

# GROUND WATER QUALITY BUREAU SUPERFUND OVERSIGHT

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## FAX TRANSMISSION COVER SHEET

Date: 10/28/96  
To: Ken Hooks, NRC  
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Sender: Birgit Landin

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### Interoffice Memorandum

To: Shawn Ghose, EPA  
CC: Stuart Kent, NMED  
Ken Hooks, NRC  
From: Birgit Landin, NMED  
Date: October 28, 1996  
Subject: Summary of Field Visit - Homestake Mining Company

Sent Via Telefax

On October 22, 1996 I visited the Homestake Mining Company (HMC) site near Grants, NM with Katherine Everett and Richard Ohrbom, both of the New Mexico Environment Department (NMED) Groundwater Pollution Prevention Section. Ms. Everett is in charge of administering the NMED discharge plan for the site. We arrived on-site at 11:00 and were met by Roy Cellan and George Hoffman. Mr. Cellan is the HMC corporate manager for reclamation and Mr. Hoffman is the project manager of the consulting company conducting the environmental work on-site. Mr. Cellan gave us an overview of mine and mill activities, discussed the history of the work done at the site, and showed aerial photos of the site over the last 20 years. From the photos, it was easy to see where the buildings used to be, how the tailings pile was covered, construction of the evaporation ponds, and clean-up of the surface soil contamination. Revegetation was started last October and has successfully taken hold in most of the disturbed area. We also toured the tailings pile, evaporation ponds, and injection/extraction well locations.

Groundwater reclamation using injection/extraction wells was initiated in 1977. Currently there are approximately 80 fresh water injection wells and 40 extraction wells in operation. Recently a second evaporation pond was constructed to handle the amount of water being extracted. The new pond was constructed with a double liner and leak detection system. HMC estimates that groundwater reclamation will continue until 2010.

The large tailings pile has been stabilized with the permanent clay cover applied to the sides. The top is still covered with the interim cover. Dewatering of the tailings sludges is currently underway. HMC has enhanced water recovery by vacuum extraction and is currently getting about 40 gallons per minute extraction of water from the pile. They estimate the pile will be fully dewatered by 2001. They are measuring the compaction of the pile and surveying the top on a semi-annual basis.

HMC has put a lot of effort into evaluating the local hydrogeology. They have identified four aquifer units and several faults controlling flow. The site has complex hydrogeology. In addition, they are currently conducting a detailed analysis of regional water quality. They plan to statistically evaluate the data to determine background water quality to help determine appropriate groundwater clean-up standards for their discharge plan with the State and will be presenting the data to the NMED later this year.

HMC was very proud of the work they have completed to date and appear to be dedicated to supporting the reclamation project. We left the site at 3:30 PM.