

**HOMESTAKE MINING COMPANY  
OF CALIFORNIA**

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**GRANTS OFFICE**

**Alan D. Cox**  
*Project Manager*

19 January 2006

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

Re: **Grants Millsite Reclamation Project** – SUA-1471 – Docket No. 40-8903  
Tracking number – **TAC LU0014**  
Aquifer Site Standards

Dear Mr. Michalak:

Pursuant to our recent discussions, this letter is provided to correct the proposed site standards table which was transmitted to your office on December 5 2005. As indicated in that letter, a molybdenum standard was proposed for only the San Mateo alluvial aquifer with no site standard listed for the Chinle mixing zone or the Upper, Middle or Lower Chinle aquifers. We are requesting that a 0.10 mg/l (ppm) molybdenum site standard be set for all aquifers listed in the table and the Chinle mixing zone. The justification and rationale for setting this site standard for all zones / aquifers is as discussed in the December letter regarding the molybdenum site standard for the alluvial aquifer.

A corrected table is attached for your review.

Thank you for your time and attention on this matter. If you or members of the NRC staff have any questions regarding the requested site standards, please contact me at your earliest convenience. I can be reached at the letterhead telephone number or via cell phone at (505) 400-2794.

Sincerely yours,



HOMESTAKE MINING COMPANY OF CALIFORNIA  
Alan D. Cox

cc: R. Chase, SLC  
D. Deisley, SLC  
B. Ferdinand, SLC  
J. Gleadle, Grants files  
G. Hoffman, Hydro-Engineering

CONSTITUENTS	PROPOSED SITE STANDARDS				
	ALLUVIAL	CHINLE MIXING ZONE	UPPER CHINLE NON-MIXING ZONE	MIDDLE CHINLE NON-MIXING ZONE	LOWER CHINLE NON-MIXING ZONE
SELENIUM (mg/l)	0.32	0.14	0.06	0.07	0.32
URANIUM (mg/l)	0.16	0.18	0.09	0.07	0.03
MOLYBDENUM (mg/l)	0.10	0.10	0.10	0.10	0.10
SULFATE (mg/l)	1500	1750	914	857	2000
CHLORIDE (mg/l)	250	250	412	250	634
TDS (mg/l)	2734	3140	2010	1560	4140
NITRATE (mg/l)	12	15	*	*	*
VANADIUM (mg/l)	0.02	0.01	0.01	*	*
THORIUM-230 (pCi/l)	0.30	*	*	*	*
RA-226 + RA-228 (pCi/l)	5	*	*	*	*

NOTE: \* = Site standards not necessary for the constituents in the indicated aquifer.