

NPL Partial Site Deletion Narrative

Ellsworth Air Force Base Rapid City, South Dakota

On May 25, 2012, EPA deleted Operable Unit (OU) 1 the former Fire Protection Training Area (FPTA), the Gateway Lake Ash Study Area and the Pride Hangar Study Area of the Ellsworth Air Force Base (AFB) site from the National Priorities List (NPL). This partial deletion pertains to surface soil, unsaturated subsurface soil, surface water and sediments at these areas. Basewide ground water will remain on the NPL. The other OUs associated with Ellsworth AFB were deleted in 2006.

Ellsworth AFB is a U.S. Air Force Air Combat Command installation located 12 miles east of Rapid City, South Dakota. The main AFB covers approximately 4,858 acres within Meade and Pennington counties and includes runways, airfield operations, industrial areas, housing and recreational facilities. The site was officially activated in July 1942 as the Rapid City Army Air Base, a training facility for B-17 bomber crews. Operations at Ellsworth AFB over the years generated a variety of waste materials including municipal solid waste, wastewater treatment plant sludge, industrial wastes including waste oils, solvents, paints, spilled fuels, waste pesticides, shop waste, metal remains from ordnance disposal and radiological wastes. Contaminants of concern at Ellsworth AFB include chlorinated solvents, waste fuels and metals.

Ellsworth AFB was placed on the NPL on August 30, 1990. At that time, the entire base was included in the listing. Upon listing, the facility began identifying areas where activities involving hazardous substances may have occurred and grouped these areas into OUs. Twelve OUs have been identified at Ellsworth AFB. Records of Decision (RODs) have been finalized for all of these OUs. Appropriate response actions for soil media have been completed at OU-1, the Pride Hangar Study Area and the Gateway Lake Ash Study Area. Remedial actions were not required for surface water or sediment at these areas.

OU-1 consists of the former FPTA, Pond 001 and a portion of the drainage channel that leads into Pond 001. The former FPTA is approximately 10 acres in size and is located in the southwestern portion of Ellsworth AFB. The FPTA was operated at this location from 1942 to 1990. The training exercises involved simulation of aircraft fires and spills and consisted of dispersing various fuels, oils and solvents within the burn pit area and igniting and extinguishing the fire. Soil contamination at OU-1 included JP-4 (jet fuel), benzene, toluene, ethylbenzene and xylene (BTEX) and chlorinated volatile organic compounds (VOCs). A ROD for an Interim Remedial Action (IRA) was signed in May 1995 and included a remedy of Soil Vapor Extraction (SVE); ground water removal; treatment of ground water, condensate and soil gas; and surface water discharge of treatment effluent. A final ROD was signed in May 1996 which added institutional controls and long-term monitoring and maintenance to the IRA remedy. The OU-1 SVE system began operation in March 1996 and continued until July 2007. A high vacuum extraction system (HVE) was operated from May to November 2007 and from May to November 2008. A bioventing system was operated from November 2008 through August 2010.

The Gateway Lake Ash Study Area is located in the southeastern portion of Ellsworth AFB. The area was once an open ravine which had been filled with ash and debris. The ash and debris covered approximately 1/3 acre and about 6 to 7.5 feet in thickness. The ash and debris and soils contained contaminants including VOCs, SVOCs, metals and dioxins/furans. In January 2007, 4,310 cubic yards of ash material were hauled away to the Rapid City Landfill. The excavated area was restored by backfilling with clean soil and reseeded.

The Pride Hangar Study Area is located in the northwest corner of the Pride Hangar within OU-11 and covers approximately 1.7 acres. Two former side-by-side waste solvent underground storage tanks were the primary source of a TCE plume. These tanks were removed in 1992. As part of the OU-11 Ground water remedy, a vacuum extraction system was installed to extract contaminated ground water and operated southeast of the Pride Hangar from 1997 to 2006. A SVE system was intermittently operated from July to November 2004.

The EPA, with the State of South Dakota's concurrence, has determined that no additional response is necessary at Ellsworth AFB for surface soil, unsaturated subsurface soil, and surface water and sediment media at OU-1, the Gateway Lake Ash Study Area and the Pride Hangar Study Area. Therefore the EPA has deleted these areas from the NPL.