



Janice K. Brewer  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Henry R. Darwin  
Director

September 29, 2014

Freeport-McMoRan  
Sierrita Operations  
Attention: Deborah Chismar  
6200 West Duval Mine Road  
PO Box 527  
Green Valley, Arizona 85622-0527

**Re: Review of the revised Mitigation Plan (Plan) and the Well Field Operation and Maintenance (O&M) Plan for the Sierrita Mitigation Order, dated December 18, 2013, prepared by Clear Creek Associates, P.L.C.**

Dear Ms. Chismar:

The Arizona Department of Environmental Quality received the above referenced revised Mitigation Plan and the Well Field Operation and Maintenance Plan on December 18, 2014. You submitted this document in accordance with Mitigation Order on Consent Docket No. P-50-06. The Mining and Industrial Drywell Unit has reviewed the revised Mitigation Plan and Well Field Operation and Maintenance Plan submitted by Freeport-McMoRan Sierrita, Inc. The following information is requested for approval of the Plan:

## **Recommendations**

### **Mitigation Plan**

The recommendations below are not required by State law and there are no legal consequences should you choose to disregard them; however, ADEQ appreciates your cooperation and asks you to consider the following:

ADEQ Recommends:

1. Sierrita revise the Plan, Page 3, in Section 2.2 Description of the Mitigation Alternative, to provide a more precise schedule on when a Feasibility Study (FS) for the new tailing impoundment would be initiated and completed. The Plan should propose a schedule that discusses when a decision on whether a new tailing impoundment would be constructed, in accordance with the December 18, 2013 revised Mitigation Plan. Once the decision is made on the new tailing impoundment, you should revise the last two sentences in this section of the Plan to document the decision and if the tailing impoundment is to be constructed, a proposed schedule on when the impoundment would be constructed, in accordance with the December 18, 2013 revised Mitigation Plan.

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2. Sierrita revise the last sentence in the first paragraph of Section 3.3.2.4 Data Use, and state “Ultimately, Sierrita may request termination of the Mitigation Plan and the Mitigation Order upon demonstration of groundwater monitoring data and technical analysis satisfactory to ADEQ and that the mitigation action objective would continue to be met without *continued* groundwater pumping.”  
In addition, ADEQ also recommends that the Plan state, “A work plan would be submitted to ADEQ to discuss how the evaluation of termination of groundwater pumping would be conducted and demonstrated.”
3. That the language in the fourth and fifth sentences in Section 3.4 Contingency Measures – 2. Contingency Event of the Plan, be more specific on when the recommendation on modifications to performance goal pumping, due to reduction of water use for mine operations, would be submitted to ADEQ and whether ADEQ would have input on the recommendation.
4. That the Plan, Section 3.4 Contingency Measures, contain a contingency measure that could be implemented if pumping from the current mitigation well field does not meet the current mitigation goals on speed of the sulfate plume reduction or if the sulfate plume expands unexpectedly.
5. That the Plan, Section 4.2 Mitigation Performance Reviews, be revised to contain language on ADEQ concurrence prior to reducing or increasing the frequency of reviewing the mitigation performance.
6. In Section 4.3 Reduction or Termination of Mitigation Pumping, that the Plan state, “A work plan would be submitted to ADEQ to discuss how the evaluation of termination of groundwater pumping would be conducted and demonstrated.”
7. In the Plan, Section 6.1 Community Advisory Group, that the CAG members meet and come to a consensus on reducing the number of CAG meetings from four meetings per year to one meeting per year.

#### **Well Field Operation and Maintenance Plan**

ADEQ received the above referenced Well Field Operation and Maintenance Plan. The Mining and Industrial Drywell Unit has reviewed the O&M Plan and has no comments at this time in approving of this Plan.

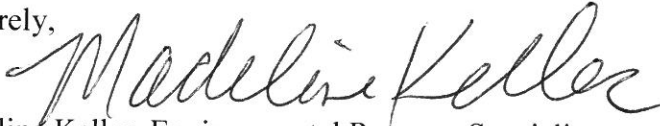
#### **How to Submit**

Please submit all documents sent in response to this letter using one of the following methods:

- Hard copy to ADEQ, Attention: Madeline Keller, Water Quality Enforcement Unit, 1110 W. Washington Street, Phoenix, AZ 85007
- FAX to (602) 771-4505
- E-mail to [mmk@azdeq.gov](mailto:mmk@azdeq.gov)

Thank you for your efforts to comply with Arizona’s environmental requirements. Should you have any comments or questions regarding this matter, please do not hesitate to contact me at (602) 771- 7681 or [mmk@azdeq.gov](mailto:mmk@azdeq.gov).

Sincerely,

A handwritten signature in cursive script that reads "Madeline Keller". The signature is written in black ink and is positioned to the right of the word "Sincerely,".

Madeline Keller, Environmental Program Specialist  
Water Quality Enforcement Unit

Cc: Jim Norris, Clear Creek Associates

John Broderick, Sierrita

Lana Fretz, Sierrita

Ned Hall, Freeport-McMoRan Copper & Gold

Stuart Brown, Freeport-McMoRan Copper & Gold

Michael A. Fulton, Director, Water Quality Division, ADEQ

Jerry Smit, Manager, Groundwater Section, ADEQ

Facility file