143128-01
NF-116

Formerly Utilized Sites Remedial Action Program (FUSRAP)

ADMINISTRATIVE RECORD

for

Niagara Falls Storage Site

U.S. Department of Energy

4.69 5292.4

200-1e

NFSS_01.06_0985_a

143128

Department of Energy

Washington, DC 20585

March 7, 1996

Dr. Robert J. Budnitz
Chair, National Academy of Sciences
Committee on Remediation of Buried and Tank Wastes
Future Resources Associates, Incorporated
2000 Center Street, Suite 418
Berkeley, California 94704

Dear Dr. Budnitz:

The Department of Energy Office of Environmental Restoration extends its appreciation to the National Academy of Sciences (NAS) Committee on Remediation of Buried and Tank Wastes for their efforts in providing recommendations for improving the Department's management of the Niagara Falls Storage Site (NFSS).

The Department has completed its review of "Safety of the High-Level Uranium Ore Residues at the NFSS, Lewiston, New York," and would appreciate an opportunity to interface with your Committee to ask some questions, seek further clarification on identified issues, and also provide the Committee feedback on the report, including potential future activities. My staff will contact Mr. Robert Andrews to establish an agreeable time and place to meet. In preparation of our meeting, I have enclosed a draft Implementation Plan that describes the department's future activities at NFSS based on your Committee's recommendations.

Thank you again for the hard work your Committee has dedicated to the NFSS project over the last two years.

If you have any questions, please do not hesitate to call me at (202) 586-6331, or you may also call my Associate, John Baublitz, at (301) 903-3250.

Sincerely,

James M. Owendoff

James M. Owendoff
Deputy Assistant Secretary
for Environmental Restoration

Enclosure

cc: R. Andrews, NAS
John Lehr, EM-50

143128

U.S. DEPARTMENT OF ENERGY

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM

PROPOSED

IMPLEMENTATION PLAN

TO THE

NATIONAL RESEARCH COUNCIL REPORT:

SAFETY OF THE HIGH-LEVEL URANIUM ORE RESIDUES
AT THE NIAGARA FALLS STORAGE SITE, LEWISTON, NEW YORK

FEBRUARY 12, 1996

143128

NIAGARA FALLS STORAGE SITE IMPLEMENTATION PLAN

A. Introduction

In March 1994, the Department of Energy requested the National Academy of Sciences (NAS), an arm of the National Research Council (NRC), to review the documentation supporting the proposed waste containment structure at the Niagara Falls Storage Site (NFSS) and independently advise if it will provide appropriate protection to the surrounding population and environment. A subcommittee to the NAS Committee on Remediation of Buried and Tank Wastes was formed to perform the review. In December 1995, the committee issued their conclusions with the following three recommendations:

1. Following completion of related or similar treatment technology studies such as the Fernald Environmental Management Project vitrification demonstration and related cost-risk-benefit studies, a program should be developed by the Department for removal, treatment, and disposal off site of the NFSS high-level residues. Because there is no immediate hazard to the off-site public from the residues in their present configuration, such studies will help ensure proper handling of the residues when they are removed for disposal, as well as to provide an example for future remediation of other sites containing radioactive residues.

2. After removal of the high-level residues, remaining wastes should be buried under a suitable protective cap.

3. The adequacy of site monitoring and maintenance activities necessary to ensure the safety of the public and the integrity of the NFSS should be assured. An alternative NFSS monitoring strategy should be developed to measure and track transport of radiological and chemical contaminants from the NFSS waste containment structure, as well as those reaching NFSS from contiguous waste disposal areas off site, both prior to and following removal of the residues.

The following plan was developed to implement NRC's recommendations stated above.

143128

B. PROPOSED IMPLEMENTATION PLAN FOR NRC RECOMMENDATIONS

Recommendation 1:

Following completion of related or similar treatment technology studies, such as the Fernald Environmental Management Project (FEMP) vitrification demonstration and related cost-risk-benefit studies, a program should be developed by the Department of Energy for removal, treatment, and disposal off site of the NFSS high-level residues. Because there is no immediate hazard to the nearby public from the residues in their present configuration, such studies will help ensure proper handling of the residues when they are removed for disposal, as well as to provide an example for future remediation of other sites containing radioactive residues.

Implementation Plan:

Fiscal Year	Action
1996-2002	Continue to monitor remedial activities at the Fernald site, across the DOE complex and private industry, to gather experiences potentially applicable to NFSS future activities.
2002-2004	Evaluate technologies, including consideration of results of the FEMP vitrification demonstration, and develop removal plan for residues.
2005-2010	Issue Record of Decision or equivalent documentation. Start implementing removal plan for residues. Current estimate for completion is three to five years; actual completion date is subject to total costs for removal, treatment, and disposal and the funds provided.

Recommendation 2:

After removal of the high-level residues, remaining wastes should be buried under a suitable protective cap.

Implementation Plan:

Fiscal Year	Action
2010	Complete design of long-term cap to incorporate information developed during removal of residues.
2011-2012	Install long-term cap.

Recommendation 3:

The adequacy of the site monitoring and maintenance activities necessary to ensure the safety of the public and the integrity of the NFSS should be assured. An alternative NFSS monitoring strategy should be developed to measure and track transport of radiological and chemical contaminants from the NFSS containment structure, as well as those reaching NFSS from contiguous waste disposal areas off site, both prior to and following removal of the residues.

Implementation Plan:

Fiscal Year	Action
February 1996	Review NAS report on NFSS, identify any issues needing further clarification, and set up a de-brief with NAS committee.
June 1996	Review current monitoring and maintenance activities for adequacy. Develop alternative monitoring and maintenance strategy to include identified improvement areas.
1997	Implement necessary changes for monitoring and maintenance activities at NFSS identified from review.
2000-2010	Periodically review monitoring and maintenance activities for adequacy and implement necessary changes for sampling activities. Will also incorporate into design of long-term cap.