

**LAKE CITY ARMY AMMUNITION PLANT
AREA 10 SAND REMEDIATION PROJECT
August 2011**

Licensee: U.S. Army
Site Location: Independence, Missouri
License No: SUC-1380
Docket No.: 04008767

Decommissioning Status & Current Issues: As of January 1, 2009, the removal of depleted uranium projectile contamination from the Lake City Army Ammunition Plant (LCAAP) Area 10 sand piles was completed. Region III conducted NRC confirmatory surveys on March 21 and 22, 2009 with representatives from the U.S. Environmental Protection Agency (USEPA) and the Missouri Department of Natural Resources present. The NRC survey did not identify any depleted uranium contamination outside release criteria. The USEPA granted permission to LCAAP to backfill the area to prevent land erosion. During the March 21 inspection, LCAAP representatives indicated that a license amendment request with an attached final status survey will be submitted to the NRC for review. The Army notified the NRC on July 5, 2011, that the report for Area 10 has been completed and will submit a license amendment by August 2011 to request the release of Area 10 for unrestricted use.

If the NRC staff makes the determination that the site meets release criteria, the licensee's license will be amended approving the release of the Area. Area 10 is the only decommissioning activity remaining at LCAAP covered by a NRC decommissioning plan. After the LCAAP license has been amended to remove the area 10 Sand Piles, any remaining DU clean-up will be done under the authority of the USEPA (SECY-98-201 and SECY-01-088). The responsibility for over-sight of any remaining residual DU contamination at LCAAP has been deferred to the USEPA. The NRC license will remain in effect, but will not have any further responsibility for clean-up at LCAAP unless help is requested from the USEPA. A listing of documents relating to the NRC and EPA deferral actions, and the Area 10 clean-up is attached.

Estimated Completion Date: CY 2011
Last Inspection: August 22, 2010
Regional Contact: Mike LaFranzo, Senior Health Physicist
(630) 829-9865

Licensee Contact:

Frank Whitaker, Health Physicist
Rock Island Arsenal
US Army Joint Munitions Command
Safety/Rad Waste - Operations Division
AMSJM-SF
(309) 782-5062
Cell (309) 716-8848

MDNR Contact:

Margy Barnes
Environmental Engineer
Missouri Department of Natural Resources
Hazardous Waste Program, Federal Facilities
573-751-6838

Background and History: Lake City Army Ammunition Plant (LCAAP) is located on U.S. Highway 7 and 78 between Independence and Blue Springs, Missouri. The Army built the plant and operated it for the purpose of manufacturing and testing small caliber conventional munitions. Lake City AAP was founded in 1941 as a Government owned/contractor operated facility. From its inception in 1941 until 1985 the plant operating contractor was Remington Arms.

Remington and LCAAP had a small scale depleted uranium (DU) operation during the 1960's and 1970's. The Army designed the DU rounds as "spotters" for a small scale, shoulder fired nuclear device known as the "Davy Crockett." By 1968, the Davy Crockett program ceased and the LCAAP was left with an estimated 44,000 spotter rounds to dispose. In 1971, Remington proposed procedures for the disposal of approximately 44,000 remaining rounds. The rounds were demilitarized by shooting the rounds into a sand filled catch box, identified as the "600-yard bullet catcher." The catch box was filled with sand as an impact material. The impact material was periodically replaced in the catch box. Remington removed the DU contaminated sand from the 600-yard catch box and placed it in an on-site area identified as "Area 10."

The LCAAP site was included in the NRC's Site Decommissioning Management Program on March 29, 1990, because of the depleted uranium (DU) contamination. The EPA pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) initiated remediation of the site in the 1980s, and the LCAAP site was included on the National Priorities List in 1987. EPA proposed the site for remediation under CERCLA because of extensive non-radiological contamination. During the 1990s, the NRC was involved with a number of decommissioning activities at LCAAP. In SECY-08-01, the staff proposed to defer regulation of radioactive contamination remediation of the LCAAP to EPA, except for Area 10, Building 3A, and the area known as the 600-yard bullet catcher. The NRC retained regulatory oversight of these areas based on requests from both the Army and EPA. In SECY-01-0088, the NRC also proposed to deferred the clean-up of Area 10 to the EPA.

In a June 13, 2001, memorandum from William D. Travers, it is indicated that "The Commission has approved the staff recommendation to defer remediation oversight of the depleted uranium contamination located in Area 10 of the Lake City Army Ammunition Plant (LCAAP) to the Environmental Protection Agency (EPA). The Commission also has approved the staff recommendation to remove the LCAAP from the Site Decommissioning Management Plan (SDMP) once remediation efforts have been completed for Building 3A and the 600-yard Bullet Catcher, with the understanding that the LCAAP license will not be considered for termination until Area 10 remediation has also been completed, which may not take place until 2008. Upon final coordination with the parties involved regarding such deferral, the staff should provide written notification to each party documenting the agreed upon terms and conditions. The NRC should retain responsibility to review the EPA's determination that Area 10 remediation has been completed to ensure that the remediation complies with the SDMP cleanup limits."

On August 8, 2001, the NRC amended the Army's license changing the Area 10 clean up schedule to December 31, 2008, and tied down reference to Camper's August 3, 2001, letter to the EPA, MDNR and Army. The Camper memo indicated the following "Based on a review of this agreement, we have determined that this approach is equivalent to the deferral process described in NRC's Staff Requirements Memorandum, dated June 13, 2001, and, therefore,

acceptable to NRC. Please note that NRC reserves the right to review any documentation upon which either EPA, MDNR or the licensee base their finding that Area 10 satisfies NRC cleanup criteria. Also, NRC reserves the right to perform a confirmatory survey of this area.”