

December 11, 1996

410-8778
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MEMORANDUM TO: John Hickey, Chief
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management, NMSS

FROM: Joseph Holonich, Chief [original signed by:
Uranium Recovery Branch Joseph Holonich]
Division of Waste Management, NMSS

SUBJECT: REVIEW OF MOLYCORP INTERIM STORAGE FACILITY

In accordance with your technical assistance request (Task # 96736), dated November 1, 1996, we have reviewed surface water hydrology and erosion protection aspects of the subject facility. Based on that review, we conclude that the facility has been acceptably designed to resist flooding and erosion for the proposed interim storage period of 10 years.

The attached technical evaluation, prepared by Ted Johnson, documents our review of the surface water hydrology aspects of the design. If you have any questions, he may be reached at 415-6658.

Attachment: Technical Evaluation

cc: R. Person

contact: Terry Johnson
415-6658

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DATE	12/10/96	12/11/96	

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TECHNICAL EVALUATION
MOLYCORP INTERIM STORAGE FACILITY
WASHINGTON, PA

Introduction

Molycorp Inc. (Molycorp) proposes to temporarily store contaminated material at the Molycorp site in Washington, Pennsylvania. Molycorp intends to provide a facility to contain thorium contaminated soils and will provide liners to prevent infiltration of water into the structure. The structure will store up to 10,000 cubic yards of material and will be located outside the 100-year floodplain of Chartiers Creek near the existing Interstate 70 highway embankment.

The storm water drainage system will consist of open ditches and culverts surrounding the facility. The site drainage system will collect water and route it through sediment control facilities before discharging to Chartiers Creek.

Evaluation

Molycorp provided information regarding specific details of the hydraulic design features and also provided information regarding the potential for flooding of the site and the facility. The staff reviewed the design parameters including runoff coefficients, times of concentration, rainfall intensity, rainfall frequency, ditch design velocities and ditch erosion protection.

Based on a review of the information provided, the staff concludes that an adequate hydraulic design has been provided to reasonably assure stability of the site for the proposed interim storage period of 10 years. Based on the information provided, the staff concludes that the structure and its associated linings are adequate to resist flooding and erosion caused by relatively severe rainfall and flood events. This conclusion is based on the location of the facility above the 100-year floodplain of Chartiers Creek and the erosional resistance of the structure and liners. The staff also visited the site area and did not identify any unique flooding problems or potential problems with erosion.

Conclusions and Recommendations

The staff concludes that the design that will be implemented by Molycorp is acceptable to reasonably assure erosional stability for the proposed interim storage period of 10 years. A detailed review of the final hydraulic design configuration was performed, and the staff concludes that the design is acceptable.