

40-6659

Petrotomics Company

P. O. Box 8509, Shirley Basin, Wyoming 82615 - Telephone: (307) 234-9341

March 9, 1998

Mr. Joseph J. Holonich, Chief
Uranium Recovery Branch MS-T-7-J-9
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Reference: Alternate Concentration Limits Application - Response to open issue 5 -
Source Material License SUA-551

Dear Mr. Holonich:

Submitted herewith in triplicate is the Addendum to response to NRC open issue 5 (model verification).

As requested, the model was verified over the five-year period 1993 through 1997. The flow model was initialized to average hydrologic conditions for 1992. Annual average pumping rates from the recovery wells were computed for the period 1993-1997, and input directly into the flow model for the verification simulation. Average annual tailings leakage (recharge) estimates were obtained directly from the ACL application. The verification simulation was run and has been compared to the existing conditions. Results of the ground water flow model verification indicate the site flow model is capable of simulating complex hydrologic conditions with accuracy, and can be used with confidence to make future predictions.

Please contact me if you have questions or need further information.

Sincerely,

HL05/

R. A. Juday
R. A. Juday
Supervisor

9803180227 980309
PDR ADOCK 04006659
C PDR



Mr. Joseph J. Holonich
March 9, 1998
Page 2

Enclosure: ACL Application, Response to open issue 5.

PC: Mr. Mohammad Haque - USNRC

U.S. Nuclear Regulatory Commission
Region IV
Attn: Ross Scarano, Director
Division of Radiation Safety and Safeguards
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

Patrick C. Mackin
CNWRA
6220 Culebra Road
San Antonio, TX 78238-5166

Ms. Georgia A. Cash
District I Supervisor
State of Wyoming
Department of Environmental Quality
Land Quality Division
Herschler Building, 3-W
122 West 25th Street
Cheyenne, Wyoming 82002