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From: William Boeck <a href="mailto:boeck@niagara.edu">[mailto:boeck@niagara.edu]</a> Sent: Saturday, January 08, 2011 10:43 AM

To: Fusrap, LRB

Subject: Development of Waste Disposal Options and Fernald Lessons Learned

Technical Memorandum

Development of Waste Disposal Options and Fernald Lessons Learned Technical Memorandum

From the Tech Memo

"Lessons learned at Fernald will address material excavation, material handling and transfer, packaging, transportation, waste disposal, personnel exposures and associated controls, radon abatement, radiological exposures to the public and environment, and public affairs."

"• Present an inventory, based on available documented information, of the various IWCS waste streams (e.g., K-65 residues, other residues, and other contaminated soils) by volume, activity and generation; • Identify, for each IWCS waste stream, the potential waste disposal facilities, waste acceptance criteria and licensing requirements, or other factors for each waste facility that may impact shipment and disposal of NFSS wastes; • Provide an estimate of disposal costs associated with various waste types for each waste facility; and • Identify transportation modes and associated unit rates available for shipment of waste to the waste facilities".

## Response

Phased plan for remedial action

Phase one: removal of L-50 from bldg 414 & 413, packaging and transportation Phase two: removal of L30 from Bldg 411 Phase 3: remove k-65 from recarbonation pit Phase 4: remove k-65 from 411within 5 years of inception Remove R-10 Phases are in increasing order of accessibility and/or radium content.

Starting with the buildings 413 and 414. These are circular concrete tanks, 62 feet in diameter and 19 feet deep. The contents were originally 7% uranium ore before processing at Linde. These are the longest in-place residues at NFSS. The goals will be to avoid the problems at Fernald and develop equipment and training for cover removal, residue removal, handling, packaging, and shipment of Afrimet ores. If there is a radium separation process, that can also be developed and tested.

Classification: UNCLASSIFIED

Caveats: NONE