



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

REPLY TO
ATTENTION OF

2 February 2005

Mr. Daniel Gillen
Acting Director, Division of Waste Management
and Environmental Protection
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mr. Gillen

The purpose of this correspondence is to notify you of our intent to blend certain radiologically contaminated waste from the Colonie, NY, Formerly Utilized Sites Remedial Action Program (FUSRAP) site (Colonie Site) for disposal at a RCRA permitted facility.

The United States Army Corps of Engineers (USACE) has an estimated 3,000 tons of above ground stockpiled radiological contaminated soils with elevated levels of depleted uranium greater than 0.05% by weight, prepared for disposal. In addition, the USACE has about 9,000 tons of above ground stockpiled radiologically contaminated soils and approximately 30,000 tons of in-situ radiologically contaminated soil designated as an unimportant quantity of source material, as that term is defined in Title 10, Code of Federal Regulations, part 40.13(a). Virtually all of this material contains RCRA hazardous substances in the form of elevated levels of lead and will be treated to meet appropriate RCRA requirements and land disposal restrictions. The proposed blending only involves contaminated material excavated from the site and no clean fill will be used in the process. Enclosure A provides background information regarding the Colonie site history, license considerations, and material characterization.

The USACE estimates a cost reduction of nearly \$1 million will be achieved, by the government, by blending for disposal at a RCRA facility permitted to accept the resultant material. (See Attachments to Enclosure A for sampling data and equations). Furthermore, USACE considers there to be the potential for additional cost savings should similar material that is conducive to blending be found during the continuing removal action slated for completion in Fiscal Year 2005.

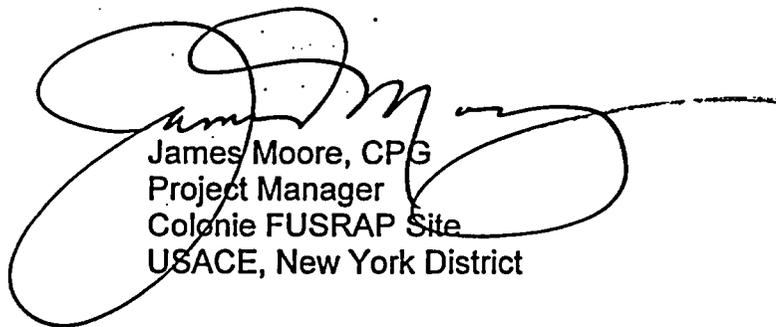
The proposed blending of these materials shall remain protective of human health and the environment while offering direct public health and safety benefits by accelerating closure of the site, increasing operational efficiencies, and reducing the occupational dose.

Based on the review of SECY-04-0035, the USACE understands that the intentional mixing of materials to meet a facility's waste acceptance criteria is consistent with current NRC position, and is handled on a case-by-case basis. The USACE is also aware that the Commission approved blending of similar waste streams, to be shipped from the Kaiser Aluminum site in Tulsa, Oklahoma, to meet the waste acceptance criteria of the disposal facility. We believe that the Colonie Site waste stream strongly warrants a similar consideration for blending.

Therefore, unless there are objections on the part of the Commission, USACE intends to begin blending and shipment of materials for disposal at a RCRA facility permitted to accept unimportant quantities of source material as soon as possible. Further, it is the intent of the USACE that any similar material excavated from the Colonie site be treated to meet RCRA requirements and blended to meet the radiological criteria associated with the RCRA facilities waste acceptance criteria. It should be noted that the USACE is fully coordinating with the Regulatory authority of the selected RCRA facility prior to disposition of these blended materials.

We look forward to your response to our proposal for blending. Please advise us in writing if this approach is acceptable within 30 days, as there are schedule and project specific actions that need to take place. If you have any questions, please call me at 732-435-0079 or our technical point of contact, Mr. Hans Honerlah, at 410-962-9184. Thank you for your consideration in this matter.

Sincerely,



James Moore, CPG
Project Manager
Colonie FUSRAP Site
USACE, New York District

Encl

Enclosure A Background Information Colonie FUSRAP Site

Site History

The Colonie Site was owned and operated from 1937 to 1984 by National Lead, Inc. (NL). During these years, NL carried out a number of processes using radioactive materials consisting primarily of depleted uranium, but also of thorium and enriched uranium (special nuclear material). (See Attachment 1 for a more detailed operational history of the Colonie Site.) The United States Department of Energy (DOE) acquired ownership of the Colonie Site in 1984, for the purpose of remediating it under FUSRAP. From 1984 until present the Colonie FUSRAP Site has acted as an interim storage site for cleanup of vicinity properties and the site itself has been subject to remedial activities.

Licensing Considerations

The U.S. Army Corps of Engineers (USACE) is aware that the following licenses were issued to NL for its use of radioactive material:

- Nuclear Regulatory Commission (NRC) License No. SUB-748, for possession of 38,000 pounds of uranium during fabrication of a module replacement tank upper shield
- New York State (NYS) License No. 235-0482, issued for fabrication of detailed DU parts
- NRC License No. SNM-686 (Docket No. 70-750), issued for the fabrication of Advanced Test Reactor fuel plates

When DOE acquired the Colonie Site, all prior NRC and NYS Licenses were administratively terminated or allowed to expire, because of DOE's authorities under the Atomic Energy Act.

The USACE assumed administration of FUSRAP in 1997, and is currently performing response activities at the Colonie Site in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The USACE on-site activities are being performed without licenses with the acknowledgement of the Commission that no NRC licensing or other regulatory requirements apply to the USACE for the USACE handling of radioactive material at the site. (See Attachment 2, "Issuance of Directors Decision Under 10 CFR 2.206," in the Federal Register dated April 5, 1999, 64 FR 16504.)

Prior Communication with NRC

In late 1999, the USACE corresponded with the NRC to obtain concurrence with our understanding of the NRC guidance associated with unimportant quantity of source material transfer and disposal. In early 2000, the current Commission direction to the

staff was such that the staff did not object to the transfer of an unimportant quantity of source material for disposal, provided that individual doses were below 1 millisievert/year (100 mrem/year). (Attachment 3 includes copies of the correspondence between the USACE and the NRC.)

To date the USACE has disposed of over 100,000 tons of this material allowing for over \$30 million in cost avoidance to the project. This has allowed the project to move forward with limited impact from the declining resources of the federal budget.

Material Characterization

Removal actions have taken place on the Colonie Site from 1997 and are planned to continue through 2005. To date approximately 120,000 tons of material has been excavated, treated, and 100,000 tons transported for disposal. To date, the isotopes identified have been primarily depleted uranium, and thorium contained in a few small areas (no special nuclear material has been encountered). The primary chemical contaminant identified for the current removal action is lead. The primary release mechanism for the radiological material was airborne release through stacks. The primary release mechanism for the chemical contaminant was through direct burial and movement of material throughout the site. Over 95% of the material excavated has required treatment to stabilize the toxicity characteristic associated with the lead and thus render the material a non-hazardous waste. The excavation of material across the site typically extends to a greater depth for chemical contamination. This is supported by the fact that to date, less than 10% of the material excavated has residual uranium greater than 0.05% by weight.

The current waste characterization process uses a field instrument (with an established correlation) to segregate excavated material into 250 cubic yard piles based on radiological activity. A five-point composite is obtained for analysis by on-site gamma spectroscopy and TCLP (for lead). Currently, there is an estimated 3,000 tons of above ground stockpiled radiological contaminated soils, with elevated levels of depleted uranium (greater than 0.05% by weight) prepared for disposal. In addition, the USACE has about 9,000 tons of above ground stockpiled radiologically contaminated soils and approximately 30,000 tons of in-situ radiologically contaminated soil designated as an unimportant quantity of source material, as that term is defined in Title 10, Code of Federal Regulations, part 40.13(a). Virtually all of this material contains RCRA hazardous substances in the form of elevated levels of lead and will be treated to meet appropriate RCRA requirements and land disposal restrictions. (See Attachment 4 for radiological sampling data on the stockpiled material).

Determination of Blending Ratios

Attachment 5 uses current data to identify a ratio of 1.05 tons of lower activity material to 1.0 ton of elevated material, as being sufficient to meet the waste acceptance criteria of the disposal facility currently being utilized. To be conservative and due to the large volume of lower activity material, USACE proposes to use a ratio of 2 tons lower activity

to one ton higher activity. The current proposal would allow for a ratio of approximately 15 tons of lower activity material to 7.5 tons of higher activity material per container prepared for disposal as each container holds approximately 22.5 tons.

Current Site Operations

As discussed in the site history, the Colonie site is approximately 11.5 acres. Currently, the removal action at the site has allowed for over 50% of the land area to be released for unrestricted use as demonstrated using MARSSIM guidance. The remaining areas of the site requiring action contain the treatment system for the hazardous waste stabilization and the 12,000 tons of stockpiled material (3,000 tons elevated material and 9,000 tons low level) prepared for disposal. The release of land area for unrestricted use has shrunk the footprint of active site, constraining current operations and making additional removal actions more difficult from a logistical perspective.

Based on the current shipping rate, USACE estimates about 15 weeks to remove the elevated material. This will allow for additional operational efficiencies at the site during the summer months and the prime construction season. The cost avoidance, from the blending proposal, will allow for project completion on schedule and within the current budget. This will also allow for USACE to transition directly into removal actions associated with a vicinity property providing additional efficiencies by saving the mobilization, demobilization, and training costs of a new workforce.

ATTACHMENT 1 Colonie Historical Site Information

Industrial operations at the site began in 1923, when the Embossing Company purchased a portion of the present-day site to construct a facility for manufacturing wood products and toys. In 1927, Magnus Metal Company, Inc. purchased the property and converted the facility to a brass foundry for manufacturing railroad components. Magnus cast the brass components in sand molds and also manufactured brass bearing housings with surfaces of babbitt metal (an alloy of lead, copper, and antimony). Preparation of the bearing surfaces for bonding with the brass housing involved degreasing the bearings with immersion in an acid bath.

In 1937, NL Industries purchased the facility continued the brass foundry operations initiated by Magnus, and bought an adjacent lot that contained a portion of Patroon Lake. At some point before 1941, NL Industries began filling Patroon Lake with used casting sand. After World War II, the plant began casting aluminum mainframes for jet airplanes. In 1958, the nuclear division of NL Industries began producing items manufactured from uranium and thorium under a license issued by the Atomic Energy Commission. NL Industries discontinued its brass foundry operations in 1960.

Between 1958 and 1984, NL Industries carried out a number of processes using radioactive materials consisting primarily of depleted uranium but also of thorium and enriched uranium. The plant handled enriched uranium from 1960 to 1972. From 1966 to 1972, NL Industries held several contracts to manufacture fuel from enriched uranium for experimental nuclear reactors. Operations were also conducted at the plant to reduce depleted uranium tetrafluoride to depleted uranium metal, which was then fabricated into shielding components, ballast weights, and projectiles. As a result of NL Industries' operations, residual radioactive materials are present at the site buildings, grounds, and Vicinity Properties (VPs).

Other processes conducted at the plant included an electroplating operation for plating uranium with nickel and cadmium. Chemicals used in the plating operation included nickel sulfamate, sodium cyanide, ferric chloride, nitric acid, silicate phosphate, iridite (chromium brightener), cadmium metal, nickel metal, boric acid, and perchloroethylene (PCE). How or where most of these materials were disposed is unknown because very few disposal records could be located. However, NL Industries' letters indicate that under an Atomic Energy Commission (AEC) license, approximately 42 m³ (55 yd³) of graphite, slag, refractory, uranium oxide, insoluble oil, metal scrap, and combustible trash were buried in the Patroon Lake area in 1961. Chemical wastes and packaged chemicals used at the site have included acids, bases, degreasing agents, carbon tetrachloride, benzene, polychlorinated biphenyls (PCBs), cyanide, heavy metals, and asbestos. The chemicals present on the Resource Conservation and Recovery Act (RCRA) Part A application permit have been removed from the site as part of the closure of the site as an interim RCRA storage facility.

On February 15, 1980, the New York State Supreme Court issued a temporary restraining order barring NL Industries from operating its facility because it emitted unacceptable airborne releases of uranium compounds. The temporary restraining order was amended on May 12, 1980, to allow NL Industries to continue limited operation. The amended order required the company to initiate an independent

investigation to assess all adverse environmental conditions in onsite soil and on the VPs that may have been caused by airborne discharges of radioactive particulates from the plant. In 1980, NL Industries contracted Teledyne Isotopes to perform a radiological survey of the facility and its vicinity.

New York State officials closed NL in 1984 and then Congress authorized DOE to remediate the property. In February 1984, the Secretary of Energy accepted an offer from NL Industries to donate the land, buildings, and equipment to DOE to help expedite the cleanup. The Army Corps of Engineers accepted the property on behalf of DOE on February 29, 1984, at which time the title was transferred to DOE. In 1985, DOE acquired a portion of the Niagara Mohawk property bordering the site to the north and northwest and subsequently designated it as part of the site.

From 1984 to 1995, the Colonie FUSRAP site was used for interim storage of radioactive materials removed from 53 VPs. These materials previously stored at the site have been removed and shipped offsite for disposal. Since 1984, there have been no reported fires, explosions, or accidental releases to the environment.

ATTACHMENT 2
Issuance of Directors Decision Under 10 CFR 2.206

11545 Rockville Pike, Rockville, Maryland.

The entire meeting will be open to public attendance.

The agenda for the subject meeting shall be as follows:

Wednesday, April 28, 1999—1:00 p.m. until the conclusion of business

Thursday, April 29, 1999—8:30 a.m. until the conclusion of business

The Subcommittee will review the NRC Staff's Safety Evaluation Report concerning Calvert Cliffs Plant License Renewal Application, and related matters. The purpose of this meeting is to gather information, analyze relevant issues and facts, and to formulate proposed positions and actions, as appropriate, for deliberation by the full Committee.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairman; written statements will be accepted and made available to the Committee. Electronic recordings will be permitted only during those portions of the meeting that are open to the public, and questions may be asked only by members of the Subcommittee, its consultants, and staff. Persons desiring to make oral statements should notify the cognizant ACRS staff engineer named below five days prior to the meeting, if possible, so that appropriate arrangements can be made.

During the initial portion of the meeting, the Subcommittee, along with any of its consultants who may be present, may exchange preliminary views regarding matters to be considered during the balance of the meeting.

The Subcommittee will then hear presentations by and hold discussions with representatives of the NRC staff and other interested persons regarding this review.

Further information regarding topics to be discussed, whether the meeting has been canceled or rescheduled, and the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefor, can be obtained by contacting the cognizant ACRS staff engineer, Mr. Noel F. Dudley (telephone 301/415-6888) between 7:30 a.m. and 4:15 p.m. (EST). Persons planning to attend this meeting are urged to contact the above named individual one or two working days prior to the meeting to be advised of any potential changes to the agenda, etc., that may have occurred.

Dated: March 30, 1999.

Richard P. Savio,

Associate Director for Technical Support, ACRS/ACNW.

[FR Doc. 99-8311 Filed 4-2-99; 8:45 am]

BILLING CODE 7590-01-P

NUCLEAR REGULATORY COMMISSION

Issuance of Directors Decision Under 10 CFR 2.206

Notice is hereby given that by petition dated October 15, 1998, the Natural Resources Defense Council (NRDC) has requested that the U.S. Nuclear Regulatory Commission (NRC) exert authority to ensure that the U.S. Army Corps of Engineers' (the Corps) handling of radioactive materials in connection with the Formerly Utilized Sites Remedial Action Program (FUSRAP) is effected in accord with properly issued license and all other applicable requirements. As NRDC notes in its petition, FUSRAP began in 1974 as a program of the U.S. Department of Energy (DOE), and that DOE had identified a total of 46 sites for cleanup under FUSRAP. By 1997, cleanup of 25 of these sites had been completed. There are currently 21 sites still in need of remediation. In October 1997, Congress transferred funding for FUSRAP from DOE to the Corps. NRDC believes that the Corps should obtain an NRC license to conduct activities under FUSRAP. At this time, the NRC has not required the Corps to obtain a license.

The request has been referred to the Director of the Office of Nuclear Material Safety and Safeguards. A copy of the petition was sent to DOE and the Corps, and DOE and the Corps were given the opportunity to comment.

By letter dated November 30, 1998, NRC acknowledged receipt of the October 15, 1998, Petition.

The Director, Office of Nuclear Materials Safety and Safeguards, has determined that the request should be denied for the reasons stated in the "Director's Decision Under 10 CFR 2.206" (DD-99-07), the complete text of which follows this notice and which is available for public inspection in the Commission's Public Document Room, the Gelman Building, located at 2120 L Street, N.W., Washington D.C. 20555, and is also available on the NRC Electronic Bulletin Board at (800) 952-9676.

A copy of this Decision has been filed with the Secretary of the Commission for the Commission's review in accordance with 10 CFR 2.206(c) of the Commission's regulations. As provided

by this regulation, this Decision will constitute the final action of the Commission 25 days after the date of issuance unless the Commission, on its own motion, institutes review of the Decision within that time.

Dated at Rockville, Maryland, this 26 day of March 1999.

For the Nuclear Regulatory Commission.
Carl J. Paperiello,
Director, Office of Nuclear Material Safety and Safeguards.

Director's Decision Under 10 CFR § 2.206

I. Introduction

On October 15, 1998, Thomas B. Cochran, Ph.D., Director, Nuclear Program, Natural Resources Defense Council (NRDC) and James Sottile, IV, Caplin & Drysdale, Chartered, filed a petition on behalf of NRDC (the "petitioner") addressed to L. Joseph Callan, Executive Director for Operations, U.S. Nuclear Regulatory Commission (NRC). The petition requests that NRC exert authority to ensure that the Corps of Engineers' handling of radioactive materials in connection with the Formerly Utilized Sites Remedial Action Program (FUSRAP) is effected in accord with a properly issued license and all other applicable requirements.

II. Background

During the 1940s, 1950s, and 1960s, the Manhattan Engineer District and the Atomic Energy Commission performed work at a number of sites throughout the United States as part of the nation's early atomic energy program. Although many of the sites were cleaned up under guidelines in effect at the time, residual contamination remains at many of the sites today. The contaminants at these sites involved primarily low levels of uranium, thorium, and radium, with their associated decay products. The U.S. Department of Energy (DOE) began FUSRAP in 1974 to study these sites and take appropriate cleanup action. By 1997, DOE had identified 46 sites in the program and had completed remediation at 25 sites with some ongoing operation, maintenance, and monitoring being undertaken by DOE. Remedial action was planned, underway, or pending final closeout at the remaining 21 sites.

On October 13, 1997, Congress passed the 1998 Energy and Water Development Appropriations Act,¹ which transferred administration of FUSRAP to the U.S. Army Corps of

¹ Energy and Water Development Appropriations Act, 1998, Pub. L. No. 105-62, 111 Stat. 1326 (1997)

Engineers (the Corps or USACE) and appropriated \$140,000,000 to the Corps for the completion of FUSRAP activities. The language in the law reads as follows:

For the expenses necessary to administer and execute the Formerly Utilized Sites Remedial Action Program to clean up contaminated sites throughout the United States where work was performed as part of the nation's early atomic energy program, \$140,000,000, to remain available until expended: Provided, that the unexpended balances of prior appropriations provided for these activities in this Act or any previous Energy and Water Development Appropriations Act may be transferred to and merged with this appropriation account, and thereafter, may be accounted for as one fund for the same time period as originally enacted.²

The legislative history behind this provision offers little guidance regarding the details of the Corps' new involvement. The Conference Committee report states that "(t)he conferees have agreed to transfer the Formerly Utilized Sites Remedial Action Program (FUSRAP) to the Corps of Engineers, and funding for this program is contained in Title I of the bill."³ The House Appropriations Committee report indicates that this change stems from concerns over the cost of the FUSRAP program under DOE. The Committee report concludes that "(c)learly, the problem must be in the contract management and contract administration function performed by the Department of Energy and the management and operating contractors who actually subcontract for most of the cleanup work."⁴ Finally, citing the Corps' efforts under the Formerly Used Defense Sites (FUDS) program, the report indicates that there are significant cost and schedule efficiencies to be gained by "... having the Corps of Engineers manage the Department of Energy's FUSRAP program as well."⁵

Given the lack of guidance in the legislative history, two members of Congress sought to clarify the law's intent through subsequent correspondence. In a November 6, 1997, letter to Energy Secretary Federico Pena and Defense Secretary William Cohen, Senator Pete Domenici and Representative Joseph McDade indicated, among other things, that:

Transfer of the FUSRAP program to the U.S. Army Corps of Engineers makes management, oversight, programming and budgeting, technical investigations, designs, administration, and other such activities

directly associated with the execution of remediation work at the currently eligible sites a responsibility of the Corps of Engineers. It should be emphasized that *basic underlying authorities for the program remain unaltered and the responsibility of DOE [emphasis added].*

The Energy and Water Development Appropriations Act for fiscal year 1999 (FY99), P.L. 105-245, continued the Corps' involvement as the implementing agency for the FUSRAP. In particular, the 1999 Act provided that response actions by the United States Army Corps of Engineers under FUSRAP shall be subject to the administrative, procedural, and regulatory provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601 *et seq.*), and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR, Chapter 1, Part 300. In addition, the 1999 Act provided that, "* * * except as stated herein, these provisions do not alter, curtail or limit the authorities, functions or responsibilities of other agencies under the Atomic Energy Act (42 U.S.C. 2011 *et seq.*) * * *"⁶

To date, NRC has not regulated activities conducted under FUSRAP, including those activities conducted by the Corps since the transfer of the program. The petitioner, however, believes that NRC should regulate the Corps' FUSRAP activities, arguing that the Appropriations Act did not purport to transfer authority over FUSRAP to the Corps. As such, according to the petitioner, the Corps may not legally administer the program absent proper oversight because, unlike DOE and (in most cases) DOE contractors, the Corps is not exempt from the licensing requirements of the Atomic Energy Act (see 42 U.S.C. 2014(s)). The petitioner further indicates that DOE has publicly stated that it cannot extend its licensing exemption for private contractors to the Corps and that DOE has no regulatory authority over the Corps for the latter's FUSRAP activities. The petitioner concludes that "* * * the Corps does not have the legal authority to run FUSRAP without first obtaining a license from the NRC."

In support of its position, the petitioner notes that the institutional mission of the Corps is not focused on the safety and security of the nation's nuclear activities. In addition, NRC's failure to regulate the Corps' FUSRAP activities is claimed to be inconsistent with the intent of the laws governing the utilization and cleanup of nuclear materials. Finally, the petitioner adds

that, with very few exceptions, Congress intended that no person should be permitted to handle nuclear materials except in accordance with a license issued by NRC.

In a November 30, 1998, letter NRC informed the petitioner that the petition had been received and was currently under review. On the same date, NRC forwarded the petition to the DOE and the Corps for their comment. In a January 12, 1999, letter, the Chief Counsel for the Corps, Robert M. Andersen, responded to NRC's request. DOE responded to NRC's request in a January 14, 1999, letter from William J. Dennison, Assistant General Counsel for Environment.

The Corps' Response

In its response, the Corps states that it is not required to obtain a license from NRC for its FUSRAP activities. The Corps' response emphasizes that Congress directed the Corps to conduct its FUSRAP activities pursuant to the CERCLA.⁷ The Corps' principal argument is that no NRC license is required because of the federal permit waiver for on-site removal or remedial actions in § 121(e)(1) of CERCLA. The Corps also believes that the AEA exempts FUSRAP activity from NRC licensing. In its opinion, "Congress intended for USACE to fill the shoes of the AEC successor agency responsible for FUSRAP cleanup, that is DOE, an agency not considered a "person" subject to licensing under the AEA." The Corps further posits that, in transferring the FUSRAP program, Congress expressed no intent that the agency obtain an NRC license for that activity and, instead, sought a seamless transition "unimpeded by procedural requirements outside of CERCLA."

Nevertheless, the Corps commits to meeting the substantive requirements of both the Atomic Energy Act (AEA) and CERCLA. It acknowledges that NRC license requirements may apply to portions of FUSRAP response actions conducted off-site, beyond the scope of the permit waiver. The letter concludes by acknowledging that the substantive provisions of NRC regulations are applicable or relevant and appropriate requirements (ARARs) for many FUSRAP response actions under CERCLA and, as such, the Corps will look "... to NRC for guidance in interpreting and implementing these requirements on the sites."

DOE's Response

DOE's response differs in several respects from that of the Corps. On the

² *Id.*

³ H.R. Conf. Rep. No. 271, 105th Cong., 1st Sess., 85 (1997).

⁴ H.R. Rep. No. 190, 105th Sess., 99 (1997).

⁵ *Id.*

⁶ Pub. L. No. 105-245, Title I.

⁷ 42 USC 9601 *et seq.*

matter of DOE's continued involvement with FUSRAP and oversight of the Corps, the Department "respectfully disagrees" with the Corps. According to its submittal, DOE is not authorized to regulate the Corps' FUSRAP activities and cannot transfer its AEA authorities to the Corps. In the Department's view, "(t)he transfer legislation did not make the Corps a DOE contractor, or otherwise subject the Corps' activities to the control or direction of DOE." The letter also indicates that DOE and the Corps are currently developing a memorandum of understanding (MOU) to clarify their respective roles and responsibilities as a result of the legislative transfer. Nevertheless, DOE believes that, with the exception of a few "administrative issues," there are no remaining issues between the two agencies that should affect NRC's disposition of the NRDC petition. The letter concludes that NRC should "evaluate the licensability of the Corps' activities in the same manner as it would evaluate the activities of any other 'person' within the meaning of the Atomic Energy Act." DOE defers to NRC on this question. The letter does not contain a DOE position concerning the viability of the Corps' CERCLA argument.

III. Discussion

The NRC staff has completed its evaluation of the petitioner's requests and the responses from the Corps of Engineers and the Department of Energy. For the reasons discussed below, the NRC denies the petitioner's request insofar as it calls on NRC to require the Corps to obtain a license for activities conducted at FUSRAP sites.

CERCLA Permit Waiver

Pursuant to § 121(e)(1) of CERCLA, "(n)o Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section."⁸ This provision waives any NRC license requirements that would apply to the Corps' activities at FUSRAP sites conducted pursuant to CERCLA.

The Corps argues that, because Congress specifically subjected FUSRAP sites to the provisions of CERCLA in the 1999 Act, section 121(e)(1) applies to Corps' response actions at FUSRAP sites. In developing regulations for the implementation of CERCLA, the Environmental Protection Agency (EPA) addressed the § 121(e)(1) waiver provision for federal agency CERCLA

response actions in § 300.400(e) of the National Contingency Plan (NCP). That provision states, in pertinent part:

"Permit requirements. (1) No federal, state, or local permits are required for on-site response actions conducted pursuant to CERCLA sections 104, 106, 120, 121, or 122. The term on-site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of response actions."⁹

In the preamble of the final rule which proposed this section, EPA provided:

Proposed § 300.400(e)(1) states that the permit waiver applies to all on-site actions conducted pursuant to CERCLA sections 104, 106, or 122; in effect, this covers all CERCLA removal and remedial actions (all "response" actions). However, a number of other federal agencies have inquired as to whether this language would reach response actions conducted pursuant to CERCLA sections 121 and 120. In response, EPA has made a non-substantive clarification of the applicability of the permit waiver in CERCLA section 121(e)(1) to include on-site response actions conducted pursuant to CERCLA sections 120 and 121. . . . The addition of CERCLA section 120 simply recognizes that the permit waiver applies to federal facility cleanups conducted pursuant to CERCLA section 120(e), which are also selected and carried out in compliance with CERCLA section 121.¹⁰

Section 121(e)(1) applies to federal agencies such as the Corps in this case. The Corps may take the role of "lead agency" in a CERCLA cleanup action. The NCP defines "lead agency" as "the agency that provides the OSC/RPM to plan and implement response actions under the NCP. EPA, the USCG, another federal agency, or a state * * * may be the lead agency for a response action."¹¹ The NCP also states that "Federal agencies listed in § 300.175 have duties established by statute, executive order, or Presidential directive which may apply to federal response actions following, or in prevention of, the discharge of oil or release of a hazardous substance, pollutant, or contaminant."¹²

⁸ 40 CFR 300.400(e)(1).

⁹ 55 FR 8666, 8689 (1990) ("National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule) (emphasis added). This change echoed EPA's intentions stated in the proposed rule: "EPA proposes to state that on-site permits are not required for response actions taken by EPA, other federal agencies, States, or private parties pursuant to CERCLA sections 104, 106, or 122." 53 Fed. Reg. 51394, 51406 (1988) ("National Oil and Hazardous Substances Pollution Contingency Plan; Proposed Rule) (emphasis added).

¹⁰ 40 CFR 300.5 (emphasis added). The definition goes on to state, "The federal agency maintains its lead agency responsibilities whether the remedy is selected by the federal agency for non-NPL sites or by EPA and the federal agency or by EPA alone under CERCLA section 120."

¹² 40 CFR 300.170.

The Corps, a branch of the U.S. Department of Defense, is among the agencies listed.¹³ In the case of the FUSRAP program, Congress specifically designated the Corps as the "lead agency" in passing the 1999 Appropriations Act.¹⁴

As the Corps acknowledges in its letter, the permit waiver in § 121(e)(1) has been rarely addressed in the courts. In support of its position, the Corps does cite *McClellan Ecological Seepage Situation (MESS) v. Cheney*, a case which held that a Resource Conservation and Recovery Act (RCRA) permit was not required when activities which might otherwise require a RCRA permit took place at a site only as part of a CERCLA removal or remedial action.¹⁵ In *McClellan*, MESS, a citizens' group, filed suit against the Secretary of Defense, with regard to cleanup actions being taken at McClellan Air Force Base, under RCRA and certain state laws. MESS claimed, *inter alia*, that McClellan was required to obtain a RCRA permit for the management of certain hazardous wastes on the base. The court held that an RCRA permit was not required, because the remedial activities were taken pursuant to CERCLA. The court relied on § 121(e)(1), stating, "Section 121(e) expressly provides that the activity does not have to be separately permitted."¹⁶

The Corps also cites *United States v. City of Denver* to uphold this interpretation of § 121(e)(1).¹⁷ In that case, the court held that CERCLA preempted a zoning ordinance which was in actual conflict with EPA's remedial order. The court stated, "[T]o hold that Congress intended that non-uniform and potentially conflicting zoning laws could override CERCLA remedies would fly in the face of Congress's [sic] goal of effecting prompt cleanups of the literally thousands of hazardous waste sites across the country."¹⁸

¹³ See 40 CFR 300.175(b)(4)(i).

¹⁴ Pub. L. No. 105-245, Title I.

¹⁵ 763 F. Supp. 431 (E.D. Cal. 1989). This holding was later vacated on the basis of subject matter jurisdiction. See *McClellan Ecological Seepage Situation (MESS) v. Perry*, 47 F.3d 325 (9th Cir. 1995).

¹⁶ 763 F. Supp. 431, at 435. The court went on to note in dicta that where there has been treatment that requires a RCRA permit which is not associated with a remedial or removal action under CERCLA, such a permit would be required. *Id.*

¹⁷ 100 F.3d 1509 (10th Cir. 1996).

¹⁸ *Id.* at 1513. The Corps cited *Ohio v. USEPA*, 997 F.2d 1520 (D.C. Cir. 1993) in support of its § 121(e)(1) position. NRC would note that the case upholds a number of provisions in EPA's 1990 revision of the NCP, including § 121(e)(1). However, the court's discussion centers on EPA's definition of the term "onsite," and does not discuss the exemption provision, as a whole, in detail.

⁸ See also, 10 CFR 300.400(e).

In passing the 1998 and 1999 Appropriations Acts, Congress gave no indication that it intended to suspend the waiver provision in § 121(e)(1) of CERCLA in the context of the Corps' FUSRAP activities. The 1999 Act does say: "Provided further, That, except as stated herein, these provisions do not alter, curtail or limit the authorities, functions or responsibilities of other agencies under the Atomic Energy Act (42 U.S.C. 2011 *et seq.*) * * *" In its letter, DOE points to this language to support its argument that the Appropriations Act does not create any authority for it to regulate the Corps. In doing so, DOE interprets the term "provisions" as referring to the provisions of the Appropriations Act and not the provisions of CERCLA. The NRC staff agrees with DOE on this point. While the language appears to indicate that the transfer of the program to the Corps does not alter the extent of DOE and perhaps NRC authority under the AEA, there is no specific indication that the language is intended to direct NRC to regulate the Corps' administration of the FUSRAP program. In particular, there is no evidence that in including this phrase, Congress intended to limit the application of the § 121(e)(1) permit waiver to the Corps' FUSRAP activities. In fact, nowhere in the reports for either the 1998 or 1999 Acts or in the text of the laws themselves did Congress give any hint that it intended NRC to regulate the Corps in its administration of the FUSRAP program. Instead, the inclusion of the specific reference to CERCLA suggests that Congress intended NRC to continue to refrain from regulating activities under the FUSRAP program even after DOE's role was reduced or discontinued.

As DOE states in its letter, the Corps has "consistently expressed the view that its authorities under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) * * *" are sufficient for the Corps' administration of the FUSRAP program. By the time the 1999 Appropriations Act was passed, the Corps' administration of the FUSRAP program under CERCLA was a matter of public record¹⁹ and NRC had not taken any steps to require the Corps to obtain a license from NRC. If Congress had intended NRC to regulate the Corps' activities at FUSRAP sites, it is likely that it would have specifically directed

NRC to do so in passing the 1999 Appropriations Act.

We note, however, that the waiver in § 121(e)(1) does not apply to off-site activities. To the extent that NRC and U.S. Department of Transportation (DOT) requirements apply to the transportation, transfer and disposal of Atomic Energy Act material taken off of FUSRAP sites, the Corps has committed to following applicable requirements, including those for transfer under the AEA, shipment under the Hazardous Materials Transportation Act, 49 U.S.C. 5101, and NRC manifest requirements (e.g., 10 CFR § 20.2006).²⁰

NRC Authority Under UMTRCA

Many FUSRAP sites contain material over which NRC would have no regulatory jurisdiction regardless of whether the Corps is the lead agency in implementing the program and regardless of whether response actions by the Corps under the program are subject to CERCLA. In particular, of the 21 sites at which remediation has not yet been completed, 12 sites contain residual material resulting from activities that were not licensed by NRC at the time the Uranium Mill Tailings Act of 1978 (UMTRCA) became effective or at any time thereafter. As defined by the UMTRCA, NRC does not have authority to regulate cleanup of covered residual material resulting from an activity that was not so licensed.

The language of section 83 of the Atomic Energy Act (42 U.S.C. 2113(a)), was added to that Act by UMTRCA. Section 83 a. requires NRC to impose certain terms and conditions relating to cleanup with respect to any "license issued or renewed after the effective date" of section 83 for covered activities, and also imposes such terms or conditions on any such "license in effect on the date of enactment" of the section. No such responsibility was imposed upon NRC with respect to activities that were not under NRC license before the date of the enactment of section 83, if they were not licensed thereafter.

Prior to the enactment of UMTRCA, neither the AEC nor the NRC had statutory jurisdiction over residual material resulting from the processing of ore for source material. This position was taken by the AEC after careful legal analysis, and was subsequently adopted

²⁰ While the Corps will be following NRC's requirements in this area, it is unlikely that any specific NRC license requirements would apply to shipments from FUSRAP sites. However, the staff will request that the Corps contact NRC if it plans to ship material that does not meet one of the exemptions for a specific license in NRC regulations. See, e.g., 10 C.F.R. § 71.10.

by the NRC when it succeeded to the AEC's regulatory functions. Though NRC exercised some control over such material in connection with licensed processing of ore for source material, it did not exercise jurisdiction at inactive sites where no license was in effect. UMTRCA was enacted because the Congress recognized that NRC did not have jurisdiction over radioactive residuals resulting from the extraction of uranium or thorium from ore processed for its source material content at inactive sites. This is evidenced by the floor remarks regarding the amended version of H.R. 13650, the bill that was enacted as UMTRCA. Senator Hart explained:

Although the NRC licenses active uranium mining and milling activities, existing law does not permit the Commission to regulate the disposal of mill tailings once milling and mining operations cease and the operating license expires. It is that authority to regulate tailings after milling operations cease, that we propose be given to the NRC.²¹

Because the residual material at many FUSRAP sites was generated in activities that were not licensed when UMTRCA was enacted, or thereafter, NRC today has no basis to assert any regulatory authority over handling of the residuals at those sites.

The NRC staff notes that many of the remaining sites (i.e., sites containing materials other than mill tailings) also raise some significant jurisdictional questions in their own right. For instance, a few of the sites may still be in legal possession of DOE even though the Corps is conducting clean up at the site under FUSRAP. While the issue of possession appears to be a matter of continuing discussion between the Corps and DOE, it is highly unlikely that NRC would have authority to require a license for cleanup activities conducted at a site which continues to be a DOE-owned or controlled site. In addition, the concentration of radioactive material at some of the remaining sites may not be sufficient to trigger NRC license requirements. While NRC does not have information sufficient to reach a final conclusion for specific sites, it is the NRC staff's understanding that some of these sites may contain only "unimportant quantities" of source material as defined under 10 CFR § 40.13(a). If this is the case, the amount of material at these sites would not be sufficient to implicate NRC license requirements. Given the limitations of NRC jurisdiction under UMTRCA, the potential DOE ownership issues, and the possibility that several sites may

²¹ 124 Cong. Rec. S18,748 (October 13, 1978).

¹⁹ See, e.g., Letter from Albert J. Genetti, Jr., U.S. Army Deputy Commander, U.S. Army Corps of Engineers, to Mr. Thomas B. Cochran and Ms. Barbara A. Finamore, Natural Resources Defense Council, May 20, 1998.

contain "unimportant quantities" of source material, it is likely that the number of FUSRAP sites over which NRC may have jurisdiction would be very small even absent the CERCLA permit waiver.

The Corps' Authority Under the Appropriations Act

In its response, the Corps states that the AEA also exempts FUSRAP activity from NRC licensing because Congress intended the Corps to fill the shoes of DOE, an agency exempt from NRC regulatory requirements under most circumstances. DOE disagrees with this characterization, claiming that, for the most part, it has no role in the FUSRAP program at this time (regulatory, contractual, or otherwise). As such, in DOE's view, the Corps cannot rely on any exemption in the AEA to avoid regulation by NRC. Nevertheless, DOE acknowledges that the transfer to the Corps did not completely eliminate the Department's involvement with FUSRAP. While the issues have yet to be resolved, DOE may have responsibility for inventory reporting of government-owned FUSRAP sites to the General Services Administration and may be required to conduct post-cleanup monitoring at some sites after the Corps' clean up activities cease.

DOE and the Corps are working on an MOU to address their disagreements regarding the nature of the transfer of the FUSRAP program and their respective responsibilities under the program. Until the disagreement has been resolved, either by the agencies or by further direction from Congress, the NRC staff need not reach a conclusion on the matter. Nevertheless, in view of the clear applicability of CERCLA § 121(e)(1) to the Corps' activity at FUSRAP sites, the staff does not believe that it would be appropriate to require the Corps to obtain an NRC license for its activity at FUSRAP sites.

IV. Conclusion

In sum, Congress has given NRC no clear directive to oversee USACE's ongoing effort under CERCLA to complete the FUSRAP cleanup project. Indeed, Congress has provided NRC no money and no personnel to undertake an oversight role. In addition, Congress has made it clear that the Corps is to undertake FUSRAP cleanup pursuant to CERCLA which waives permit requirements for onsite activities. In these circumstances, we are disinclined to read our statutory authority expansively, and to commit scarce NRC resources, to establish and maintain a regulatory program in an area where, under Congressional direction, a sister

federal agency already is at work and has committed itself to following appropriate safety and environmental standards.

Accordingly, I deny the petition insofar as it requests NRC to impose licensing and other regulatory requirements on the Corps for that agency's handling of radioactive material at FUSRAP sites. Both the permit waiver provision of CERCLA and the ambiguity regarding DOE's role in the program lead me to the conclusion that NRC should not inject itself into the FUSRAP program at this time. Absent specific direction from Congress to the contrary, NRC will continue to refrain from regulating the Corps in its clean up activities at FUSRAP sites.

As provided by 10 C.F.R. § 2.206, a copy of this Decision will be filed with the Secretary of the Commission for the Commission's review. The Decision will become the final action of the Commission 25 days after issuance, unless the Commission, on its own motion, institutes review of the Decision within that time.

Dated at Rockville, Maryland this 26th day of March 1999.

For the Nuclear Regulatory Commission.

Carl J. Paperiello,

Director, Office of Nuclear Material Safety and Safeguards.

[FR Doc. 99-8315 Filed 4-2-99; 8:45 am]

BILLING CODE 7590-01-P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 35-26995]

Filing Under the Public Utility Holding Company Act of 1935, as Amended ("Act")

March 26, 1999.

Notice is hereby given that the following filing(s) has/have been made with the Commission pursuant to provisions of the Act and rules promulgated under the Act. All interested persons are referred to the application(s) and/or declaration(s) for complete statements of the proposed transaction(s) summarized below. The application(s) and/or declaration(s) and any amendments is/are available for public inspection through the Commission's Office of Public Reference.

Interested persons wishing to comment or request a hearing on the application(s) and/or declaration(s) should submit their views in writing by April 20, 1999, to the Secretary, Securities and Exchange Commission, Washington, DC 20549-0609, and serve

a copy on the relevant applicant(s) and/or declarant(s) at the address(es) specified below. Proof of service (by affidavit or, in case of an attorney at law, by certificate) should be filed with the request. Any request for hearing should identify specifically the issues of fact or law that are disputed. A person who so requests will be notified of any hearing, if ordered, and will receive a copy of any notice or order issued in the matter. After April 20, 1999, the application(s) and/or declaration(s), as filed or as amended, may be granted and/or permitted to become effective.

Ameren Corporation, et al. (70-9427)

Ameren Corporation ("Ameren"), a registered holding company, Union Electric Company ("UE"), an electric and gas public utility subsidiary of Ameren, Union Electric Development Company ("UEDC"), an indirect nonutility subsidiary of Ameren, Ameren Development Company ("Ameren Development"), and "energy-related company" within the meaning of rule 58 and a subsidiary of Ameren, Ameren ERC, Inc., and "energy-related company" within the meaning of rule 58 and a wholly owned subsidiary of Ameren Development, all located at 1901 Chouteau Avenue, St. Louis, Missouri 63103, and Central Illinois Public Service Company ("CIPS"), an electric and gas public utility subsidiary of Ameren and CIPSCO Investment Company ("CIC"), a nonutility subsidiary of Ameren, both located at 607 East Adams, Springfield, Illinois 62739, (collectively, "Applicants") have filed an application-declaration under sections 6(a), 7, 9(a), 10, 12(c), 13(b) and rules 45, 46, 54, 87, 90 and 91 of the Act.

By order dated December 30, 1997 ("Merger Order"),¹ Ameren was authorized, among other things, to acquire all of the issued and outstanding common stock of UE and CIPS (collectively, the "Operating Companies") and Ameren Services, a subsidiary service company. By order dated March 13, 1998 ("Financing Order"),² Ameren was authorized, among other things to: issue and sell common stock and other securities; repay, redeem or retire securities of Ameren or its subsidiaries; and, provide working capital to its subsidiaries. Ameren was also authorized to issue guarantees and provide other forms of credit support in respect of the obligations of its existing and future nonutility subsidiaries in an aggregate principal amount not to exceed \$300

¹ See Holding Co. Act Release No. 26809.

² See Holding Co. Act Release No. 26841.

ATTACHMENT 3
Prior Correspondence with NRC



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 04, 2000

Mr. Gregory E. Johnson, Chief
Hazardous, Toxic, and Radioactive Waste Branch
Engineering Division
U.S. Army Corps of Engineers
P.O. Box 1715
Baltimore, MD 21203-1715

SUBJECT: DISPOSAL OF RADIOACTIVE WASTE FROM COLONIE, NY, FUSRAP SITE

Dear Mr. Johnson:

I am writing in response to your letter of August 27, 1999, to Mr. John Hickey, U.S. Nuclear Regulatory Commission (NRC), in which you requested our concurrence with your proposed approach for disposing of radioactive waste from the Colonie, NY, Formerly Utilized Sites Remedial Action Program (FUSRAP) site. You state that some of the waste at the site contains "unimportant quantities" of source material, as defined in our regulations in 10 CFR 40.13(a), and that you intend to ship these to a RCRA disposal facility. You also note that some materials may contain enriched uranium, and you provide a method for distinguishing between source material (i.e., material without enriched uranium) and enriched uranium. My staff has spoken with Mr. Hans Honerlah of your office several times in the last two months concerning this issue, and we understand that you have not shipped these materials as yet, pending our response to your letter.

The NRC is currently evaluating options for revising 10 CFR Part 40, "Domestic Licensing of Source Material," including a proposal for § 40.13(a) that would address the issue of disposal of unimportant quantities of source material (i.e., material with less than 0.05% source material by weight). On November 1, 1999, the staff submitted a paper to the Commission (SECY-99-259, available at <http://www.nrc.gov/NRC/COMMISSION/SECYS/index.html>) that discusses these options. The Commission will provide direction to the staff on these matters in the near future. In the interim, the Commission has chosen to address these disposals on a case-by-case basis. Under current Commission direction, the staff will not object to transfers of such material for disposal from NRC licensees which will result in individual doses less than 1 millisievert per year (100 mrem/year). The staff will notify the Commission of all proposed transfers by licensees which could result in individual doses that exceed 0.25 millisievert per year (25 mrem/year).

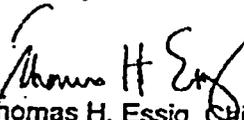
With respect to manifesting of unimportant quantities of source material, your understanding that manifesting pursuant to 10 CFR 20.2006 is not required is correct. This section only applies to transfers of low-level radioactive waste intended for a Part 61 disposal facility.

Your letter also proposes to distinguish between source material and special nuclear material by defining special nuclear material as having a ^{235}U content of one or more percent by weight. This interpretation is contrary to our regulations in 10 CFR 110.2, which defines special nuclear material as uranium enriched to greater than 0.711% ^{235}U . Also, we regulate special nuclear material in accordance with the regulations in 10 CFR Part 70, so that the "unimportant quantity" provision in 10 CFR Part 40 does not apply to these materials.

2

As you know, NRC does not regulate activities at FUSRAP sites and thus we have no authority to formally concur on your decisions. However, we trust that our clarification of the above regulations will be useful in your decisionmaking for disposal options. If you have any questions, please contact James Kennedy of my staff at 301-415-6668.

Sincerely,


Thomas H. Essig, Chief
Uranium Recovery and Low-Level
Radioactive Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

August 27, 1999

REPLY TO
ATTENTION OF

Engineering Division

Mr. John Hickey
Chief, Low-Level Waste and
Decommissioning Projects Branch
U.S. Nuclear Regulatory Commission
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards
Washington, DC 20555-0001

Dear Mr. Hickey:

The purpose of this correspondence is to notify you of our intent to ship certain radiologically contaminated waste from the Colonie, NY, Formerly Utilized Sites Remedial Action Program (FUSRAP) site (Colonie Site) to a RCRA disposal facility.

We have an estimated 1,770 cubic yards of above ground stockpiled material, including soils and concrete building debris, prepared for disposal. In addition, we have about 11 acres of radiologically contaminated soil in place at the Colonie Site. Virtually all of this material contains RCRA hazardous substances in the form of elevated levels of lead and other metals. The material will be removed and tested for off-site disposal through the course of the remedial action. Enclosure A provides background information regarding the Colonie site history, license considerations, and material characterization. Some portions of the stockpiled material and some portions of the in-situ soils contain "unimportant quantities of source material", as that term is defined in Title 10, Code of Federal Regulations, part 40.13(a). It is these portions that we intend to ship to a RCRA disposal facility.

The United States Army Corps of Engineers estimates the cost to ship the entire 1,770 cubic yards of the Colonie Site stockpiled material to Envirocare, a disposal facility licensed for receipt of source material, to be \$4.5 million. Of the 1770 cubic yards of above ground stockpiled material, approximately 960 cubic yards is source material containing a uranium average less than 0.05% by weight. (See Attachment 3 of Enclosure A for

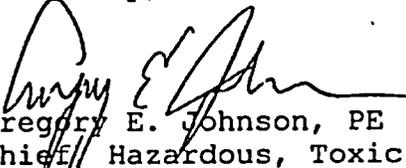
sampling data on stockpiled material.) If 960 cubic yards are shipped to a RCRA facility permitted to accept "unimportant quantities of source material", the cost savings would be close to \$2 million. Further, USACE estimates an additional cost savings of up to \$20 million if we ship the anticipated volume of in-situ soil expected to contain "unimportant quantities of source material" to a RCRA facility, instead of the sending entire volume to a NRC licensed facility.

We understand the Commission decided that similar waste streams, to be shipped from the METCOA site in Pulaski, Pennsylvania, and from the Lake City Army Ammunition Plant in Independence, Missouri, were not subject to the NRC's disposal requirements under 10 CFR Part 20. (See Enclosure B, copies of NRC letters dated December 23, 1998 and April 5, 1999.) Furthermore, we understand that the Commission did not require manifesting the shipped material pursuant to 10 CFR Part 20.2006. We believe that the Colonie Site waste stream containing "unimportant quantities of source material", identified above, warrants a similar treatment.

Therefore, unless there are objections on the part of the Commission, we intend to ship the segregated 960 cubic yards of stockpiled source material to a RCRA facility permitted to accept thorium and uranium less than 0.05% by weight no later than November 1, 1999. It is our intent that all additional material excavated from the site that is identified as source material containing thorium or uranium less than 0.05% by weight will also be shipped to a permitted RCRA facility. It is also our intent to get approval from the necessary State agencies prior to disposal.

We look forward to your concurrence with our proposed approach. Please advise us in writing if this approach is acceptable. If you have any questions, please call me at 410-962-2207 or our technical point of contact, Mr. Hans Honerlah, at 410-962-9184. Thank you for your consideration in this matter.

Sincerely,


Gregory E. Johnson, PE
Chief, Hazardous, Toxic, and
Radioactive Waste Branch
Engineering Division

**ATTACHMNET 4
STOCKPILED ANALYTICAL DATA**

STOCKPILED UNIMPORTANT QUANTITY OF SOURCE MATERIAL					
Sample ID	Yards^(a)	Tons	Grams	U-238 (pCi/g)	U-238 (Curies)
CSL-594	213	268.15	243261577	43.5	0.010581879
CSL-596	245	305.5	277144926	19.1	0.005293468
CSL-597	240	292.8	265623680	22.4	0.00594997
CSL-598	217	258.5	234507245	19.5	0.004572891
CSL-599	215	265.91	241229484	8.3	0.002002205
CSL-600	273	321.89	292013683	13	0.003796178
CSL-601	263	313.87	284738062	8.3	0.002363326
CSL-550	243	302.32	274260079	51.3	0.014069542
CSL-551	280	344.55	312570488	24.1	0.007532949
CSL-556	232	299.46	271665530	16.6	0.004509648
CSL-560	279	325.80	295560775	66.8	0.01974346
CSL-561	268	296.21	268717180	15.1	0.004057629
CSL-562	330	377.51	342471296	20.8	0.007123403
CSL-563	272	340.15	308578876	83.7	0.025828052
CSL-564	293	342.27	310502107	15.9	0.004936984
CSL-581	357	451.25	409367096	22	0.009006076
CSL-582	281	352.30	319601170	36.1	0.011537602
CSL-583	277	345.10	313069440	131.9	0.041293859
CSL-584	258	309.95	281181898	148	0.041614921
CSL-585	309	375.41	340566208	164.3	0.055955028
CSL-587	296	365.13	331240350	148.5	0.049189192
CSL-592 ^(b)	250	325	294835028	15.8	0.004658393
CSL-589	300	382.9	347361022	8.1	0.002813624
CSL-593 ^(b)	250	325	294835028	62.9	0.018545123
CSL-590	245	293.1	265895836	12.4	0.003297108
CSL-591	255	315.3	286035336	81.7	0.023369087
CSL-595 ^(b)	250	325	294835028	65.3	0.019252727
Total	7,191	8820.33	8001668425		0.402894325
Weighted average U-238 (pCi/g) in UQSM =				50.35128969	

^(a)- yards estimated based on conveyor weights established during treatment using conversion factor of 1.3 tons/yard.

^(b)- if treatment is not required based on chemical data, tonnage is established using the conversion of 1.3 ton/yard and an estimated volume.

- UQSM – Unimportant Quantity of Source Material as defined in 10 CFR 40.13(a)

STOCKPILED MATERIAL WITH ELEVATED ACTIVITY					
Sample ID	Yards^(a)	Tons	Grams	U-238 (pCi/g)	U-238 (Curies)
CSL-468	246	319.45	289800152.4	216.0	0.062596833
CSL-539	270	350.73	318176889.8	233.1	0.074167033
CSL-541	283	367.90	333753251.1	205.0	0.068419416
CSL-544	250	324.38	294272573	176.9	0.052056818
CSL-566	277	360.44	326985653.3	196.4	0.064219982
CSL-568	295	382.85	347315662.4	184.7	0.064149203
CSL-574 ^(b)	250	325.00	294835027.5	237.7	0.070082286
CSL-578	312	405.3	367681958.9	929.7	0.341833917
CSL-586	269	349.92	317442070.2	181.6	0.05764748
Total	2,451	3185.97	2890263239		0.855172969
Weighted average U-238 (pCi/g) In material with greater than 0.05% by weight uranium =					295.8806511

^(a) - yards estimated based on conveyor weights established during treatment using conversion factor of 1.3 tons/yard.

^(b) - if treatment is not required based on chemical data, tonnage is established using the conversion of 1.3 ton/yard and an estimated volume.

ATTACHMENT 5

Mass Balance Equation for determining blending ratio:

$$WAC^{Uranium\ 238} (EA_{ton} + UQSM_{ton}) = U^{238}_{EA} (EA_{ton}) + U^{238}_{UQSM} (UQSM_{ton})$$

where:

- $WAC^{Uranium-238}$ = Disposal Facility Waste Acceptance Criteria for Uranium-238 (pCi/g)
- U^{238}_{EA} = Average U^{238} concentration of material with elevated activity (where the average U^{238} concentration is greater than 0.05% by weight)(pCi/g)
- U^{238}_{UQSM} = Average U^{238} concentration of material containing an unimportant quantity of source material (pCi/g)
- EA_{ton} = Tons of material with elevated activity (where the average U^{238} concentration is greater than 0.05% by weight)
- $UQSM_{ton}$ = Tons of material containing an unimportant quantity of source material

Using the Site specific data from Attachment 4 and the current disposal facility WAC of 170 pCi/g for U^{238} . [Note: All thorium-232 data for the stockpiled material is at or near background levels and therefor not considered in the calculation]

- $170 \frac{pCi}{g} U^{238} (EA_{ton} + UQSM_{ton}) = 296 \frac{pCi}{g} U^{238} (EA_{ton}) + 50 \frac{pCi}{g} U^{238} (UQSM_{ton})$
- $170 \frac{pCi}{g} U^{238} (EA_{ton}) + 170 \frac{pCi}{g} U^{238} (UQSM_{ton}) = 296 \frac{pCi}{g} U^{238} (EA_{ton}) + 50 \frac{pCi}{g} U^{238} (UQSM_{ton})$
- $170 \frac{pCi}{g} U^{238} (UQSM_{ton}) - 50 \frac{pCi}{g} U^{238} (UQSM_{ton}) = 296 \frac{pCi}{g} U^{238} (EA_{ton}) - 170 \frac{pCi}{g} U^{238} (EA_{ton})$
- $120 \frac{pCi}{g} U^{238} (UQSM_{ton}) = 126 \frac{pCi}{g} U^{238} (EA_{ton})$

$$UQSM_{ton} = 1.05(EA_{ton})$$