

NPL Partial Site Deletion Narrative

Rocky Mountain Arsenal (USARMY) Adams County, Colorado

On January 15, 2004, EPA deleted the Selected Perimeter Area (SPA) of the Rocky Mountain Arsenal (RMA) site On-Post Operable Unit (OU) from the National Priorities List (NPL). The On-Post OU of the RMA site covers 25.5 square miles in southern Adams County, Colorado, approximately eight miles northeast of Denver. The SPA of the On-Post OU comprises approximately 4,930 acres (7.7 square miles) of the perimeter of RMA.

The RMA was established in 1942 by the U.S. Army and was used to manufacture chemical warfare agents and incendiary munitions for use in World War II. Following the war and through the early 1980s, the facilities continued to be used by the Army. Beginning in 1946, some facilities were leased to private companies to manufacture industrial and agricultural chemicals. Shell Oil Company, the principal lessee, primarily manufactured pesticides from 1952 to 1982. After 1982, the only activities at RMA involved remediation.

Complaints about groundwater pollution north of the RMA site began in 1954. RMA was proposed for inclusion on the NPL on October 15, 1984. A remedial investigation (RI) for the On-Post OU was completed in January 1992. Areas with similar soil contamination were combined into individual projects, resulting in four separate soil cleanup projects within the SPA. A structures survey identified seventeen structures within the SPA. Thirteen of these structures contained contaminants such as asbestos, polychlorinated biphenyls, pesticides, herbicides, and heavy metals. During the RI/FS, the Irondale Containment System (ICS) was constructed to treat groundwater emanating from the Rail Yard and Motor Pool. Two additional groundwater plumes were identified beneath the northwest portion of the SPA.

On June 11, 1996, the Army, EPA, and the State of Colorado signed the Record of Decision (ROD) for the On-Post Operable Unit. The ROD required excavation and consolidation of soil presenting a risk to human health, as well as munition debris, in a state-of-the-art hazardous waste landfill to be built within the On-Post OU; and excavation of debris and soil presenting a risk to biota and placement of those soils within the Basin A consolidation area. The remedy for structures included the demolition of thirteen of the seventeen structures identified in the SPA. The selected groundwater remedy consisted of continued operation of the groundwater treatment systems, as well as the closing of any wells which had the potential to provide a cross-contamination pathway from the contaminated, upper groundwater aquifer to the deeper, confined aquifer. Continued use restrictions for the property were also required.

A total of 4,400 bank cubic yards (bcy) of soil presenting a risk to human health were disposed in the on-site hazardous waste landfill under the Toxic Storage Yards Soil project. Under the Miscellaneous Southern Tier Soil project, 12,649 bcy of soil presenting a risk to human health and 8 bcy of debris were disposed in the hazardous waste landfill. Another 3,325 bcy of soil presenting a risk to biota were disposed in Basin A. Under the Existing (Sanitary) Landfill-Section 4 project, a small amount of asbestos containing material and 11,975 bcy of soil presenting a human health risk were disposed in the hazardous waste landfill. A total of 40,260 bcy of trash and debris were disposed in Basin A. Under the Burial Trenches Soil Remediation project, all soil presenting a risk to human health was disposed in the on-site hazardous waste landfill. All other material with a lower risk was disposed in the Basin A consolidation area.

Demolition and removal of nine of the thirteen structures slated for removal was completed as part of the Miscellaneous RMA Structure Demolition and Removal-Phase I project. Of the four remaining structures, one was demolished as part of the Miscellaneous Southern Tier Soil project, two had been demolished prior to remedial action, and one structure has been retained.

The groundwater containment systems will continue to operate to prevent migration of groundwater plumes offsite. However, monitoring indicates that groundwater contamination has been below all regulatory standards since 1993. The ICS and Motor Pool wells met the ROD shut-off criteria and the ICS facility was demolished and removed.

Based on extensive investigations and a risk assessment performed for the SPA of the RMA site, it has been determined that all appropriate CERCLA responses have been completed to protect public health and the environment and that no further response action by responsible parties is required. Therefore EPA, with concurrence from the State of Colorado, proposes to delete the SPA of the On-Post OU of the RMA site from the NPL.