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# MEMORANDUM

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Date: June 14, 2010

To: The Honorable Chairman and Members  
Pima County Board of Supervisors

From: C.H. Huckelberry  
County Administrator 

Re: **ASARCO Mission Mine Air Quality Issues Update**

I met with the Department of Environmental Quality (PDEQ) to discuss the current status of ASARCO, LLC enforcement actions and air quality permitting. I have also discussed the need for changes to statutory authority and the Pima County Code to further protect the air quality and public health of County residents from existing, as well as any future, copper mining operations in Pima County.

### November and December 2009 ASARCO Air Quality Violations

In the fall of 2009, ASARCO began a berm building project to increase the height of Tailings Dam 8 located south of Helmut Peak Road on the ASARCO Mission Mine facility near Green Valley. ASARCO ceased depositing wet tailing to this tailings dam as part of this construction project. By November 2009, a large part of the tailings dam had become dry, which resulted in windblown emissions of fine tailings material from the top of the dam. PDEQ issued two Notices of Violation (NOVs) to ASARCO for excess emissions and opacity standard violations from the tailings dam on both November 12 and December 22, 2009. The December 22 emissions were so severe, numerous residents in Sahuarita and Green Valley had fine grey tailings material deposited on their homes and yards.

Subsequent testing of this material and the tailings by PDEQ with the assistance of the US Environmental Protection Agency (EPA) Region 9 Laboratory determined the concentrations of metals were not above background concentrations. Size fraction analysis done by The University of Arizona Department of Soil, Water and Environmental Science determined the small size of the material (particles less than ten microns in diameter) in the tailings and samples collected from a resident's yard is twice the amount found in natural desert soil, and the fine fraction (particles less than 2.5 microns in diameter) was 1.5 times that found in desert soil. The small size fraction of this tailings material poses the biggest health threat to residents in the area.

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### ASARCO Response to 2009 Violations

On January 27, 2010, ASARCO responded to the NOV's issued for violations in November and December 2009. In their response, ASARCO states:

*"Asarco believes that it has taken reasonable precautions on both of the days in question, i.e., November 12, 2009 and December 22, 2009, and throughout the berm building period for Tailings Dam #8."*

PDEQ responded to ASARCO's position in a letter entitled "Final Compliance Determination of Notices of Violation 0911-061 and 0912-067". PDEQ disagrees with ASARCO's position that adequate dust control measures were taken during the berm building process and that preventive rather than reactionary measures should have been taken prior to the days the wind speed increased. PDEQ notified ASARCO that:

*"Because of the magnitude of the violations, the impact of the emissions on the surrounding residents and the enforcement history of your facility, PDEQ believes that a penalty is warranted for these violations."*

ASARCO responded to PDEQ's Final Compliance Determination on May 28, 2010. In their response ASARCO states:

*"While Asarco is always committed to working with its regulators and to improving the environmental performance of its operations, we do not and will not agree with PDEQ's contention that Asarco failed to take reasonable precautions to control fugitive dust emissions. Asarco also disagrees with PDEQ's myopic focus on Asarco's "windy day" supplemental measures, which are a very small component to the Company's overall pro-active fugitive dust control strategy."*

Upon reviewing the matter with PDEQ and the County Attorney's Office, I have reiterated by direction that they pursue all violations for the maximum fines. PDEQ will be meeting with ASARCO on June 16, 2010 to discuss a possible settlement of this matter.

### April 21, 2010 Notice of Violation Issued to ASARCO

PDEQ staff conducted an inspection of ASARCO's tailings dams on April 21, 2010 as winds were forecasted for that day. Tailings Dam 8 berm building had been completed, and the dam had been put back into operation with wet tailings being applied. ASARCO had begun berm building on Tailings Dam 4 in January 2010 and was implementing a new "Berm

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Building Dust Control Plan" that they developed in response to the violations of 2009. PDEQ inspectors observed excessive amounts of dust emission from Tailings Dam 4 crossing north across Pima Mine Road. An NOV was issued by PDEQ for these emissions. ASARCO responded to the NOV on May 18, 2010 and again contended it had taken all reasonable precautions on that day and during the berm building process.

While this matter may be able to be resolved at the same time as the violations from 2009, I have directed PDEQ and the County Attorneys' Office to pursue all violations for maximum penalties as ASARCO continues to demonstrate an unwillingness and inability to control tailings emissions.

#### **ASARCO Berm Building Dust Control Plan**

PDEQ met with ASARCO in February 2010 to discuss a proposed "Berm Building Dust Control Plan" that ASARCO developed to prevent future problems with the tailings during berm building. PDEQ provided comments on the proposed plan on March 5, 2010. PDEQ's comments focused on the need for more detailed information and an implementation strategy for how ASARCO will ensure that tailings emissions will be controlled. ASARCO responded to PDEQ's comments on April 1, 2010. To ensure that ASARCO would follow the plan to prevent future tailings dam emissions, PDEQ believes the plan should be included in their air quality permit. ASARCO disagrees with this position and states:

*"The plan is not required by any applicable requirement and, as demonstrated by PDEQ's questions concerning construction rates and equipment, goes far beyond air pollution control."*

The continuing pattern of excess tailings emissions by ASARCO demonstrates that insufficient attention and resources are being directed to dust control by this company. I have directed PDEQ to evaluate the tailings operations of other mining facilities such as Freeport McMoRan. Freeport is located south of ASARCO. I have also directed PDEQ to determine appropriate engineering controls or operations to include in ASARCO's new air quality permit and to provide extensive public involvement, participation and scrutiny of the new proposed permit. PDEQ will begin this process in June 2010.

#### **Potential Legislation and Pima County Code Revisions**

In pursuing maximum penalties against ASARCO, Pima County is limited by Arizona Revised Statutes to a maximum penalty of \$10,000 per day per violation. By contrast, the Clean Air Act authorizes the EPA to impose a penalty of up to \$27,500 per violation. To provide an effective deterrent to noncompliance, Pima County must have appropriate penalty authority

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to address existing as well as future copper mining operations. I believe it is appropriate to pursue legislation next session to give the County penalty authority equal to the EPA under the Clean Air Act.

I have also directed PDEQ to begin revisions to Pima County Code Title 17, Air Quality, to strengthen standards for mine tailings. Current provisions have not been adequate to address the ongoing problem at ASARCO, and the Green Valley area could be potentially surrounded by three copper mines in the future. Strong local control is necessary to protect the public health of the citizens of Pima County as well as the delicate Sonoran Desert.

**Creation of a Mining Mitigation Advisory Committee**

I will be establishing a Mining Mitigation Advisory Committee to evaluate mitigation measures of hard rock mining impacts on the environment. The committee will be comprised of experts from the mining industry and the environmental field. I am directing the committee to make recommendations regarding control measures, plans and County Code revisions to minimize or eliminate air and water quality impacts from hard rock mining operations.

If the Board would like copies of any the information referenced in this memorandum, they will be provided upon request. The information is also available at PDEQ's website:

[http://www.deq.pima.gov/permits/ASARCO\\_MineTailings.htm](http://www.deq.pima.gov/permits/ASARCO_MineTailings.htm)

CHH/mjk

c: John Bernal, Deputy County Administrator for Public Works  
Ursula Kramer, Director, Environmental Quality