic compounds (VOCs)** Inhaled. Headache, respiratory irritant, damage to central nervous system and internal organs.
⇒ **Hexachlorobenzene** Inhaled, consumed by eating polluted animals, plants. Carcinogenic/cancer causing, damage to internal organs, damage to fetuses.

According to California Air Resources Board, "*Most of the particulate matter emitted from residential waste burning is small enough to be inhaled and can be especially harmful to people with existing respiratory illness, the aged, and the very young*."

The Tribal Air Station (continuously) monitors the volumetric concentration of particulate matter of any kind <10 micron in diameter, and also <2.5 micron in diameter; both sizes are respirable. View real time air quality data at http://www.bishoptribeemo.com/monitoring.htm

e-cigarettes: EVALI (formerly "Severe Pulmonary Disease")

On Dec 20 2019, the CDC reported publicly that emergency visits related to "EVALI" (*e-cigarette vaping associated lung injury)* have declined since a peak in September. They also reported that Vitamin E acetate was linked to EVALI, though not yet determined to be the only additive which may be linked, and that additives in generally may be risky. Additionally, because there were some related deaths which occurred 3-4 days after hospital release (increased risk for individuals >50 yrs age), CDC recommends follow-up within 48 hours of hospital release for any cases.

Updated Source and Emissions Inventory Study

In 2019, the Tribe's 2012 Emissions Inventory (which has been available at the Air online library webpage) was updated. The report was drafted for the base years 2016—2019, generally speaking, depending on the data set. The report and a summary were submitted to TEPA Board, EMO Director, and the TA. The new study is posted at http://www.bishoptribeemo.com/library.htm

2019 Air Quality Statistics are in!

The Air Program has compiled the statistics for last years' air quality monitoring data. Noteworthy is that the first (in at least 10 years) exceedance of the Tribal 24-hour Standard for PM2.5, which is often largely smoke, occurred outside of wild fire events or "season", and instead occurred in winter. 6 exceedences of the Tribal 24-hour Standard for PM10 occurred in 2019, during September through November.

⇨ **For questions and information contact the Air Quality Program at 760-784-9308** ⇦