March 10, 2011

David K. Goldblum
2530 Crystal Drive
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Arlington, VA 22202

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION STAFF REVIEW OF U.S. ARMY SEQUENTIAL EXTRACTION PROCEDURE FOR SOIL LEACHABILITY AT THE JEFFERSON PROVING GROUND (NRC LICENSE SUB-1435)

Dear Dr. Goldblum:

In a letter dated January 24, 2011, Science Applications International Corporation (SAIC), on behalf of the U.S. Army, provided information on the sequential extraction procedure that SAIC proposes to use to determine metal partitioning in soil in support of the decommissioning of the Jefferson Proving Ground (JPG). The letter (Agency-wide Documents Management and Access System Accession # ML1102603761) provided your test information and requested U.S. Nuclear Regulatory Commission (NRC) approval of the procedure.

NRC staff have reviewed the procedure and have the following comments:

1. In general we have concluded that the proposed extraction procedure is appropriate, as long as the extraction results are not interpreted as an actual indicator of states in which depleted uranium (DU) is held.

2. JPG has not indicated how it plans to use the data collected from the procedures. While we agree that sequential extraction may be useful in supporting predictions of uranium mobility, the appropriateness of the procedures specified cannot be determined without a more specific understanding of how the results will be used.

3. Some of the procedures specify sample refrigeration after collection and short holding times. Our understanding is that JPG plans to use samples that have been held for approximately 2 years at ambient temperatures. Detailed concerns about the potential changes in sample characteristics were described in our comments on JPG's response to our concerns on the development of partition coefficients [ML 110190306]. JPG should explain how this deviation with the written procedures will be addressed and indicate whether there will be other deviations from the written procedures.

In order to complete our review of your proposed procedure we are requesting that you address the comments above within 30 days of the date of this letter

In accordance with 10 CFR 2.390 of the NRC "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html

If you have any questions, please contact me at Dominick.Orlando@nrc.gov or 301-415-6749.

Sincerely,

/RA/

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Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

License No. SUB-1435
Docket No. 040-08838

cc: See next page

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If you have any questions, please contact me at Dominick.Orlando@nrc.gov or 301-415-6749.

Sincerely,

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