

Alaska Department of Environmental Conservation Division of Spill Prevention and Response

FORT RICHARDSON

September 2000

Site Description

Fort Richardson Army Post is bounded by Elmendorf Air Force Base and Anchorage to the west and Eagle Bay and the Knik Arm of Cook Inlet to the north. The southern and eastern boundaries consist of undeveloped lands and Chugach State Park.

Thirty-eight contaminated sites have been identified at the facility. The sites include: Eagle River Flats (ERF) and ordnance testing area, Roosevelt Road Transmitter Site Leachfield, Poleline Road disposal area (PRDA), Circle Road drum storage area, Former Fort Richardson Landfill, and Ruff Road Fire Training area (RRFTA) where fire training exercises were performed using waste fuels mixed with solvents, and leaking underground storage tank (UST) sites.

The Post was added to the Comprehensive Environmental Response, Compensation, and Liability Act National Priorities List in 1993. The State and Army have entered into an environmental restoration agreement to address petroleum contamination from fuel spills and leaking above ground fuel storage tanks. A separate UST compliance agreement was developed to address leaking USTs.

Threats and Contaminants

- * Sediment and surface water samples collected from ERF in 1989 and 1991 indicated elevated levels of white phosphorus.
- * The Roosevelt Road Transmitter site is contaminated with petroleum and metals.
- * Chlorinated solvents are present in soil and groundwater at the PRDA.
- * Building 35-7552 is contaminated by polychlorinated biphenyls (PCBs).
- * Soils at Building 986's dry well is contaminated with petroleum and metals.

Public Health and Environmental Concerns

Visitors, construction workers may potentially be exposed to pollutants through dermal contact or accidental ingestion of contaminated soil or groundwater. Contaminants that have bioaccumulated in fish and other wildlife may also threaten human health. White phosphorous has killed thousands of migratory waterfowl and other birds in this area since 1982.

Response Actions

- * In 1992, PCB-contaminated soil was removed from the Roosevelt Road Site and shipped to an out-of-state, permitted hazardous waste landfill.
- * Over 20,000 cubic yards of petroleum contaminated soil from the Post's Landfill were thermally treated in 1992.
- * In 1993, petroleum contaminated soil was removed from the Circle Road site and remediated in a soil burner in Anchorage. Also in 1993, 30 USTs were removed.
- * In 1994, approximately 3,500 cubic yards of soil contaminated by chlorinated solvents were removed from PRDA.
- * Six-phase soil heating with vapor extraction for the soil and shallow groundwater began in July 1997 and remains effective at over 90% of the contaminants present.

Current Status

- * The Record of Decision for OU D will be signed no later than September 2000 by the Army, ADEC, and US EPA.
- * A new OU E will be composed of Building 35-752 and the Armored vehicle maintenance area based on new information gathered that shows contamination is present requiring further investigation and action.
- * At ERF, ponds are being drained to dry out the sediments, which will oxidize the white phosphorus. Limited capping of ponds will be used in areas that cannot be drained and are highly contaminated with white phosphorous.