UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
URANIUM RECOVERY FIELD OFFICE
BOX 25325
DENVER, COLORADO 80225

AUG 24 1990

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Docket No. 40 8943
SUA-1534, Amendment No. 5
04008943170E

MEMORANDUM FOR: Docket File No. 40-8943

FROM: Joel P. Grimm
Project Manager

SUBJECT: WASTE DISPOSAL PLAN FOR FERRET'S CROW BUTTE ISL

Background

On July 16, 1990, Ferret Exploration Company of Nebraska, Inc. (Ferret) submitted a request to the NRC for an amendment to Source Material License SUA-1534, permitting disposal of radioactive waste from its Crow Butte ISL facility near Crawford, Nebraska. Ferret proposes to dispose of the waste byproduct materials at American Nuclear Corporation's (ANC) Gas Hills uranium mill tailings pile in Wyoming. Specifically, Ferret requests to amend License Condition No. 11, which prohibits commencement of mining at Crow Butte prior to obtaining NRC approval of its waste disposal plan.

By letter dated June 21, 1990, ANC submitted an associated request for a license amendment authorizing receipt and disposal of waste byproduct material from Ferret. ANC's request was approved on July 30, 1990, by Amendment No. 40 to Source Material License SUA-667.

Discussion

The material to be disposed of will consist of pond liners and residue, contaminated soils, pumps, processing equipment, and miscellaneous fittings and parts. Pond residue will probably be shipped by a slurry truck or, if this is not practicable, in sealed drums. Miscellaneous fittings, parts, and equipment will be shipped in enclosed trailers and, when necessary, 55-gallon drums. The packaging and shipping containers will meet all applicable requirements under U. S. Department of Transportation regulations for low specific activity (LSA)

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materials. A manifest describing the waste material and an emergency response plan will accompany each shipment.

Conclusion

Based on our review of the amendment requests and the contractual agreement between ANC and Ferret, the staff concludes that disposal of Ferret's byproduct material at the Gas Hills mill is in accordance with NRC regulations and specifically, Criterion 2 of Appendix A to 10 CFR 40. Criterion 2 encourages the disposal of waste from ISL facilities at mill tailings sites to avoid proliferation of numerous small disposal sites.

Ferret will be required to maintain this contractual agreement or request approval of an alternative plan. Ferret shall be prohibited from conducting mining operations in the absence of an approved plan, within certain time constraints included in the new license condition. As the contractual agreement specifies responsibilities for waste packaging, transportation, and radiological safety, Ferret will be required to make the agreement available for inspection at its corporate office and onsite.

Therefore, the staff recommends that Source Material License SUA-1534 be amended to approve Ferret's waste disposal plan by authorizing disposal of waste byproduct material from the Crow Butte ISL facility at ANC-Gas Hills. License Condition No. 11 will be amended to read as follows:

11. The licensee is authorized to dispose of waste byproduct material from the Crow Butte facility at the American Nuclear Corporation (ANC) Gas Hills, Wyoming, mill. The licensee's agreement with ANC constitutes an approved waste disposal plan, and the licensee shall be required to maintain the agreement for inspection at its corporate office and onsite. In the event the agreement expires or is terminated, the licensee is required to notify the NRC, Uranium Recovery Field Office, within seven (7) working days of the expiration date. A new agreement must be submitted for NRC approval within ninety (90) days of expiration, or the licensee will be prohibited from further lixiviant injection.

Joel P. Grimm

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Project Manager

Case Closed: 04008943170E

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LFMB
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