

Mining Company Copper Queen Branch, 36 W. Highway 92, Bisbee, Arizona 85603

March 31, 2008

Mr. Robert Casey
Water Quality Enforcement Unit Manager
Arizona Department of Environmental Quality
1110 West Washington Street
Phoenix, Arizona 857007

Re: Mitigation Order on Consent No. P-121-07

**Drilling Contractor and Methods** 

Dear Mr. Casey,

This letter is to identify the drilling contractor and the addition of two drilling methods for the groundwater investigation of the sulfate plume in the vicinity of the Phelps Dodge Concentrator Tailing Storage Area near Bisbee, Arizona. We are in the process of responding to comments¹ prepared by Arizona Department of Environmental Quality (ADEQ) regarding the work plan² submitted pursuant to the Mitigation Order, but want to respond now to ADEQ's request (comment 2 on page 13 of ADEQ letter of March 12, 2008) to provide the name of the drilling subcontractor for Task 2.3 the project (New Monitoring Well Installation and Testing). The contractor selected for drilling and well construction is WDC Exploration and Wells (WDC).

The work plan identified reverse circulation air rotary and mud rotary as the primary methods to be used for subsurface exploration, reconnaissance water sampling, and well installation. Since submitting the work plan we identified air rotary casing hammer (ARCH) and Stratex under-reaming casing advance as drilling methods that are potentially applicable for the project. We believe that the use of these methods to penetrate the basin fill materials can allow for better collection of groundwater samples during drilling and provide for easier well construction because of the use of a drive casing that can seal off subsurface formations as drilling progresses. Therefore, we intend to add the ARCH and Stratex methods as additional drilling tools that may be employed depending on site conditions. The addition of these methods allows greater versatility in the investigation and helps ensure high quality data collection. Drilling through bedrock formations would still be accomplished using reverse circulation air rotary or mud rotary as appropriate.

Casey, R. 2008. Correspondence from Robert Casey, ADEQ, to Mike Jaworski, Coper Queen Branch, Regarding: Mitigation Order on Consent, Docket No. P-121-07 – Work Plan. March 12, 2008.
 Hydro Geo Chem, Inc. 2007. Work Plan to Characterize and Mitigate Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Phelps Dodge Concentrator Tailing Storage Area, Cochise County, Arizona. Mitigation Order on Consent Docket No. P-121-07. December 17, 2007.

Since ADEQ did not comment on well locations or drilling methods, and because WDC has a drill rig and crew available to start work, we intend to begin drilling for Task 2.3 as soon as possible so that we do not experience a delay by needing to wait for the next available drill rig and crew. If you have any questions regarding this information please contact me at (520)432-6209 or our project manager Stuart Brown at (503)675-5252.

Sincerely,

Michael Jawerski Site Manager

Phelps Dodge Copper Queen Branch

cc: Cynthia Campbell

Stuart Brown James Norris