



Sierrita Operations
Environment, Land & Water Department
6200 West Duval Mine Road
PO Box 527
Green Valley, Arizona 85622-0527

February 8, 2011

Hand delivered

Ms. Cynthia S. Campbell
Arizona Department of Environmental Quality
Water Quality Compliance Section
1110 West Washington Street
Phoenix, Arizona 85007-2935

Re:

Mitigation Order on Consent Docket No. P-50-06

Dear Ms. Campbell:

As a follow up on the recent meeting between Freeport-McMoRan Sierrita Inc. (Sierrita) and your staff on January 21st, Sierrita is hereby submitting this letter to provide ADEQ with an update on changes to the proposed locations of the well sites as described on the Final Conceptual Wellfield Design and the status of the Arizona State Trust land purchase, as they relate to the Mitigation Plan submitted to ADEQ on May 2009.

Changes to well locations

Sierrita's efforts to implement the sulfate mitigation wellfield have included locating well sites on the ground and initiating negotiations for access to sites on private property. As a result of these implementation efforts, some well locations identified for the Final Wellfield Conceptual Design¹ (FWCD) required minor adjustments to account for logistical constraints on the ground. Generally, well locations were modified to keep them out of the flood way of a surface water drainage, to avoid areas of future[?] residential development, or because access was infeasible given the Covenants, Conditions, and Restrictions of the residential developments where wells had been proposed.

Figure 1 compares well sites proposed in the FWCD to alternative well sites selected to install wells as close as feasible to the FWCD recommendation. The PS and FFS well sites have not changed from the locations identified in the FWCD. Sites IW-25 through IW-28 and MC-4 were modified to avoid drainages and flood ways. MC-1 through MC-3 were modified because the FWCD locations were in residential developments with legal limitations on development that could not be overcome because the well locations lacked resident support.

The potential impact of using different well locations for the sulfate mitigation wellfield was assessed by simulating the future plume migration with the numerical model used to develop the FWCD. The numerical model simulated pumping at the alternate well sites using the same pumping rates recommended by the FWCD. Figure 2 compares the extent of the sulfate plume (defined as concentrations in excess of 250 milligrams per liter) in year 2060 predicted for the FWCD well locations and the alternate locations. The predicted outlines of the sulfate plume in 2060 are similar for the FWCD and alternate well locations. For this reason, Sierrita believes there would be no substantive difference between the outcomes obtained for the alternate well locations versus the FWCD locations.

¹ Hydro Geo Chem, Inc. and Clear Creek Associates, P.L.C. 2010. Final Wellfield Conceptual Design, Mitigation Order on Consent Docket No. P-50-06. January 29, 2010.

Arizona State Trust land purchase

On July 29, 2009 Sierrita submitted an application to the Arizona State land Department (ASLD) to buy approx 8,300 acres of State Trust land needed to implement Alternative 5 of the Mitigation Plan. The land would be used to place several FFS wells and to construct a new tailing impoundment as described in the plan. ASLD originally advised that the completion of the purchase would take approximately 18 to 24 months from the time the application was received, which put the completion between March and July, 2010. Sierrita recently received verbal communication from ASLD that the process is behind schedule and Sierrita is now expecting to complete acquisition of this land in the 3rd quarter of 2011 or 1st quarter of 2012.

Based on the anticipated time to complete the land acquisition, Sierrita expects to have all the new mitigation wells and conveyance system operational by July 1st, 2013. The four new Interceptor wells (IW wells) have been constructed and work to tie those wells up into the existing pipeline has begun, so those wells can be operational before the end of 2011. Drilling of the PS and MC-4 wells will commence in the 2nd quarter of this year. Sierrita is diligently working to secure access to MC-2 well (pending approval by ADEQ of proposed new locations), and drilling of this well can start as early as July of this year. When the results of the State Land purchase are known, Sierrita can focus on constructing the last 8 wells (MC-1, MC-3 and the six FFS wells) and the conveyance system.

If the purchase of the State Trust land should extend beyond the 3rd quarter of 2011, Sierrita believes it may not be feasible to meet some of the proposed deadlines described in the Mitigation Plan. Therefore, should the sale extend beyond September 30, 2011, Sierrita will re-evaluate the schedule and communicate any potential changes that may occur at that time.

If you have any questions, please do not hesitate to contact me at (520) 393-2696.

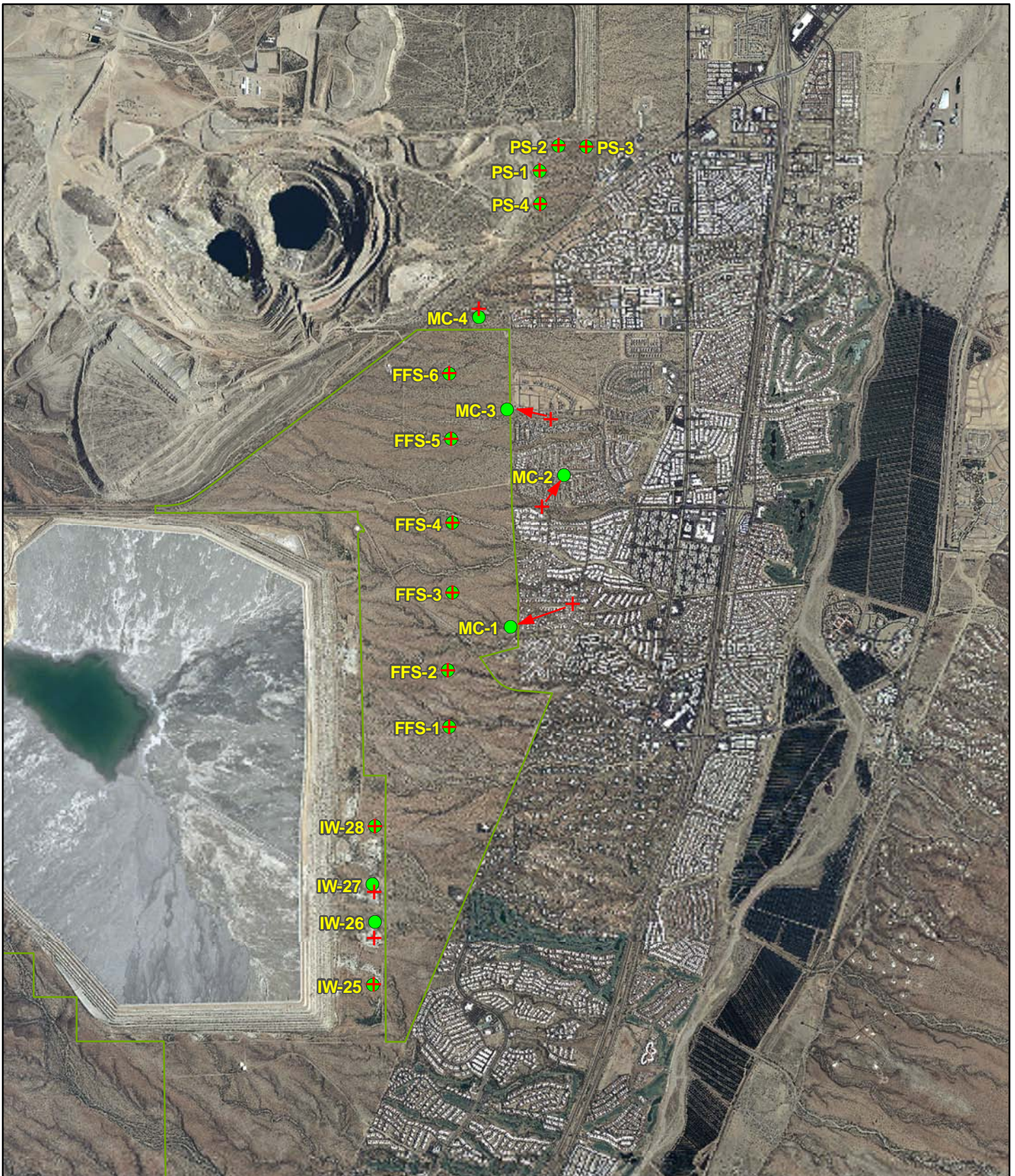
Sincerely,



Martha G. Mottley
Chief Environmental Engineer

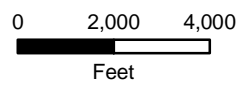
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Attachments (2)
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xc: Henry Darwin, Arizona Department of Environmental Quality
John Broderick, Sierrita
Ned Hall, FCX
Stuart Brown, FCX



Legend

- + Proposed Well Locations for Final Wellfield Conceptual Design
- Recommended Alternate Well Locations
- Arizona State Land Boundary

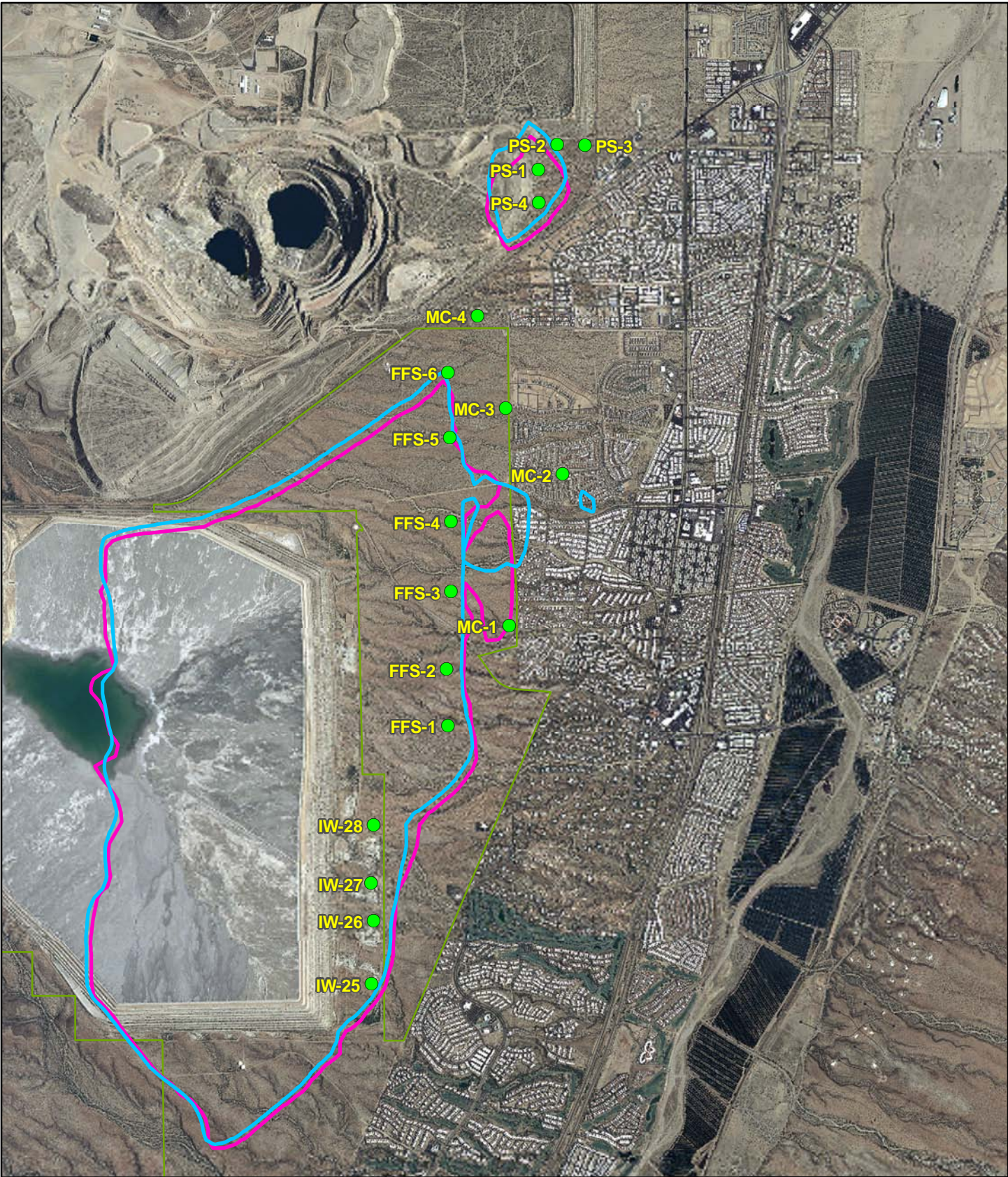


CLEAR CREEK ASSOCIATES

File ID	055039-048
Date	2/2/11

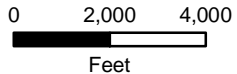


FIGURE 1
COMARISON OF FINAL WELLFIELD DESIGN AND ALTERNATE WELL LOCATIONS



Legend

- Recommended Alternate Well Locations
- Simulated 250 mg/L Sulfate Concentration for 2060 for Final Wellfield Conceptual Design Well Locations
- Simulated 250 mg/L Sulfate Concentration for 2060 for Alternate Well Locations
- Arizona State Land Boundary



File ID	055039-049
Date	2/2/11



FIGURE 2
COMARISON OF PREDICTED
SULFATE PLUME IN 2060