New York State Department of Environmental Conservation

Division of Solid and Hazardous Materials

reau of Radiation & Hazardous Site Management JO Wolf Road, Albany, New York 12233-7255

Phone: (518) 457-9253 FAX: (518) 457-9240



FEB 2 2 1999

Mr. Raymond L. Pilon U. S. Army Engineering District, Buffalo District 1776 Niagara Street Buffalo, New York 14207-3199

Dear Mr. Pilon:

Re: Draft Scope of Work - Remedial Investigation/Feasibility Study/Proposed Plan for the Niagara Falls Storage Site, Lewiston, New York

This letter provides the New York State Department of Environmental Conservation's comments on the Draft Scope of Work - Remedial Investigation/ Feasibility Study/Proposed Plan for the Niagara Falls Storage Site, Lewiston, New York.

While our specific comments are enclosed, I would like to, again, express our Department's position which we presented in our September 28, 1993 letter from former Commissioner Thomas Jorling to Mrs. Hazel O'Leary, Secretary of the United States Department of Energy. Our position is that we believe the 40 CFR Part 192 uranium mill tailings standard established by the United States Environmental Protection Agency was never intended to regulate such high activity radioactive wastes as the K-65 residues contain, and that the most applicable standard would be those of 40 CFR Part 191 requiring deep mine repository disposal and assurance of over 10,000 years of isolation from humankind.

Thank you for the opportunity to comment on this document. If you have any questions or need further information, please contact me at the above telephone number.

Sincerely,

Paul J. Merges, Ph.D.

Soulf. Merges

Director

Bureau of Radiation & Hazardous Site Management

Lieutenant Colonial M. Feierstein, USACE cc:

P Giardina, USEPA

R. Aldrich, NYSDOL

K. Rimawi, NYSDOH

ARARS to be determined in RIJES phase.

4/26/99 M. BAYCZAK J. Leithner 03.01.0073 4 R. J. Leithner

New York State Department of Environmental Conservation's Comments on the

Draft Scope of Work - Remedial Investigation/Feasibility Study/Proposed Plan for the Niagara Falls Storage Site, Lewiston, New York (December 1998)

Comment 1: On page 1, Section 1.0, *Introduction and Summary*, refers to the wastes at the Niagara Falls Storage Site as "both high and low activity, low level radioactive waste." The *Note* on page 4 asserts, "The term 'low level' is a legal term that specifies that the material was generated from processing of uranium ore." Both of these statements are inconsistent with the federal Low-Level Radioactive Waste Policy Act (LLRWPA) and the Atomic Energy Act (AEA). The legal definition of "low-level radiative waste" is given in the LLRWPA as "radioactive waste not classified as high-level radioactive waste, spent nuclear fuel, or byproduct material as defined in section 2014(e)(2) of this title [42 U.S.C. 2021b(2)]. "By-product material" is defined in the Atomic Energy Act as "the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content [42 U.S.C. 2014e(2), underlining added]. Therefore, contrary to the *Note* on page 4, the fact that the radioactive waste at NFSS was generated from the processing of uranium ore means that it is not low-level radioactive waste. The Scope of Work should be revised to remove the erroneous use of the term "low-level radioactive waste."

The average concentration of radium-226 in the high-activity waste is 520,000 picocuries per gram. If this waste were LLRW, it would be classified as greater than Class C, which under both NRC and New York State regulations is not generally acceptable for near-surface disposal. This renders Task 3, *Landfill Survey*, (page 10) a futile effort when applied to the high-activity wastes. The appropriate long-term disposal site for those wastes is a geologic repository as defined in 10 CFR Part 60. The task should be reworded to avoid giving the impression that this waste can be landfilled and thus wasting public funds seeking a landfill to accept it.

Comment 2: In the first paragraph on page 3, it is stated, "This statement of work delineates the requirements for a combined remedial investigation, feasibility study, proposed plan and draft Record of Decision (ROD) " Such an approach is not acceptable to this Department, nor is it consistent with the applicable regulations or the schedule of deliverables presented in Section 11 of the Statement of Work. The latter schedule indicates that the RI/FS, proposed plan, and draft ROD will be due on different dates, implying that they are separate documents.

The federal fiscal year 1999 Energy and Water Development Appropriations Act (105 P.L. 245) appropriated \$140,000,000 to the Corps for FUSRAP with the provision that

response actions by the United States Army Corps of Engineers under this program shall be subject to the administrative, procedural, and regulatory provisions of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601 et seq.), and the National Oil and Hazardous Substances Pollution contingency Plan, 40 CFR, Chapter 1, Part 300.

Section 300.430(f)(1)(B)(ii) of 40 CFR Part 300 states, "The selection of a remedial action is a two-step process" A contractor cannot prepare a combined RI/FS, proposed plan and draft ROD if the Corps of Engineers intends to comply with that regulation. The statement of work must be revised accordingly.

Comment 3: In Section 1.3, Constituents of Concern, it is acknowledged that the site has not been thoroughly characterized for conventional chemical contaminants. A statement should be added to this section which expresses a positive approach in addressing this issue.

Comment 4: On page 7, Section 2.1, it is stated, "The strategy for the Niagara Falls Storage Site is to remediate radiological contaminants at the site such that Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) closure is achieved using 'protective' and 'least costly' rating criteria." Section 300.430(e) (9)(iii) sets forth nine criteria for evaluating alternatives: overall protection of human health and the environment, compliance with ARARs, long-term effectiveness and permanence, reduction of toxicity, mobility, or volume through treatment, short-term effectiveness, implement ability, cost, state acceptance, and community acceptance. The statement of work must direct the contractor to evaluate all of those factors for each alternative.

Comment 5: In Section 3, Site Assessment and Characterization, one of the tasks should be the development of release criteria for both the chemical contaminants and the radiological contaminants. This will be necessary to fulfill Task 9, the identification of remediation areas and volumes, especially for the soils around building 401 (unless the USACE uses background levels as the cleanup level).

Comment 6: In Section 3.7 Task 7: Specification and Acquisition of Field Data (If Required), we recognize that the proposed number of borings and soil samples are for cost estimation purposes only. Three samples would generally be inadequate to characterize a soil profile. We understand that this discussion was for estimation purposes, but the work statement needs to develop a sampling plan that will obtain the data with adequate spatial resolution that is needed for soil profile characterization. One technique that may help identify contaminated zones within the cores is to obtain pointwise count rate measurements (say 30 second counts every few inches down the length of each core segment).

If there are areas where surface contamination is suspected and if they are not thoroughly investigated, essentially 100% walkovers are recommended. If the areas are large enough to warrant automated equipment, (e.g. the USRADS system) complete surveys can be easily conducted. It should be noted that this Department plans to conduct surveys and sampling programs during and after any remediation work. The work plan should be designed to include the cooperative involvement of this Department.

Comment 7: In Appendix 2, Risk-Based Screening, is discussed. To demonstrate that the selected remedy will comply with this Department's *Cleanup Guideline for Soils Contaminated with Radioactive Materials*, Division of Solid & Hazardous Materials Technical Administrative Guidance Memorandum 4003 ("TAGM 4003"), the radiation doses due to residual radioactive material must be estimated. This Department will expect to see data of sufficient quality and quantity that describes the location of any remaining radioactive material so that estimates of residual doses can be made.