

July 10, 2008

Bruce Elliott, Director  
Safety/Rad Waste Directorate  
Department of the Army  
Headquarters, U.S. Joint Munitions Command  
1 Rock Island Arsenal  
Rock Island, IL 61299-6000

SUBJECT: REVIEW OF DEPARTMENT OF THE ARMY'S JUNE 25, 2008, LETTER  
RELATING TO DECOMMISSIONING ACTIVITIES AT THE LAKE CITY ARMY  
AMMUNITION PLANT, INDEPENDENCE, MISSOURI

Dear Mr. Elliott:

This refers to the NRC's review of your June 25, 2008, request to revise the Area 10 sands "Derived Contamination Guideline Limit" (DCGL) from 2 picocuries per gram (pCi/g) to 8.4 pCi/g in conjunction with remediation activities being performed at the Lake City Army Ammunition Plant, Independence, Missouri (LCAAP). Specifically, your letter requests NRC approval of the Joint Munitions Command's (JMC) request to use the alternate DCGL for depleted uranium (DU) during the Area 10 Sand Piles Removal Action at LCAAP. This request was necessary because the Army changed its plan from dispositioning the segregated and stabilized Area 10 sands on site to proposing the off-site disposal of the sand at the Johnson County Landfill in Shawnee, Kansas. Based on the proposed DCGL, which is equivalent to less than 0.05 percent by weight source material, the sand materials qualify under the 10 CFR 40.13(a) exemption as unimportant quantities of source material. Accordingly, the transfer to the landfill is a permissible transfer of source material under 10 CFR 40.51(b)(3).

The NRC performed a safety analysis considering the dose to several different exposure groups including a waste collector (which estimates also the dose to a truck driver in this case), a worker at the facility, an intruder after the facility is closed, and two offsite calculations: (1) doses to an individual next to the site from the direct disposal actions (e.g., direct radiation, fugitive dust, etc.) and (2) a long-term analysis of leaching into groundwater and being utilized from a well. The results of this analysis showed the doses to be small fractions of a millirem. Because of the very small doses associated with this disposal and that the predominate dose is to individuals working directly with the disposal, consideration of collective dose from the possibility of other 40.13(a) or 10 CFR 20.2002 disposals at the same landfill is not warranted.

Thus, after review of your request we have determined that the revised DCGL for the sand being transferred is consistent with NRC policy, and we have no objection to the transfer. The U.S. Environmental Protection Agency and the Missouri Department of Natural Resources, who have immediate over-sight authority for the LCAAP clean-up, will be informed concurrently of the NRC finding.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). The NRC's document system is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

We appreciate your cooperation and if you have any questions, please do not hesitate to contact me at (630) 829-9856.

Sincerely,

***/RA by W. Snell Acting for/***

George M. McCann, Senior Health Physicist  
Decommissioning Branch

Docket No.: 040-08767  
License No.: SUC-01380

cc: C. Sperry, USEPA  
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