

volume stream. Based on the complete historical investigations, in 2008 PCBs were the only remaining CERCLA contaminants at the site. The excavation and disposal of PCB contaminated soil is described in the 2010 Record of Decision.

During the 2009 removal action, approximately 510 cubic yards of fuel-contaminated soil was excavated from the three fuel areas at Site SS003 and landspread at Upper Camp Site OT001. Because no fuel or hazardous substances were found at concentrations above applicable cleanup levels, Site SS003 requires no further action under state law and will be designated Cleanup Complete.

2.5.5.3 Site SS004 (Vehicle Maintenance Building; AOC05)

Site SS004 (also known as Vehicle Maintenance Building; AOC05) is the former Vehicle Maintenance Building located at the northwest corner of the Upper Camp area. This site was used for repairing and refueling vehicles.

During the 1994 PA/SI, a floor drain outfall and a 500-gallon diesel aboveground storage tank (AST) adjacent to the building were investigated, but no areas of visible contamination were documented. Four surface soil samples were collected for laboratory analyses: one near the diesel AST, one at the building's floor drain outfall, and two along the north side of the building. The samples were analyzed for DRO, gasoline-range organics (GRO), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), inductively-coupled plasma metals and mercury. The sample collected near the diesel AST contained petroleum contaminants (17,000 mg/kg DRO and 455 mg/kg GRO) above ADEC cleanup levels for DRO (10,250 mg/kg) and below the cleanup level for GRO (1,400 mg/kg) (USAF 1995).

During the 1999 RI, three samples from two test pits and 42 surface soil samples were collected to evaluate potential sources of contamination (USAF 2001). Surface soil samples were focused southwest of the building and adjacent to the diesel day tank, where strong fuel odors were noted. Test pit soil samples were collected from 1.5 feet bgs downslope of the floor drain and south of the fuel tank and analyzed for GRO, DRO, RRO, metals, pesticides,

polychlorinated biphenyls (PCBs), VOCs, and SVOCs. DRO levels up to 4,700 mg/kg were detected in samples collected south of the fuel tank.

In the 2008 RI, seven test pits were excavated and soil samples were collected and analyzed for DRO to delineate soil contamination at the southwest corner of the Vehicle Maintenance Building. Test pits were focused around the diesel day tank, and step-outs were made based on field screening results and field observations. Analytical sample results indicated that soil exceeding the ADEC criterion for DRO (10,250 mg/kg) was limited to less than 3 cubic yards adjacent to the former day tank.

During previous investigations, it had been a concern that contamination from Site SS004 could be contributing to contamination at nearby Site SS017. However, the following site conditions observed in 2008 indicated that contamination associated with SS004 is not likely contributing to groundwater contamination at SS017. SS004 is located upgradient of SS017 and no groundwater that might flow into SS017 was encountered during excavation activities. Also, sampling was conducted at regular intervals between SS004 and SS017; all sample results were below the ADEC cleanup level for DRO (10,250 mg/kg). Historical drum storage activities at SS017 are a more likely scenario for contamination than migration from SS004. As a result, the migration to groundwater criteria is not applicable at SS004.

During the 2009 Clean Sweep Operation, 7 cubic yards of visibly stained soil was excavated and transported to a designated land spreading area in the Granite Mountain disposal area at the Upper Camp (USAF 2010). Following land spreading, the soil was configured into a stockpile and sampled for DRO analysis. Stockpile sampling results indicated no DRO concentrations above the ADEC limit (10,250 mg/kg). The soil was then used as cover for the new onsite disposal area at the Upper Camp. Three confirmation soil samples were collected from the excavated area. DRO concentrations ranged from nondetect to 1,870 mg/kg and RRO concentrations ranged from 174 to 355 mg/kg; both levels were below the ADEC criteria for DRO (10,250 mg/kg) and RRO (10,000 mg/kg). The site was backfilled and graded.

More than twice the volume of contaminated soil planned for removal was excavated and disposed of during the 2009 removal action. Analysis of the remaining soil revealed DRO and RRO concentrations to be below the ADEC criteria (10,250 mg/kg and 10,000 mg/kg, respectively). Because no fuel or hazardous substances were found at concentrations above applicable cleanup levels, Site SS004 requires no further action under state law and will be designated Cleanup Complete.

2.5.5.4 Site SS005 (Spill/Leak No. 3; AOC06)

Site SS005 (also known as Spill/Leak No. 3; AOC06) consists of two 130,200-gallons diesel ASTs northeast of the main dormitory complex at the Upper Camp. The tanks were used to store diesel fuel for Upper Camp operations.

During the 1994 PA/SI, stained soil was evident near the AST fill valves on the north end, and a fuel odor was noticeable during sampling around each tank. DRO concentrations in excess of the ADEC criterion (10,250 mg/kg) were identified at a stained area southwest of the southern tank (83,500 mg/kg), near the valve west of the northern tank (19,300 mg/kg), and in numerous locations north of the northern tank (7,240 to 13,200 mg/kg) (USAF 1995).

During the 1999 RI, three test pits were excavated near the 1994 exceedance locations. No surface staining was observed, but fuel odors were detected during the excavation of the test pits. The samples collected from the test pits were analyzed for GRO, DRO, RRO, and lead. A total of 25 surface samples were taken throughout the site and analyzed for GRO, DRO, and RRO. The highest concentration of DRO found near the southern AST was 9,830 mg/kg; concentrations near the northern AST were as high as 20,800 mg/kg. Concentrations of GRO, RRO, and lead were all under ADEC cleanup levels (GRO 1,400 mg/kg; RRO 10,000 mg/kg; lead 400 mg/kg) (USAF 2001).

In the 2008 RI, six test pits were excavated to delineate the vertical extent of the DRO contamination at the two locations noted in 1999. Sample results indicated the contamination to be limited to the bedrock interface at 4 feet bgs. Approximately 28 cubic yards of visibly stained soil was recommended for removal.