# Beale, Creech, and Travis Air Force Bases are Poisoning Our Groundwater and Soil

By Pat Elder, www.CivilianExposure.org

#### **TRAVIS AFB**

The foam used in fire training exercises at Travis contains one of the deadliest compounds ever developed. As a group, they are known as Per and Poly Fluoroalkyl Substances, or PFAS.



It's snowing at Travis AFB, CA! - (Not really.) Cancerous aqueous film forming foam (AFFF), which is used in routine fire-training exercises on U.S. military bases around the world, falls like snow. - Photo: U.S. Air Force, Sept. 24, 2013.

According to the EPA, exposure to PFAS "may result in developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated pu-

berty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes)." PFAS also contributes micro-penis, and low sperm count in males.

The military allows the poisons to leach into the groundwater in bases around the world to contaminate neighboring communities which use groundwater in their wells and municipal water systems.

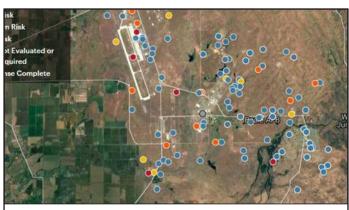
According to the Department of Defense, groundwater at Travis was shown to contain 40,000 parts per trillion of PFOS and PFOA, two of the most cancerous PFAS compounds. They're extremely useful in extinguishing

super-hot petroleum fires. Harvard scientists say **1 part per trillion** (ppt) in drinking water is likely to be harmful to human health.

#### **BEALE AFB**

With 200,000 parts per trillion, Beale AFB has 5 times the amount of cancer-causing PFAS in its groundwater than that found at Travis AFB.

Beale also has an extraordinarily high concentration of



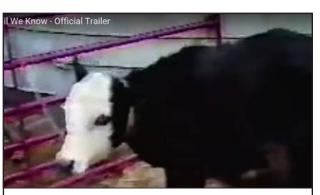
Beale AFB has more than a hundred hazardous sites.

lead and Polycyclic Aromatic Hydrocarbons (PAH's) in the soil. We know how deadly lead is, but PAH's may be worse. They're like PFAS because they can cause mutations in the unborn.

The military says there is the potential for "off-site migration of contamination to private potable water and irrigation wells." That means people in the area could be drinking or using seriously poisoned water. Livestock that graze in the area are particularly vulnerable.

## Beale has this warning for people in the surrounding community:

"Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS



A dying cow, contaminated by PFAS, in the documentary "The Devil We Know."

or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers."

**CREECH AFB** 

Creech is the headquarters of the USAF's 432nd Air Wing of Predator and Reaper drones which operate deadly, remotely piloted aircraft in various foreign countries.

BENZO[A]ANTHRACENE

Creech is an extraordinarily secret place. Unlike Beale and Travis, Creech is not an EPA Superfund site, although it's not due to a lack of contaminants. The DOD has said Creech is "known or suspected to have released PFAS," but that's all we know.

The local Indian Springs Water Company has detected Radium, combined (-226 & -228), Radium-226, Radium-228 & Uranium in the water. Drinking water contamination with radioactive sub-

and PAH's, may harm fetal development. For several years, this water utility was in violation of monitoring for contaminants or reporting monitoring tests as required by the Safe Drinking Water Act.

stances increases the risk of cancer and, like PFAS

Typically, the Department of Defense assumes no liability and refuses to pay for cleaning up the contamination it has caused. The Air Force won't reimburse communities for the money spent responding to water contamination caused by toxic firefighting foam.

### Deadly Contaminants found in the water and soil at Travis AFB - EPA

1,1,2-TRICHLOROETHANE	BENZO[A]PYRENE	MERCURY
1,1-DICHLOROETHENE	BIS(2-ETHYLHEXYL)PHTHALATE	METHOXYCHLOR
1,2-DICHLOROPROPANE	BROMODICHLOROMETHANE	NAPHTHALENE
1,2-DIHYDROACENAPHTH-	CADMIUM	NICKEL
YLENE	CARBON TETRACHLORIDE	P,P'-DDE
1,4-DICHLOROBENZENE	CHLORDANE	PENTACHLOROPHENOL
2,3,7,8-TETRACHLORODIBEN-	CHLOROBENZENE	PHENANTHRENE
ZO-p-DIOXIN (TCDD)	CHLOROETHENE	POLYCHLORINATED BIPHENYLS
ACETONE	CHLOROFORM	(PCBs)
ALDRIN	CHLOROMETHANE	PYRENE
ALPHA-CHLORDANE	CHROMIUM	SELENIUM
ALUMINUM	CHRYSENE	SILVER
ANTHRACENE	CIS-1,2-DICHLOROETHENE	STODDARD SOLVENT
ANTIMONY	COPPER	TETRACHLOROETHENE
AROCLOR 1242	DIBENZO(A,H)ANTHRACENE	TOLUENE
AROCLOR 1248	DICHLOROMETHANE	TOTAL PETROLEUM HYDRO-
AROCLOR 1254	DIELDRIN	CARBONS (TPH)
AROCLOR 1260	DIOXINS	TOXAPHENE
ARSENIC	ENDOSULFAN (I OR II)	TRICHLOROETHENE
BARIUM	FLUORANTHENE	URANIUM-234
BENZENE	GASOLINE	URANIUM-235
BENZO(B)FLUORANTHENE	HEPTACHLOR	XYLENE (MIXED ISOMERS)
BENZO(GHI)PERYLENE	HEPTACHLOR EPOXIDE	ZINC
BENZO(K)FLUORANTHENE	INDENO(1,2,3-CD)PYRENE	

**LEAD**