



ALBUQUERQUE OFFICE

Alan D. Cox  
Manager - Grants & Southwest U.S.

22 October 2003

U.S. Nuclear Regulatory Commission  
Office of Nuclear Materials Safety and Safeguards  
Division of Fuel Cycle Safety and Safeguards  
Chief of Fuel Cycle Facilities Branch (Mailstop T8-A33)  
C/o Document Control Desk  
11545 Rockville Pike  
Two White Flint North  
Rockville, MD 20852-2738

Attn: Mr. William VonTill

RE: Homestake Mining Company – License SUA-1471  
Docket 40-8903  
*Grants Reclamation Project –*  
*Chinle Aquifers – Background Water Quality Evaluation &*  
*Water Quality Statistical Evaluation Support Document*

Dear Mr. VonTill:

Enclosed please find a copy of the following reports:

1. ***"Grants Reclamation Project Background Water Quality Evaluation of the Chinle Aquifers"*** (3 copies); and,
2. ***"Statistical Evaluation of Chinle Aquifer Quality at the Homestake Site near Grants, NM"*** (2 copies)

These documents were prepared in response to NRC, EPA and NMED review comments relating to the December 2001 alluvial aquifer background water quality evaluation report entitled *"Ground-Water Hydrology for Support of Background Concentration at the Grants Reclamation Site"*.

The enclosed reports provide an evaluation of a considerable amount of water quality data on the Chinle aquifers and the Chinle mixing zone associated with the San Mateo alluvial aquifer in and around the Grants site. The reports document and establish the proposed full range of background water quality concentrations for key constituents in the Upper, Middle, and Lower Chinle aquifers and the mixing zone.

We will be transmitting by e-mail an electronic version of the main report text and figures to assist in your review of the documents.

I look forward to further communications on the reports and trust that they provide the necessary information to set water quality background concentration values for the Grants site. If you have any questions, please contact me at the Grants site (505) 287-4456 or the Albuquerque office at (505) 828-1621.

Sincerely yours,



HOMESTAKE MINING COMPANY  
Alan D. Cox

Enclosures

Cc: (w/ enclosures as indicated)

D. Mayerson – New Mexico ED, Santa Fe	(2 – BG WQ Eval; 1- Statistical Eval.)
M. Purcell – Region VI EPA, Dallas	(1 – BG WQ Eval; 1- Statistical Eval.)
B. Ingersoll – SLC	(1 – BG WQ Eval)
K. Baker – ERG, Inc. – ABQ	(1 – BG WQ Eval; 1- Statistical Eval.)
P. DeDycker – PMD & Assoc. - Denver	(1 – BG WQ Eval)
J. Gleadle – Grants	(1 – BG WQ Eval; 1- Statistical Eval.)
ABQ files	(1– BG WQ Eval; 1- Statistical Eval.)