

US Military Bases Known To Be Contaminated (ca. 1992)  
(From: Life in the Times)

The following 59 U.S. military bases were suffering from significant water or soil contamination a year ago, according to the Department of Defense's interpretation of its latest hazardous waste survey. DoD officials say not every base suffering such contamination is on the list, because information was not available for all bases. The list is based on the latest status report for DoD's Installation Restoration Program.

The IRP report contains no explanation of the problems at each base, so we asked each service to provide details. The Army did so. The Navy Chief of Information refused to help us gather the information. Air Force Public Affairs could not provide the information by our deadline, but we will publish it as soon as it becomes available. We gathered information on some of these missing bases from EPA and a DoD report to Congress on "Superfund" sites. Life in the Times cannot vouch for the accuracy or completeness of the information that was provided.

### Army

#### Aberdeen Proving Ground, MD

Essentially every land portion of the Edgewood, MD, area (on which a portion of the base is located) is contaminated or potentially contaminated. Monitoring in 1977-78 indicated contamination of surface and ground water. Four standby wells were shut down in 1983 due to detected organic compounds. The base's active drinking water supplies come from two off-post sources. Deer Creek and Winters Run, unaffected by contamination on base. Fort A.P. Hill, VA. There are three problems. A herbicide contaminated the soil near an old pesticide storage building. The soil has been placed in sealed drums. Second, herbicide and dioxin contaminated soil and debris are stored at a base warehouse in 33-gallon drums inside sealed 55-gallon drums. A study will be done to recommend an environmentally sound method of permanent disposal. Third, the base plans to remove some 70 tons of soil contaminated by DDT. The base water comes from a deep aquifer and is not contaminated, the Army says.

#### Fort Belvoir, VA

Several contaminants - benzene, trichloroethylene, chloroform, toluene, ethylbenzene, and 1-2-dichloroethane - have seeped from the Building 324 tank farm into an unnamed creek. None of these contaminants was detected in surface water at the installation boundary, and no health hazard is apparent, the Army, says. Post drinking water comes from the Fairfax County Water Authority.

#### Fort Devens, MA

A sanitary landfill that is a potential source of contamination is being closed. It was used as an open burning site, then for incineration of waste and burial of residues. Water quality meets state standards.

#### Fort Dix, NJ

Nine potentially contaminated sites are known. One, the sanitary landfill, was placed on the National Priority (Superfund) List due to the presence of organic solvents. However, the Army says no significant health hazards have been identified. To avoid any risk, the landfill may be capped with clean soil and vegetated with grass. The other eight sites were identified only recently. Organic solvents and/or petroleum products were located at an old magazine area, a tank farm, a fire station, the golf course, a motor pool, a firing range, a pesticide storage building, and a National Guard facility. Investigation is under way to determine any problems. The sites to not endanger the base water supply according to the Army.

#### Fort Lewis, WA

There are two problems: One, is Landfill No. 5. Plans call for a landfill liner and leachate collection to preclude ground water contamination. There are also plans for a refuse-fired incinerator to reduce

reliance in the landfill. Also trichloroethylene (TCE) has been found in the ground water beneath the Logistics Center. Post drinking water comes from a spring unrelated to that aquifer.

#### Fort McClellan, AL

Ten old training areas and three former disposal sites have a slight chance of subsurface contamination from mustard agent and its breakdown products and possible byproducts of chemical agent decontamination. Only very small quantities of agent were used and all sites have been closed, decontaminated and fenced. No evidence of any surface or surface water contamination has been found in the past, the Army says. The post receives its water from the city of Anniston.

#### Redstone Arsenal, AL

A \$30 million cleanup was recently completed by Olin Corp, which made DDT in a leased factory that was closed in 1970 for environmental reasons. Manufacturing waste was contaminating soils and streams. DDT was found in the wildlife food chain but not in potable water supplies inside or outside the base. In addition, the presence of PCBs, heavy metals, while phosphorous and other organic compounds is known or suspected. An investigation is under way to determine if they contaminated the active sanitary landfill, a DDT waste landfill, open burning and detonation grounds, and 22 old disposal sites. Also, a \$5 million program is in progress to remove all asbestos from post buildings.

#### Navy

##### Brunswick NAS, ME

A study is under way to determine contaminants and their migration habits.

##### Lakehurst Naval Air Engineering Center, NJ

Soil and shallow ground water at the tetraethyl lead disposal site are contaminated, perhaps from aviation fuel. The ground water in some areas is covered with a 6-inch layer of JP-Fuel. Elsewhere, the carcinogen nitronomine may be present. Waste oils, battery acid, and solvents are suspected of having been discharged into some dry wells. The soil stabilization field test received 362 gallons of aniline and 161 of furfural (toxic by ingestion, inhalation, or skin absorption), and ferric choride solution; personnel and animals that come in contact with the soil may be endangered. A landfill received thousands of gallons of hydraulic fluids, five tons of asbestos, and also cutting oils, solvents, sludge, and heavy metals. A site for PCB testing and storage is near the environmentally sensitive Ridgeway Branch. The western portion of the base may be contaminated by ordnance: shells, gas-loaded projectiles, phosgene, phosphorus, mustard agent, explosives, flares, and depth bombs. The shallow aquifer in this area may also be contaminated.

##### Moffett Field NAS, CA

The major contaminants in the ground water are volatile organic compounds.

##### Whidbey Island NAS, WA

The ground water could be contaminated. Waste oil, solvents, fuel, and caustic rinse water containing heavy metals have been discharged through the storm sewer system and into Dugella Bay. Waterfowl and fish that feed or live in drainage's may be affected. Subsurface migration at the seaplane base may have affected fish or shellfish in Oak and Crescent Harbors. A backup well at Ault Field is threatened by potential migration of contaminants.

#### Other Navy bases:

China Lake, CA

Indian Head NOS, MD

Jacksonville NAS, FL

Miramar NAS, CA

Pabmont River NAS, MD

## Roosevelt Roads NS, Puerto Rico

### Air Force Castle AFB, CA

On-base drinking water supply has been contaminated with trichloroethylene (TCE). Work is under way to install a new well drawing from a deeper, uncontaminated aquifer.

### Dover AFB, DE

Ground on the is contaminated with arsenic and other metals, and a stream on base is contaminated with trichloroethylene (TCE). The base well, however, is free of these contaminants. Remedial action has been under way since 1985.

### Griffiss AFB, NY

Phenols, ethyl benzene, and benzene have been detected in ground water on base, and toluene in surface water on base.

### Hill AFB, UT

Seepage water near two disposal areas contains toxic organic chemicals, such as trichloroethylene (TCE), 1,2 dichloroethane, and 1,1,1 trichloroethane. None of the affected water is used for human consumption. Remedial action to date includes construction of a slurry wall and landfill covers as well as pumping and treating contaminated ground water.

### Mather AFB, CA

Water in 36 homes was affected by trichloroethylene (TCE) contamination of a well on base. A new permanent water supply is to be provided to these homes.

### McChord AFB, WA

Various chemicals -- methylene chloride, chloroform, benzene, arsenic, chromium, and mercury -- have been detected in test wells and in surface drainage leaving the base. One site is a liquid waste spill next to the wash rack and industrial waste treatment system. Contracted work for the American Lake Gardens Water Supply Project began in 1985; a contractor installed shallow wells and one deep well.

### McClellan AFB, CA

An estimated 160 sites have been identified. Contaminants include organic compounds, such as trichloroethylene (TCE), methylene chloride, and 1,1-dichloroethylene. Wells both on and off base that had contaminants exceeding government standards have been shut down. McClellan is considered a leader in cleanup efforts. Completed projects include alternate water supply for off base residents and a ground water containment system and treatment plant.

### Norton AFB, CA

Trichloroethylene (TCE) was detected in concentrations exceeding state drinking water standards. All base wells were contaminated to various degrees with silver and tetrachloroethylene (PCE). Closure of a lagoon and sludge removal was begun several years ago.

### Robins AFB, GA

Contaminants include halogenated solvents, heavy metals, pesticides (DDT, chlordane, etc.), cyanide, and oil products. The toxic organic compounds trichloroethylene (TCE), and tetrachloroethylene (PCE) have been detected in ground water on base. Ground water is not used as drinking water, but the contaminants could eventually appear in surface water.

### Tinker AFB, OK

Some base wells were closed due to contamination from chlorinated solvents. Chlorinated solvents were also detected in the aquifer that is the primary water source in the region. Organic compounds

have been detected at all sites, though migration is limited. Remedial action begun in 1984, includes capping landfill No. 6, and stopping leaks from underground storage tanks at the fuel farm.

#### Wright-Patterson AFB, Ohio

Fourteen organic compounds, including trichloroethylene (TCE) and tetrachloroethylene (PCE) in relatively high quantities have been found in wells serving the base. Nearly half the 17 wells have been shut down due to contamination or age. An air stripper has been put on two wells to remove the organics, and installation of two other strippers is planned.

#### Other Air Force bases:

Beale AFB, CA  
Chanute AFB, IL  
Charleston AFB, SC  
Columbus AFB, MS  
Edwards AFB, CA  
England AFB, LA  
F.E. Warren AFB, WY  
George AFB, CA  
Hanscom AFB, MA  
Hickam AFB, HI  
Kelly AFB, TX  
Lowery AFB, CO  
Luke AFB, AZ  
Kirtland AFB, NM  
Langley AFB, VA  
MacDill AFB, FL  
McGuire AFB, NJ  
Moody AFB, GA  
Mountain Home AFB, ID  
Otis AG Base, MA  
Pope AFB, NC  
Pease AFB, NH  
Plattsburgh AFB, NY  
Reese AFB, TX  
Seymour Johnson AFB, NC  
Shemya, AL  
Travis AFB, CA  
Vandenburg AFB, CA  
Wurtsmith AFB, MI

<http://www.va.gov> - Department of Veteran Affairs (VA) Web Site

<http://www.va.gov/hepatitusc> - VA 'Hepatitis-C' Web Site