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John D. Brack
General Manager

October 24, 2006

Via Certified Mail # 7004 1350 0001 1197 3419
Return Receipt Requested

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

Re: Revised Schedule for Mitigation Order on Consent, Docket No. P-50-06

Dear Ms. Campbell:

This letter provides a revised schedule for the “Work Plan to Characterize and Mitigate Sulfate with Respect to Drinking Water Supplies in the Vicinity of the Phelps Dodge Sierrita Tailing Impoundment, Pima County, Arizona” (Work Plan) dated August 11, 2006. The schedule was revised based on Arizona Department of Environmental Quality (ADEQ) comments¹ on the Work Plan and subsequent discussions between ADEQ and Phelps Dodge Sierrita, Inc. (PDSI) during which options for expediting certain aspects of the project and schedule constraints were discussed. We thank ADEQ for taking the time for meetings and telephone discussions with PDSI.

The revised schedule provided in Attachment A supersedes the original schedule in the Work Plan and follows the format used in ADEQ’s comments. Please note that the revised schedule assumes ADEQ approval of the Work Plan and Quality Assurance Project Plan (QAPP) by November 15, 2006. Any delay in approval past that date would require adjustment of the schedule accordingly by adding the delay to the deliverable due dates.

Important aspects of the revised schedule are that it delivers the Well Inventory and Interim Action Evaluation by December 31, 2006, as proposed by ADEQ in their comments. This is important because the Well Inventory and Interim Action Evaluation will provide the methods for identifying and mitigating any wells impacted prior to development of the Mitigation Plan. Consistent with ADEQ’s General Comment F, Schedule, completion of the interim action evaluation early in the project alleviates the need to expedite the investigation process.

¹ ADEQ. 2006. Correspondence from Robert Casey, ADEQ, to John Brack, PDSI, Regarding: Mitigation Order on Consent, Docket No. P-50-06 – Work Plan Response. September 22, 2006.

Another important aspect is that we plan to submit a list of wells proposed for monitoring, a generic monitoring well construction diagram, and a response to ADEQ's QAPP comment regarding data review, verification and validation [Specific Comment F(2)] by October 31, 2006 when we submit our responses to ADEQ's comments and Work Plan addendum. These three items were identified by ADEQ as specific gaps in the current QAPP. The submittal of these items a month earlier than proposed by ADEQ will hopefully make it possible for ADEQ to review and approve the QAPP by November 15, 2006 and for PDSI to complete the first round of quarterly groundwater monitoring by December 31, 2006 under the approved QAPP.

The revised schedule is constrained by the need to conduct groundwater monitoring during the summer 2007 period of high seasonal pumping in order to provide calibration data for the numerical fate and transport model.² Monitoring data for the summer season is critical for evaluating how the high summer pumping rates affect regional groundwater flow conditions. The fate and transport model will use the summer data to complete calibration activities and to evaluate the response of the groundwater flow system to seasonal pumping demands. The summer monitoring is proposed to be completed by September 2007.

Once the summer monitoring results are obtained, calibration, refinement and documentation of the numerical model will be completed and incorporated into the Aquifer Characterization Report (ACR) by December 31, 2007. Included in this process will be review of the calibrated model with ADEQ so that the agency is comfortable with the model and its operation. The ACR will also document the installation of the new monitoring wells. In light of discussions with ADEQ, we propose that the ACR consist of the following: results of the summer 2007 groundwater monitoring, results of installation and testing of offsite monitoring wells, a revised site conceptual model based on and summarizing the results of previously reported plume characterization tasks, and results of construction and calibration of the fate and transport model.

Because the summer 2007 groundwater monitoring is the critical path activity which cannot be expedited, well installation can also be completed by September 30, 2007 without impeding progress on the ACR. Establishing a completion date of September 30, 2007 for well installation will reduce the potential for triggering the Force Majeure provision in Section VII.A of the Mitigation Order if PDSI is unable to obtain timely access to one or more of the new well locations or obtain necessary permits in a timely manner.

Following the submittal of the ACR, four months are needed to complete simulations of various mitigation actions for control of the sulfate plume and reduction of groundwater sulfate concentrations for the feasibility study (FS). The FS will use the simulation results to evaluate the long-term effectiveness and cost of the mitigation alternatives. A draft FS report will be completed by April 30, 2008 assuming ADEQ approves the ACR by January 31, 2008. In discussions with ADEQ, PDSI agreed to meet with ADEQ to review FS progress after completion of the following tasks: Identification and Screening of Mitigation Actions and

² Note that the winter groundwater monitoring would be performed between December 2006 and February 2007.

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Technologies, Development and Screening of Mitigation Actions, and Detailed Analysis of Mitigation Actions. These meetings will allow ADEQ to monitor the progress of the FS and provide feedback to the alternatives development process. The Mitigation Plan will be finalized and submitted to ADEQ by June 30, 2008, two months after the FS.

PDSI considers the revised schedule to be aggressive, particularly in light of the access/permitting issues that must be negotiated and the scope of the FS which has been expanded to include evaluation of potential mitigation actions for reducing sulfate loadings to groundwater from the tailing impoundment. ADEQ is well aware of PDSI's concerns regarding the timeliness of obtaining site access and permitting. During Mitigation Order negotiations, both parties identified the use of Force Majeure in these instances so that PDSI is not subjected to stipulated penalties for delays beyond its control.

Please do not hesitate to contact me at (520) 648-8510 or Mr. Stuart Brown at (503) 675-5252 if you have any question regarding this submittal.

Sincerely,

A handwritten signature in black ink, appearing to read "John D. Brack". The signature is fluid and cursive, with a large initial "J" and "B".

John D. Brack

JDB:sb

Attachment

xc: Robert Casey, ADEQ Water Quality Enforcement Unit
Chad Fretz, Phelps Dodge Sierrita, Inc.
Ray Lazuk, Phelps Dodge Corporation

ATTACHMENT A

ACTIVITY or TASK	DELIVERABLE DUE DATE
PDSI Response to ADEQ Comments, Work Plan Addendum, and Supplemental QAPP Information	October 31, 2006
Health and Safety Plan	November 30, 2006
Well Inventory	December 31, 2006
Interim Action Evaluation	December 31, 2006
Groundwater Monitoring (including depth-specific sampling)	
1 st Round	December 31, 2006
2 nd Round	March 31, 2007
3 rd Round	June 30, 2007
4 th Round	September 30, 2007
Evaluation of Interceptor System	February 28, 2007
Installation of New Wells	September 30, 2007
Final Aquifer Characterization Report	December 31, 2007
Feasibility Study	April 30, 2008
Mitigation Plan	June 30, 2008
Treatability Studies (if needed)	September 30, 2008

Note: Schedule assumes ADEQ approves the Work Plan and Quality Assurance Project Plan by November 15, 2006, and the Aquifer Characterization Report by January 31, 2008. Any delay in receiving these approvals will result in an extension of the schedule by the number of days by which ADEQ's approval occurs after the assumed dates.