

## DEPARTMENT OF THE ARMY

NEW YORK DISTRICT, CORPS OF ENGINEERS JACOB K. JAVITS FEDERAL BUILDING NEW YORK, N.Y. 10278-0090

ATTENTION OF Programs and Project Management Division

MAY 19, 2000

Mr. John T. Greeves
Director, Division of Waste Management
U.S. Nuclear Regulatory Commission
Two White Flint North
Mailstop T7J-8
11545 Rockville Pike
Rockville, MD 20852-2738

Dear Mr. Greeves:

As you are aware, the U.S. Army Corps of Engineers (USACE) has been directed by the Energy and Water Development Appropriations Acts of 1998-2000 to cleanup Formerly Utilized Sites Remedial Action Program (FUSRAP) sites across the nation in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Maywood, New Jersey, FUSRAP site offers a unique challenge to USACE because a private party holds a Nuclear Regulatory Commission (NRC) license (STC-1333) for the storage of approximately 19,200 cubic yards (CY) of thorium containing materials (with traces of radium and uranium) in three unlined burial pits located on one property at the site. The licensed material has historically been included in the definition of FUSRAP waste. USACE is responsible for cleanup of FUSRAP waste on the Maywood site.

USACE and the U.S. Department of Energy (DOE) have completed cleanup of 67 residential and municipal properties in the Boroughs of Maywood and Lodi and the Township of Rochelle Park at the Maywood site. USACE would like to propose to the U.S. Environmental Protection Agency, Region II (EPA) and the New Jersey Department of Environmental Protection (NJDEP) plans to cleanup up all of the remaining radiological contamination on commercial and government properties at the Maywood site. cleanup would consist of 24 properties (in-situ contaminated soil volume in excess of 200,000 CY) and would be in accordance with the final provisions of a formal dispute resolution process between DOE and EPA in 1994. One of these 24 properties contains the three NRC-licensed burial pits. USACE has prepared a draft Feasibility Study (FS) under CERCLA that outlines the alternatives considered and a draft Proposed Plan (PP) selecting a preferred remedy. For the licensed material, the preferred

## remedy selected includes:

- Naming 10 CFR 20 Subpart E as an Applicable or Relevant and Appropriate Regulation (ARAR) for the decommissioning of the licensed burial pits on the licensee's property. USACE will use RESRAD version 5.95 to show compliance with the 25 mrem/yr dose requirement of 10 CFR 20 Subpart E.
- Excavation, treatment, and off-site disposal of licensed thorium contaminated materials. Residual contamination would result in less than 25 mrem/yr for a commercial scenario. If durable institutional controls cannot be established to restrict future land use to commercial activities, USACE would remediate the site to comply with the 25 mrem/yr dose standard for an unrestricted use scenario. The treatment technologies being considered for use are soil sorting and soil/gravel/oversize separation.
- The licensed contaminant of concern, Th-232, is not measured directly, but is instead estimated from the measurement of its daughter product, Ra-228. The Th-232 is assumed to be in secular equilibrium with Ra-228 because the long-lived radionuclide (Th-232) has a relatively short-lived decay product (Ra-228 has a half-life of approximately 5.8 years) and secular equilibrium is reached after about 7 of the decay product's half-lives. After seven half lives, less than 1% of a radionuclide would remain. Thorium extraction ceased at the Maywood Site in 1956. Thus, Ra-228 has had ample time to return to secular equilibrium with Th-232.

However, in order to submit this recommended remedy to EPA and NJDEP, USACE is looking for confirmation from the NRC that the jurisdictional and procedural requirements in relation to the decommissioning of the licensed burial pits and the termination of the third party's license will not hinder or prevent the cleanup of the burial pits by USACE under CERCLA. USACE has assembled the following questions for NRC to answer in order to confirm that USACE will be allowed to execute a CERCLA remedy that includes the licensed burial pits.

1. Will NRC support a USACE cleanup of the NRC-licensed Stepan burial pits under CERCLA? 10 CFR 20 Subpart E will be cited as an ARAR and the substantive requirements would be achieved.

- 2. USACE believes the permit exemption under 40 CFR 300.400(e) would allow USACE to remediate the licensed material without obtaining a license. Does NRC support that position?
- 3. If the Corps agrees to take control of the burial pits for the purposes of health and safety, and commits to seeking funds necessary to perform remediation of the burial pits, will NRC administratively suspend (or even terminate) the Stepan license? Will the NRC require the license holder to apply for suspension or termination of the license prior to taking such an action?
- 4. If USACE would attempt to negotiate with EPA to have the NRC-licensed burial pit material removed from the definition of FUSRAP waste (remove the NRC-licensed material from the definition of the CERCLA site, thus eliminating the government's responsibility for the remediation of the licensed material under the Federal Facilities Agreement for the Maywood Site), would NRC require the licensee to terminate the license through decommissioning?

USACE requests NRC provide a response to these questions as soon as possible. USACE plans to submit a draft final Feasibility Study and draft final Proposed Plan to the regulators shortly in order to have a signed ROD in place for the 2001 construction season. USACE is trying to meet Congressional, regulator and community expectations to begin remediation of the Site no later than 2001.

If you have any questions or concerns, please contact me, or the Project Manager, Mr. Allen Roos, at 212-264-0120. I look forward to your prompt response.

Sincerely,

Colonel, Corps of Engineers

District Engineer

Cf: Angela Carpenter, USEPA Donna Gaffigan, NJDEP