

Copper Queen Branch/Freeport-McMoRan Corporation 36 West Highway 92 Bisbee, Arizona 85603

August 15, 2008

Ms. Cynthia S. Campbell, Manager Water Quality Compliance Section Arizona Department of Environmental Quality 1110 West Washington Street Phoenix, Arizona 85007

Re: Mitigation Order on Consent No. P-121-07 Monitoring Well Site No. 2

Dear Ms. Campbell,

This letter requests a modification of the Work Plan¹ for investigation of sulfate in the vicinity of the Concentrator Tailing Storage Area of the Freeport-McMoRan Copper Queen Branch (CQB). The modification pertains to proposed well Site 2 in the vicinity of Naco Water Company (NWC) well NWC-4 at Bisbee Junction (Figure 1). Information on Site 2 is provided in Section 3.3.3, Table 7, and Figure 23 of the Work Plan.

The Work Plan proposed a single well at Site 2 to determine the sulfate concentration at depth at NWC-4. However, in July 2008 NWC deepened NWC-4 by installing a well screen from approximately 520 to 850 feet below ground surface. The pre-existing screen of NWC-4 from 322 to 462 feet below ground surface was sealed off from the new lower screen. The deepened well meets the objectives defined for the well proposed at Site 2. The most recent sulfate analysis available for the pre-existing well is from November 2005 when the concentration was 200 milligrams per liter sulfate (mg/L). A reconnaissance sample of development water from the deepened well had a concentration of approximately 150 mg/L. Figure 2 is a cross section depicting conditions in the vicinity of NWC-4.

In addition to the deepening of NWC-4, groundwater monitoring data collected since development of the Work Plan provide a more complete description of the sulfate plume in the vicinity of the proposed Site 2 than was previously available. Figure 3 is a plan map of the plume based on monitoring data from the second quarter of 2008². The sulfate plume is north and west of Site 2 based on sampling at nearby private wells.

¹ Hydro Geo Chem, Inc. 2008. Revision I Work Plan to Characterize and Mitigate Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Concentrator Tailing Storage Area, Cochise County, Arizona. July 3, 2008.

² Hydro Geo Chem, Inc. 2008. First and Second Quarters 2008 Groundwater Monitoring Report, Task 2.2 of Aquifer Characterization Plan, Mitigation Order on Consent Docket No. P-121-07. July 30, 2008.

Preliminary information from the deepened NWC-4 indicates that sulfate is less than 250 mg/L at depth in the Morita Formation.

The deepening of NWC-4 and groundwater monitoring for the Mitigation Order have provided data that fulfill the objective of the well originally proposed for Site 2. Because the deepened NWC-4 meets the Work Plan objectives for a well at Site 2, CQB requests permission to use NWC-4 for monitoring in lieu of installing a well at Site 2.

Please do not hesitate to contact Mr. Stuart Brown at (503) 675-5252 or myself at (520) 432-6209 if you have any questions regarding this request.

Sincerely

Michael Jawor Site Manager

Freeport-McMoRan Copper Queen Branch

Attachments

cc: David Haag, Arizona Department of Environmental Quality

Rebecca Sawyer (Copper Queen Branch CQB) Sheila Deely (Freeport-McMoRan Phoenix)

Stuart Brown (Bridgewater Group)

James Norris (Hydro Geo Chem)

ATTACHMENTS

FIGURES

- 1 Site 2 Well Location
- 2 Cross Section from TM-16 to TM-06
- 3 Sulfate Concentrations for Second Quarter 2008

FIGURES





