



**DEPARTMENT OF THE ARMY**  
**LAKE CITY ARMY AMMUNITION PLANT**  
**INDEPENDENCE, MO 64051-1000**

July 26, 2001

Engineering Division

SUBJECT: LCAAP Area 10 Remediation

Mr. Larry W. Camper, Chief  
Decommissioning Branch  
U.S. Nuclear Regulatory Commission  
11545 Rockville Pike  
Rockville, Maryland 20852-2738

Dear Mr. Camper:

The purpose of this letter is to describe the approach of the Army, the Missouri Department of Natural Resources (MDNR), and the U.S. Environmental Protection Agency (EPA) for addressing environmental contamination at Area 10 at the Lake City Army Ammunition Plant (LCAAP) pursuant to the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act / Superfund and Reauthorization Act (CERCLA/SARA) and the LCAAP Federal Facility Agreement (FFA). As we have discussed, the approach is based on the Army's preference to address Depleted Uranium (DU) materials licensed by the Nuclear Regulatory Commission (NRC) as part of the Army's CERCLA response activities in Area 10 rather than conducting a separate decommissioning pursuant to the NRC license. The Army would conduct the CERCLA response actions under authorities delegated by the President to the Secretary of Defense in Executive Order 12580. MDNR and EPA would have regulatory oversight for such response actions under the LCAAP FFA. The Army believes that the CERCLA process offers greater flexibility in executing cleanup responsibilities, which may result in a more cost-effective and efficient cleanup process, consistent with environmental priorities established by the FFA parties.

Further, executing the Area 10 cleanup under the CERCLA program reduces potential regulatory duplication since the releases of NRC licensed materials in Area 10 are also subject to the requirements of CERCLA and state law. By addressing the cleanup of Area 10 under CERCLA, a more streamlined regulatory approach will be possible.

The Army is proposing to perform a non-time-critical removal action under CERCLA at the LCAAP Area 10 Sand Piles to address all contaminants of concern that may be present. Primary contaminants of concern identified in the Sand Piles are DU and lead. The parties believe such an approach is appropriate and consistent with the National Contingency Plan (NCP). In order to complete this process, the Army must first prepare an Engineering Evaluation / Cost Analysis (EE/CA) to describe the scope of the environmental problems at the site and evaluate possible

removal actions to address these problems. The Army has been working to complete this EE/CA for the past several months. EPA and MDNR have provided review comments on draft versions and are currently reviewing a "draft final" iteration of the EE/CA. The FFA parties anticipate that an additional version of the EE/CA will be prepared by the Army to address further EPA and MDNR comments, and to address issues raised in the NRC Staff Requirements Memorandum (SRM) of June 13, 2001. As discussed in more detail below, the Army must also make the final EE/CA available to the public for review and comment before it can select a removal action.

The SRM states that the Area 10 cleanup should satisfy the decommissioning cleanup standards for DU, set forth in the Site Decommissioning Management Plan Action Plan criteria (35 pCi/g, DU in soils) (57 Federal Register 13389, April 16, 1992). The Army had prepared previous iterations of the Area 10 EE/CA with the understanding that the DU soils cleanup standard would be risk-based, consistent with CERCLA criteria, and will revise the EE/CA to reflect the desired NRC standard. The NRC cleanup standard for DU in soils will satisfy CERCLA protectiveness criteria, according to analysis performed by the Army. The parties are intending to complete the Area 10 EE/CA prior to the end of calendar year 2001.

After the EE/CA is completed to the satisfaction of the FFA parties, it will be released for public review and comment for a minimum 30-day period. A public meeting will be held during this comment period to field questions, comments, and concerns regarding the nature of the removal action proposed. Considering public input provided during the comment period, the Army will then compose a decision document, commonly called an "Action Memorandum," to document the removal alternative selected from those considered in the EE/CA. EPA and MDNR will be provided the opportunity to review and comment on the Action Memorandum. The FFA parties will work together using established procedures to reach agreement on the Action Memorandum. It is anticipated that the Area 10 Action Memorandum will be completed within 4-6 months after the EE/CA is finalized.

After completing the required public involvement process, and documenting the selected removal action, the Area 10 Sand Pile removal action will be implemented on a schedule consistent with the LCAAP cleanup priorities established by the FFA parties. The Army is presently estimating that funding to execute the Area 10 cleanup will be requested for 2008. A work plan providing details of the removal action, somewhat similar in scope to an NRC Decommissioning Plan, will be prepared by the Army to describe the nature of the cleanup work to be performed. The work plan will be shared with EPA and MDNR for review, comment, and resolution, consistent with FFA processes. A Final Status Survey consistent with MARSSIM requirements will be specified in the work plan so that the Army will have information to

demonstrate whether the cleanup work attains the 35 pCi/g standard for DU that will be specified in the Action Memorandum. The FFA parties will offer NRC the opportunity for input into the Final Status Survey to ensure that their data needs may be appropriately addressed.

The Area 10 Sand Piles are a sub-site within the LCAAP Installation Wide Operable Unit (IWOU). A Record of Decision (ROD) documenting the final cleanup decision (remedial action) for the IWOU is to be submitted by the Army to EPA and MDNR no later than 2010, according to the most recent enforceable FFA schedule. Among other necessary cleanup work required for the IWOU, this ROD will evaluate the nature of any cleanup work that the Army may have completed in Area 10 prior to issuance of the ROD. If the FFA parties agree that the Area 10 removal action is sufficient to address threats associated with releases of hazardous substances at the Sand Piles, no further cleanup action will be required for the Sand Piles. Should it be determined that prior cleanups at Area 10 are not sufficiently protective of human health or the environment, the IWOU ROD will specify the nature of any additional cleanup actions required for Area 10. The IWOU ROD is a document subject to the enforcement and dispute resolution provisions of the FFA.

To provide you with some important background information, the LCAAP is listed on EPA's National Priorities List (NPL) under authorities of CERCLA/SARA. CERCLA 120 requires that, for all federally owned facilities listed on the NPL, the responsible Federal Agency enter into an FFA with EPA to address cleanup requirements for the site. Further, CERCLA 120 provides that the Federal Agency must comply with appropriate state laws and regulations in performing cleanups at their facilities, and must provide an opportunity for appropriate state agencies to participate in cleanup decisions. In general, the FFA indicates that the Army is responsible for executing all the CERCLA cleanup actions at the LCAAP and must coordinate all significant aspects of these actions with EPA and MDNR. The authority to conduct CERCLA response actions at Army-owned facilities is delegated to the Army in Executive Order 12580. EPA may not, unless emergency situations exist, expend EPA monies to perform CERCLA cleanup work at federally owned facilities.

The FFA requires the Army to submit for EPA and MDNR review all significant documents related to cleanup work at the LCAAP. Documents subject to this FFA requirement include work plans, sampling and analysis plans, investigation reports, risk assessments, feasibility study reports, and remedial action decision documents (Records of Decision). EPA and MDNR provide comments to the Army upon review of the documents, and the party's work to develop mutually agreeable approaches to project cleanup with appropriate documentation. A dispute resolution process is available to the FFA parties for situations where consensus on an approach or document cannot be reached. The Administrator of EPA is the ultimate arbiter of any disputes which cannot be resolved at lower levels of management among the parties. The FFA also provides that EPA may assess penalties against the Army for failing to submit significant

project documents in accordance with deadlines agreed upon by the parties, or when the Army fails to comply with the conditions of the FFA relating to an interim or final remedial action.

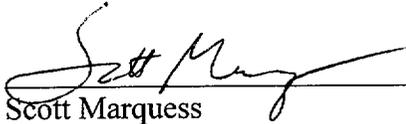
The CERCLA process makes a distinction between "removal" actions and "remedial" actions in describing the types of possible cleanup actions that may be implemented at a site. Removal actions are generally short-term actions, which may be taken to minimize or eliminate a release or the threat of a release of a hazardous substance. Removal actions are typically completed in a matter of months, and generally do not entail extensive long-term operations or maintenance. A removal action is often implemented as an interim action and may not necessarily represent the final cleanup action that is required for a site or portion of a site to reach protective standards. The National Contingency Plan (NCP), the implementing regulation of CERCLA, provides examples (40 CFR 300.415) of types of actions which may appropriately be considered as removal actions. The LCAAP FFA requires that the Army consults and coordinates with EPA and MDNR when conducting removal actions. However, the FFA does not provide EPA the authority to issue penalties or enforce against the Army in matters related to removal actions.

Remedial actions are distinguished from removal actions in that they are generally more complex, more costly types of actions, that frequently require long-term operations and maintenance to attain protective standards. Remedial actions are the final, comprehensive action taken at a site to abate unacceptable risks. A remedial action may build upon prior cleanup work performed as a removal action. Remedial actions at LCAAP are subject to the enforcement provisions of the FFA.

In summary, the Army will remediate Area 10 of the LCAAP under the provisions of Executive Order 12580, CERCLA, and the LCAAP FFA. This LCAAP Area 10 removal action will, among other things, satisfy NRC SDMP Action Plan cleanup criteria for DU in soil (35 pCi/g). It is the understanding of the parties that EPA and MDNR will provide regulatory oversight of this LCAAP Area 10 removal action and that the NRC license will remain in effect until this removal action and any other necessary LCAAP CERCLA response actions related to NRC's letter dated October 20, 1998 (attached) are completed.

If the above outlined approach is equivalent to the Deferral process described in the NRC June 13, 2001, SRM and the May 17, 2001 Policy Issue Paper (SECY-01-0088), please signify by return correspondence.

For the United States Environmental Protection Agency



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Scott Marquess  
Project Manager  
Federal Facilities / Special Emphasis Branch  
Superfund Division

For the United States Army



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H. Garth Anderson, PE  
CERCLA Project Manager  
Lake City Army Ammunition Plant

For the Missouri Department of Natural Resources



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Mitchell C. Scherzinger, Environmental Engineer  
Federal Facilities Section



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 20, 1998

Mr. Gene Gunn  
Chief, Federal Facilities and  
Special Emphasis Branch  
Superfund Division  
U.S. Environmental Protection Agency  
Region VII  
726 Minnesota Avenue  
Kansas City, Kansas 66101

SUBJECT: DEFERRAL OF REGULATORY OVERSIGHT OF CERTAIN PORTIONS OF THE  
LAKE CITY ARMY AMMUNITION PLANT SITE, INDEPENDENCE, MISSOURI, TO  
THE U.S. ENVIRONMENTAL PROTECTION AGENCY

Dear Mr. Gunn:

The purpose of this letter is to propose partial deferral of U.S. Nuclear Regulatory Commission (NRC) regulatory oversight to the U.S. Environmental Protection Agency (EPA), for the remediation of radiological contamination of certain portions of the Lake City Army Ammunition Plant (LCAAP) site, Independence, Missouri. We previously discussed this matter with Mr. Scott Marquess of your staff.

NRC has concluded that the remedial program being administered by EPA at the LCAAP site is adequate to protect the public and the environment from the risks associated with the radioactive contamination at this site. Further, deferral should conserve EPA and NRC resources and minimize duplication of effort.

Based on discussion with the U.S. Army and your staff, we propose to defer the oversight of remediation activities at the LCAAP site to EPA, except for Area 10, Building 3A, and the 600-yard bullet catcher. The U.S. Army plans to remediate these areas promptly in accordance with NRC requirements. With the exception of these areas, NRC would not plan to take any further action on the LCAAP site following deferral, unless specifically requested by EPA.

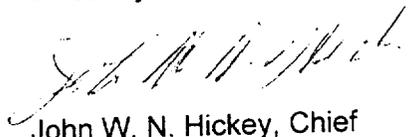
As you have already requested, NRC will participate in the review of any LCAAP remediation plan submitted to EPA and in the development of any record of decision that involves radioactive contamination-related issues. We request that EPA notify NRC when EPA believes that remediation is complete. After NRC has reviewed EPA's basis for concluding that remediation is complete, NRC will, based on that determination, remove LCAAP from the Army's NRC radioactive materials license.

G. Gunn

- 2 -

We would like to meet with you, at your convenience, to arrange final implementation of this proposal. If you have any questions about this action, please contact Stewart Brown of my staff at (301) 415-6605.

Sincerely,



John W. N. Hickey, Chief  
Low-Level Waste and Decommissioning  
Projects Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
and Safeguards

cc: LCAAP Distribution List