RAS 14540 ARMY EXH. # 13

DEPARTMENT OF THE ARMY
INSTALLATION MANAGEMENT AGENCY
HEADQUARTERS, UNITED STATES ARMY GARRISON, ROCK ISLAND ARSENAL
1 ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

REPLY TO
ATTENTION OF:

January 17, 2007

Office of the Garrison Manager

NUCLEAR REGULATORY COMMISSION
In the Matter of US ARMY (JEFFERSON PROVING GROUND)
Docket No. 40-8838-MLA ASLBP No. ARMY Exh. # 13
OFFERED:
IDENTIFIED on: / RECEIVED:
Action Taken: ADMITTED REJECTED WITHDRAWN
Reporter/Clerk:

Dr. Thomas McLaughlin
Office of Federal and State Materials and
Environmental management Programs (FSME)
Division of Waster Management and
Environmental protection (DWMEP)
Decommissioning and Uranium Recovery
Licensing Directorate (DURLD)
Materials Decommissioning Branch (MDB)
Mail Stop T-7E18
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Dr. McLaughlin:

In the matter of the Nuclear Regulatory Commission (NRC) license SUB-1435, attached as enclosures to this cover letter are responses to action items # 1 and # 2 from the meeting with NRC headquarters staff on October 12, 2006. Regarding action item # 3, please see the Army's response provided on the following as an attachment to this letter. The Army further agrees to meet with NRC staff after the second quarterly sampling event for the action item # 3 constituents to discuss the results of the sampling program developed under the FSP and the status of other FSP activities.

If you have any questions please contact either Mr. Paul Cloud, US Army Jefferson Proving Ground (JPG), at (410) 436-2381, E-mail address paul.d.cloud@us.army.mil or Mr. John J. Welling, Chief Counsel, US Army Garrison-Rock Island Arsenal at (309) 782-8433, E-mail address john.j.welling@us.army.mil.

Sincerely,

Alan G. Wilson
Garrison Manager

DOCKETED
USNRC
October 25, 2007 (2:00pm)
OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF
Docket No. 40-8838-ML

Enclosures

TEMPLATE = SECY-028

SECY-02

Action Item 3, Meeting Report, October 12, 2006

"The Army will indicate when it will start sampling the different media for radionuclides and other chemicals discussed in Action Item 2 and the FSP. The NRC staff believes that groundwater, surface water, cave water and sediment sampling should be initiated as soon as the conduit wells are installed and developed."

Discussion

The Army has prepared a Well Selection Report for submission to the NRC by January 19, 2007 attached as an enclosure to this letter and has enclosed FSP Addendum 4 at the same time (also attached to this letter as an enclosure). The well location selection report includes the results of soil verification, fracture trace, electrical imaging, surface water gauge installation and well location selection activities. The report details the process that was completed in selecting well pair locations and rationale for each selected location.

The Army prefers to limit FSP Addendum 4 to detail the well drilling and installation procedures. In addition, the Army prefers to reserve the discussion of the details of the groundwater, surface water, cave, and sediment sampling procedures; and the radiological and other chemical analyses that will be performed on the sampled media for a separate FSP Addendum following the installation and evaluation of the new wells as well as an evaluation of the existing wells. The evaluation will consider ERM wells and range study wells with respect to the data collected during and shortly after the installation of the new wells. This evaluation is a recommendation in the well selection report and is generally stated as follows:

Following the installation of the proposed well pairs, survey of well coordinates and elevations (new wells, ERM wells and range study wells), and collection of initial groundwater stage data, an evaluation will be completed. This evaluation will assess the newly installed well pairs, the existing ERM wells and range study wells. The evaluation will determine which, if any, of the existing wells are appropriately constructed and located for inclusion in ongoing characterization activities. In addition to determining if appropriate to be included, the types of uses (e.g., chemistry sampling, stage gauging) of the wells also will be evaluated. Following this evaluation, recommendations for any necessary rehabilitation or redevelopment also will be provided. Initial groundwater stage data will provide preliminary groundwater flow direction data that will assist in the evaluation, selection and frequency of surface water samples and locations. Included in this evaluation will be the selection of the wells for installation of recorders for groundwater stage data collection.

The selection of the groundwater, surface water, cave, and sediment sampling procedures; locations; frequencies; timing and the radiological and other chemical analyses that will be performed on the sampled media without the site specific data to complete the evaluations described above. At this point before the installation of the new wells and the evaluation of the well and surface water data, the Army would have limited new data upon which to revise the sampling details presented in the original FSP and would miss the opportunity to design the media sampling based on the additional site specific data.

At this point, we only have three months (October through December 2006) of stream and cave spring gauge data, which we believe does not provide enough information about the hydrologic cycle to identify sampling locations beyond what is currently known. In addition, at the time of the evaluation of the wells, the Army will have collected at least six months of surface water data at the surface water gauging stations. The Army would also like to complete preliminary evaluation of the surface water data so that the following are better understood:

- The relationship between precipitation, surface water and groundwater;
- Flow past and between (gaining/losing) the surface water gauging stations;
- Timing of and spatial influences of surface runoff, base flow and groundwater discharge

The evaluation of these surface water flow data will provide additional guidance in selecting the surface water and sediment sample locations, timing, and frequencies.

To continue with the phased approach of collecting data and then designing additional and follow-on studies with the results of the previously completed studies to complete the characterization of the site is desired over "forcing" or "rushing" the design of studies. The Army would like to complete the discussed tasks and evaluations and then meet with and present the media sampling strategy and data and evaluations listed above with the NRC before completing and submitting a FSP Addendum detailing the media sampling.