

## Burn Pits

Open-air pits are used to burn garbage and other wastes at bases in Iraq and Afghanistan that lack incinerators. The pits have been cited as the cause of maladies ranging from respiratory problems to cancers in veterans and former contractors who worked at bases. The most commonly discussed burn pit was the now-shuttered 10-acre pit at Joint Base Balad in Iraq.

Waste products in burn pits include, but are not limited to:

- Chemicals
- Paint
- Medical and human waste
- Metal/aluminum cans
- Munitions and other unexploded ordnance
- Petroleum and lubricant products
- Plastics and styrofoam
- Rubber
- Wood
- Discarded food



The Department of Defense has performed air sampling at Joint Base Balad, Iraq and Camp Lemonier, Djibouti. The DoD claims that none of the individual chemicals exceed military exposure guidelines (MEG). To back its claim, the Pentagon has routinely cited a controversial 2007 study conducted by the Army Center for Health Promotion and Preventive Medicine at Joint Base Balad. That study has been criticized for failing to measure extremely fine airborne particles, which pose the greatest health risks, and for being conducted during Iraq's rainy season, which would tend to depress levels of airborne soot. The air sampling performed at Balad and discussed in an unclassified 2008 assessment tested and detected all of the following:

- Particulate matter
- Polycyclic Aromatic Hydrocarbons
- Volatile Organic Compounds
- Toxic Organic Halogenated Dioxins
- Furans (dioxins)

### Polycyclic Aromatic Hydrocarbons found in the study:

Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoroanthene, Benzo(b)fluoroanthene, Benzo(g,h,i)perylene, Benzo(k)fluoroanthene, Chrysene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene

### Volatile Organic Compounds found in the study:

Acetone, Acrolein\*\*, Benzene, Carbon Disulfide, Chlorodifluoromethane, Chloromethane, Ethylbenzene, Hexane, Hexachlorobutadiene\*\*, m/p-Xylene, Methylene Chloride, Pentane, Propylene, Styrene, Toluene

*Acrolein and Hexachlorobutadiene were occasionally detected far above the MEG ratio—over 1800 percent above the MEG for Acrolein and over 500 percent above the MEG for Hexachlorobutadiene.*

Plaintiffs across the country have filed numerous lawsuits which have been consolidated in the United States District Court for the District of Maryland. In *Jobes v. KBR, Inc. et al* they allege U.S. soldiers, National Guard personnel, contract employees and others serving our country in Iraq and/or Afghanistan are suffering from chronic illnesses, serious diseases, an increased risk of developing serious diseases and an increased risk of death.