

Attachment No. 6  
Notice of Violation (#PC0911-061)  
issued for 11/13/09 violations

T: 17 R: 13 Sec: 15  
Latitude: 31.950431  
Longitude: -111.003845  
Parcel No.: 303-33-013A  
SD: 4



DEPARTMENT OF ENVIRONMENTAL QUALITY  
150 W. Congress Street  
Tucson, Arizona 85701-1317  
[www.deq.pima.gov](http://www.deq.pima.gov)

December 23, 2009

**CERTIFIED MAIL**  
**Return Receipt Requested**

ASARCO, LLC  
Attn: Mr. Richard Rhoades  
4201 W. Pima Mine Road  
Sahuarita, AZ 85629

Permit #: 2026

### **NOTICE OF VIOLATION # PC 0911-061**

The Pima County Department of Environmental Quality (PDEQ) has reason to believe that ASARCO, LLC - Mission Complex located at 4201 W. Pima Mine Road, Sahuarita, Arizona, has violated requirements of the Arizona Revised Statutes (ARS), rules within the Pima County Code (PCC), and an applicable permit. The PDEQ authorized representative discovered the violations alleged below during a complaint inspection conducted on November 12, 2009, at the facility and through review of an excess emissions report dated November 13, 2009. The findings were reported to Jamie Ekholm, Environmental Engineer.

#### **I. FINDINGS OF FACT**

##### **ALLEGED VIOLATION #1**

**PCC 17.16.040 and 17.16.050.B**

##### **Permit Condition, Part "B", Section I.C.2**

No person shall cause or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent subject to the following provisions: [SIP Rule 321, PCC 17.16.040, and PCC 17.16.050.B]

- a. Opacities (optical densities) of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument.

b. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted herein. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be 25. Sets need not be consecutive in time, and in no case shall two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation.

### **Findings**

On November 12, 2009, ASARCO, LLC - Mission Complex caused and allowed fugitive emissions from tailings dam #8 to have an average optical density greater than 20 percent.

### **Requested Corrective Action(s)**

- Immediately employ all necessary control measures required to prevent effluent from fugitive emissions sources to remain below the applicable opacity standard.
- Immediately develop and implement all necessary control methods to be employed to prevent recurrent excess emissions from tailings dams.

### **ALLEGED VIOLATION #2**

#### **PCC 17.16.050.D**

#### **Permit Condition, Part "B", Section I.C.3**

No person shall cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.

[SIP Rule 343 and PCC 17.16.050.D]

a. Sources required to obtain an air quality permit under ARS § 49-426, § 49-480 or Rule 17.12.470 may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions. Compliance with such permit conditions shall be considered compliance with this provision.

b. This subsection shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.

### **Findings:**

On November 12, 2009, ASARCO, LLC - Mission Complex caused and permitted the diffusion of visible emissions from tailings dam #8 beyond the property boundary of Helmet

Peak Road without taking reasonably necessary and feasible precautions to control the fugitive emissions. The control measures taken by ASARCO, LLC – Mission Complex were not commensurate with the size and scope of tailings dam #8 in berm building mode.

**Requested Corrective Action(s)**

- Immediately employ all necessary control measures commensurate with the size and scope of current berm building to prevent diffusion of visible emissions beyond the property boundary line.
- Immediately develop and implement all necessary control methods to prevent diffusion of visible emissions from tailings dams during future berm building.

**ALLEGED VIOLATION #3**

**Permit Condition, Part “B”, Section I.C.3**

The Permittee shall monitor to ensure that tailings piles, during the berm building mode, have been smeared (i.e., with light coat of fresh, moist tailings on the surface of the dam) once every 60 days unless otherwise warranted by meteorological conditions.

**Findings:**

ASARCO, LLC – Mission Complex initiated berm building on tailings dam #8 on September 14, 2009, and did not monitor to ensure that the tailings pile surface was smeared within 60 days.

**Requested Corrective Action(s)**

- Immediately smear the tailings piles with a light coat of fresh, moist tailings on the surface of the tailings dam #8.
- Develop and implement a plan to smear the tailings piles with a light coat of fresh, moist tailings on the surface of the dam during future berm building mode at least once every 60 days. Develop criteria when meteorological conditions warrant more frequent application, to control fugitive emissions.

**II. CITATION OF AUTHORITY**

ARS § 49-471 et seq

17.28.010, PCC Title 17, Violations and Order of Abatement

**III. REQUESTED COMPLIANCE DOCUMENTATION**

ASARCO, LLC – Mission Complex shall submit a written response to PDEQ within **thirty (30)** calendar days of receipt of this notice. The response shall include:

- A thorough explanation of those actions that led to each violation
- The corrective actions taken to meet compliance
- The corrective measures taken to prevent future violations of this type

The above documentation shall be deemed "submitted" when received by PDEQ at the following address:

Pima County Department of Environmental Quality  
Air Program  
Attn: James M. Jones  
150 W. Congress  
Tucson, AZ 85701

#### **IV. STATEMENT OF CONSEQUENCES**

Failure to achieve compliance or enter into a Consent Order will result in PDEQ initiating a unilateral enforcement action. Achieving compliance does not preclude PDEQ from seeking civil penalties. A unilateral enforcement action may result in a civil penalty. A civil penalty may be imposed for each violation for the entire non-compliance period.

PDEQ believes that alleged violations identified in a Notice of Violation (NOV) are significant and advises you they may be used to determine a pattern of non-compliance or used to determine civil penalties pursuant to ARS § 49-513. As such, PDEQ believes that an NOV is an appealable agency action as defined in ARS § 49-471(4).

A person whose legal rights, duties or privileges were determined by an appealable agency action or who will be adversely affected by an appealable agency action and who exercised any right to comment on the action provided by law, rule or ordinance may appeal the action to the air pollution hearing board established pursuant to ARS § 49-478.

#### **V. ADMINISTRATIVE INFORMATION**

##### **OFFER TO MEET**

PDEQ personnel are willing to schedule a meeting to discuss the NOV and corrective action. If you would like to meet, please contact me at (520) 740-3340. Before meeting, please submit the following:

- An agenda that specifies the objectives you wish to discuss.
- The names and affiliations of the participants that will be accompanying you.

##### **COMPLIANCE ASSISTANCE**

PDEQ personnel are also willing to help you achieve and maintain compliance. If you need assistance complying with the regulations please contact our department at (520) 740-3340.

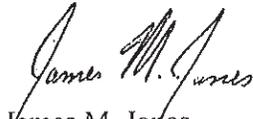
**NOTICE OF NON-DISCRIMINATION**

The Pima County Department of Environmental Quality does not discriminate on the basis of race, color, national origin, sex, disability religion, or age in its programs or activities in accordance with applicable laws and regulations. Further, any person who is in need of special services (e.g., written material in large type, signer for the hearing impaired, or for free assistance in Spanish), please contact PDEQ's Environmental Justice Program Manager, Beth Gorman, 150 W. Congress Street, Suite 109, Tucson, Arizona, 85701, Phone (520) 740-3343, email [beth.gorman@deq.pima.gov](mailto:beth.gorman@deq.pima.gov).

**AVISO DE NO DISCRIMINACIÓN**

El Departamento del Condado de Pima de Calidad Ambiental no discrimina en base de la raza, el color, el origen nacional, el sexo, la religión, discapacidad, o la edad en sus programas o actividades de acuerdo con leyes y regulaciones aplicables. Además, cualquier persona que esté necesitando los servicios especiales (e.g., material escrito en letra grande, intérpretes de lenguaje con señas, o para obtener asistencia gratuita en español), por favor contacte a la encargada del Programa de Justicia Ambiental del Departamento Calidad Ambiental del Condado de Pima, Beth Gorman, 150 W. Congress Street, Suite 109, Tucson, Arizona, 85701, teléfono (520) 740-3343, email [beth.gorman@deq.pima.gov](mailto:beth.gorman@deq.pima.gov).

Sincerely,



James M. Jones  
Civil Engineering Assistant

Attachment: Complaint Investigation Report dated November 12, 2009

cc: Permit File #: 2026



**PIMA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**AIR PROGRAM**

150 W CONGRESS STREET  
TUCSON, ARIZONA 85701-1317  
PHONE (520) 740-3340 FAX (520) 882-7709  
[www.deq.pima.gov](http://www.deq.pima.gov)

**Complaint Investigation Report**

**Tracking ID: PC0911-061**

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**Permit #:** 2026

**Source:** ASARCO, LLC - Mission Complex

**Location:** 4201 W Pima Mine Road, Sahuarita, AZ

**Date:** 11/12/2009

**Inspector:** James Jones

**Arrival Time:** 12:30 PM

**Spoke With:** Jamie Ekholm

**Departure Time:** 3:05 PM

**Phone #:** (520) 648-4588

**Reason for Inspection:** Complaint of dust being generated from mine at the southwest corner of Sahuarita and I-19

**Compliance Status:** Non-Compliant

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**I. INSPECTION NARRATIVE**

The Pima County Department of Environmental Quality (PDEQ) received multiple related complaints between 11:30 am and 12:40 pm describing fugitive particulate emissions from the location southwest of Sahuarita Road and I-19. The inspector investigated similar complaints on October 20, 2009 and October 27, 2009, during high wind events and was aware that the surface of tailings dam #8 on the ASARCO, LLC – Mission Complex property was dry and the dam was in berm building mode that reportedly began on September 14, 2009 (Attachment 1). The inspector drove to the intersection of Sahuarita Road and La Canada Drive near the complaint location.

Upon arriving at the complaint location, the inspector began taking photos of tailings dam #8, located to the southwest of the intersection of Sahuarita Road and La Canada Drive, and observed fugitive particulate emissions from a small portion of the east slope of tailings dam #8 around 12:45 pm at the point where the construction of the new berm had progressed and was halted (Attachment 2, Photo No.'s 1-3). The inspector's viewing position was not at a proper angle in relation to the sun location to perform a Method 9 Visible Emission evaluation (VE).

The inspector continued observations and then traveled east to vantage point of higher elevation on Helmet Peak Road. The inspector observed a green water truck that is used by the mine to apply a water based polymer stabilizer returning from the tailings dam around 1:12 pm. The inspector contacted Jamie Ekholm, an Environmental Engineer with ASARCO, LLC – Mission Complex, and requested to conduct an on-site inspection.

Between 1:39 pm and 1:41 pm, the inspector observed a large fugitive particulate plume that originated on the top surface of tailings dam #8 near the southern end that continued north along the top of the tailings dam and diffused across the property boundary at Helmet Peak Road (Attachment 2, Photo No.'s 7-8).

Mr. Ekholm met the inspector around 2:00 pm and signed the inspection rights form (Attachment

3). Mr. Ekholm informed the inspector that he had performed Method 9 VE observations earlier in the day between 11:00 am and 12:00 pm with a maximum 6-minute average of 61 percent and that ASARCO, LLC – Mission Complex would be filing an excess emissions report notifying PDEQ (Attachment 4). The inspector shared with Mr. Ekholm that he had just recently observed a plume of emissions generated from the southern end of the tailings dam surface and diffusing across the property boundary at Helmet Peak Road.

The inspector went to the top of the tailings dam #8 with Mr. Ekholm and showed Mr. Ekholm the area observed at the tail end of the new berm construction that was initially observed emitting fugitive particulate matter (Attachment 2, Photo No. 9). Mr. Ekholm indicated he would communicate with the crew applying polymer to the area and have them mitigate this area. The inspector walked to the top of the tailings dam and examined the surface. The windspeed was measured to be 19 mph average, 26 mph maximum, and a direction of south/southwest. Weather information reported by the National Weather Service for the Tucson International Airport indicated wind speeds on November 12, 2009, of between 16-18 mph average gusting to 23-29 mph with a direction from the south-southwest between 11:53 am and 3:53 pm (Attachment 5).

The inspector observed some fugitive particulate emissions that swept the surface on the southwest side of tailings dam but none that were as large as the plume observed earlier or that would appear to exceed the applicable opacity standard. The inspector observed that a considerable portion of the south area of the tailings surface was coated with polymer and observed a truck applying the polymer in that area (Attachment 2, Photo No. 10).

The inspector walked towards the west side across the tailings dam surface with Mr. Ekholm and observed the characteristic of the surface of the tailings dam in the southeast quadrant. Tailings dam #8 measures a surface area of slightly less than a square mile or approximately 500 acres. The evaporation of moisture from the tailings surface during the berm building mode left a crust over the area of the tailings dam, and shrinkage of crusted surface had created cracks that were approximately an inch wide on average and leaving sections of crusted material that averaged approximately a half to three square feet. The inspector observed that through the process of wind erosion, it appeared that a greater portion of unstable fine underlying tailings material was exposed in the furrows and cracks in the protective crust of the tailings dam surface across the surface of the dam, which left these areas of the tailings dam more susceptible to fugitive emissions during high winds. It appeared that without an adequate intact crust layer or addition of a soil stabilizer, the underlying tailing soil was presently and would continue to become more susceptible to wind dispersion at lesser and lesser wind energies if the protective crust continued to erode from winds (Attachment 2, Photo No.'s 12). The inspector observed that ASARCO, LLC – Mission Complex was applying polymer to the top surface of the tailings impoundment in the southern area to minimize and mitigate the fugitive emissions from this erosive effect. The inspector observed that polymer was not applied to a majority of the surface of tailings dam #8.

## **II. POST-INSPECTION NARRATIVE**

PDEQ received an excess emissions report from ASARCO, LLC – Mission Complex General Manager, Richard Rhoades, dated November 13, 2009. The excess emission report detailed an EPA Method 9 observation conducted by Jamie Ekholm between 11:00 am and 12:00 pm which recorded a maximum 6-minute average opacity of 61 percent. The report indicated that a broken

crust and excessive wind gusts on Tailings Impoundment #8 caused the excess emissions. The report also indicates that Mr. Ekholm observed visible emissions from Tailings Impoundment #8 travel across the property boundary at Helmet Peak Road (Attachment 3).

On December 4, 2009, PDEQ Air Compliance Supervisor, Dustin Fitzpatrick, sent an email to Jamie Ekholm requesting a copy of the EPA Method 9 Visible Emission Observation Form that was referenced in the November 13, 2009, excess emissions report and confirmation of whether or not wet tailings had been applied to the surface of tailings dam #8 since the berm building operation began. Mr. Ekholm replied on December 9, 2009, with attached documentation of the EPA Method 9 form and inspection records, as well as an indication that wet tailings had not been applied to the surface of tailings dam #8 and tailings application would not commence until construction of the south berm to the southwest corner was completed (Attachment 6).

### **III. REVIEW OF PERMIT CONDITIONS AND APPLICABLE REGULATIONS**

To determine compliance with Air Quality Control Permit #2026, which has been issued to your facility, the following review of your permit conditions was performed. The design of this report is in a specific format to facilitate the reader's understanding of the inspection and compliance determinations. The results of the investigation are documented below under a "Findings" heading that is preceded by the applicable permit condition from your permit. Permit conditions transcribed directly from your permit are provided in a smaller size font for clarity.

#### **Permit Condition(s):**

##### **Part "B", Section, I.C.2**

No person shall cause or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density greater than 20 percent subject to the following provisions: [SIP Rule 321, PCC 17.16.040, and PCC 17.16.050.B]

- a. Opacities (optical densities) of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument.
- b. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted herein. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be 25. Sets need not be consecutive in time, and in no case shall two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation.

#### **Findings:**

ASARCO, LLC – Mission Complex General Manager, Richard Rhoades, filed an excess emissions report describing excess emissions observed between 11:00 am and 12:00 pm on November 12, 2009, from Tailings Impoundment #8. A supporting EPA Method 9 Visible Emissions Observation Form was submitted to PDEQ documenting the maximum 6-minute average opacity result of 61 percent during the period.

#### **Deficiency:**

ASARCO, LLC – Mission Complex caused and permitted the effluent from tailings dam #8 to have an average optical density greater than 20 percent, as prohibited by Permit Condition, Part B, Section I.C.2 and Pima County Code Title 17, Chapter 17.16.040 and 17.16.050.B.

**Permit Condition(s):**

**Part "B", Section, I.C.3**

No person shall cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken. [SIP Rule 343 and PCC 17.16.050.DI]

- a. Sources required to obtain an air quality permit under ARS § 49-426, § 49-480 or Rule 17.12.470 may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions. Compliance with such permit conditions shall be considered compliance with this provision.
  
- b. This subsection shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.

**Findings:**

ASARCO, LLC – Mission Complex General Manager, Richard Rhoades, filed an excess emissions report describing excess emissions observed between 11:00 am and 12:00 pm on November 12, 2009, from Tailings Impoundment #8. The report described observations of occasional sustained wind gusts generating dust plumes from Tailings Impoundment #8 crossing the property boundary at Helmet Peak Road. During off-site observations on November 12, 2009, the inspector also observed a dust plume generated on the south end of the surface of tailings dam #8 and traveling north across the property boundary at Helmet Peak Road between 1:39 pm and 1:41 pm. The control measures taken by ASARCO, LLC – Mission Complex were not commensurate with the size and scope of tailings dam #8 in berm building mode.

**Deficiency:**

ASARCO, LLC – Mission Complex caused and permitted diffusion of visible emissions from tailings dam #8 beyond the property boundary line of Helmet Peak Road, as prohibited by Permit Condition, Part B, Section I.C.3 and Pima County Code Title 17, Chapter 17.16.050.D.

**Permit Condition(s):**

**Part "B", Section, II.F.1**

The Permittee shall monitor to ensure that tailings piles, during the berm building mode, have been smeared (i.e., with light coat of fresh, moist tailings on the surface of the dam) once every 60 days unless otherwise warranted by meteorological conditions.

**Findings:**

ASARCO, LLC – Mission Complex began berm building on tailings dam #8 on September 14, 2009, and as of December 9, 2009, did not monitor to ensure that a light coat of fresh, moist tailings was applied to the surface of the dam.

**Deficiency:**

ASARCO, LLC – Mission Complex failed to monitor to ensure that tailings dam #8 was smeared with a light coat of fresh, moist tailings once every 60 days while in berm building mode, as prohibited by Permit Condition, Part B, Section II.F.1.

**IV. EXIT INTERVIEW**

The inspector reviewed the findings of the site inspection with Mr. Ekholm and stated that a compliance determination would be made after the findings were reviewed with PDEQ management.

**V. COMPLIANCE SUMMARY**

Upon review of the inspection results and compliance history for this source, PDEQ management determined that the facility will be issued a Notice of Violation for the above listed deficiencies.

**Attachments:**

1. Berm Building Notification dated September 10, 2009
2. Inspection Photo Log
3. Notification of Inspection Rights Form
4. Excess Emissions Report dated November 13, 2009
5. National Weather Service, Tucson Airport Weather Conditions for November 12, 2009
6. Email with Attachments dated December 9, 2009

ATTACHMENT 1  
Berm Building Notification dated September 10, 2009

ASARCO Incorporated  
MISSION COMPLEX

# FAX

DATE: 9/10/09

Number of pages including cover sheet: 2

TO: Pima County DEP

ATTN: Teresa Sobkowski

Air Program Manager

RE: Beem building notification

Phone:

Fax: 852-7709

CC: File

FROM:

Jamie Ekholm

ASARCO MISSION COMPLEX

Sahuarita, AZ 85629

Phone: 393-4671

Fax: 520-648-0802

REMARKS:

Urgent

For your review

Reply ASAP

Please comment

# ASARCO LLC - Mission Complex

## Initial Inspection of Tailings Dam prior to berm building.

Initial inspection of Tailings Dams that will enter the berm building phase performed in compliance with ASARCO LLC - Mission Complex Visual Observation Plan.

Tailings Dam: 8

Berm Building Initiation Date: 9/14/09

Inspection Date: 9/10/09 Time: 12:40 pm

Inspector (print): Jamie Elholm (sign): [Signature]

Are any areas of the tailing dam drier than necessary for berm building such that they may reasonably result in dust emissions? (circle one) Yes  No

If yes, identify the section(s) of the tailings dam: N/A

For each section identified, complete a Control Strategy.

Control Strategy for Section: N/A

Circle all of the following that were applied:

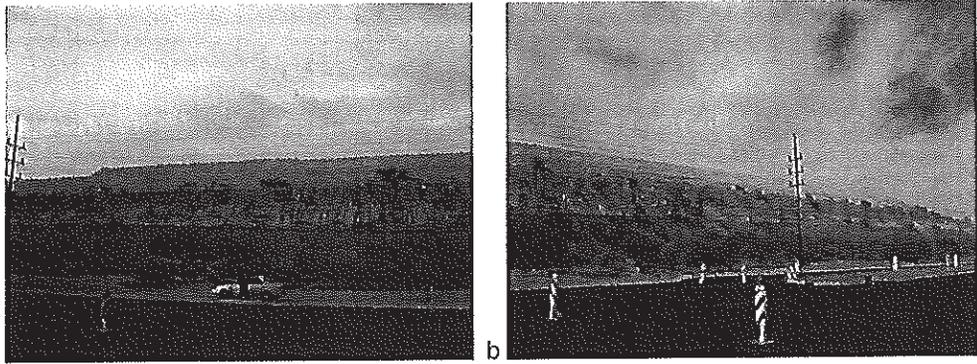
dust suppressant (identify) water other (identify) \_\_\_\_\_

Volume applied: \_\_\_\_\_ Time applied: \_\_\_\_\_

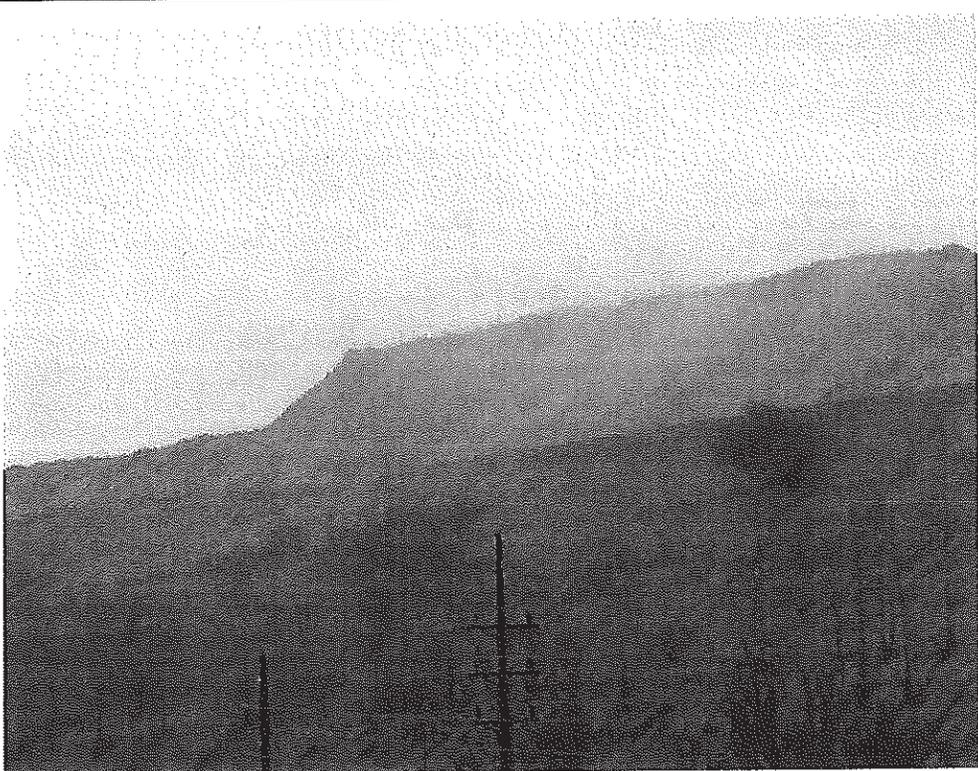
Asarco will utilize the following Control Strategy to minimize the possibility of dust (attach additional sheets as necessary):

Polymer dust suppressant will be used on newly constructed berm or water will be applied if tailings are deemed wet enough so that a polymer spray is not necessary.  
Visual observations will be conducted on a weekly basis and more often as needed during the berm building phase.  
Estimated construction time will be 2.5 to 3 months.

ATTACHMENT 2  
Inspection Photo Log

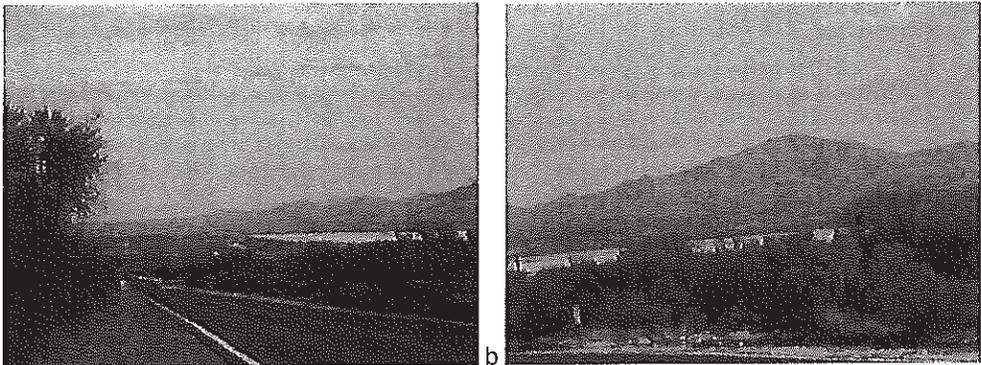
<b>Site Location:</b> ASARCO, LLC - Mission Complex 4201 W. Pima Mine Road, Sahuarita, AZ		<b>Photographer:</b> J. M. Jones	<b>Camera:</b> Canon A620
<b>Photo No. 1 a, b</b>			
<b>Date:</b> 11/12/2009			
<b>Photo Description:</b> View of the east slope of talings pile #8 at the ASARCO, LLC – Mission Complex property viewed from La Canada Drive when the inspector arrived at 12:30 pm.  No construction activity was observed at the time of this observation.			

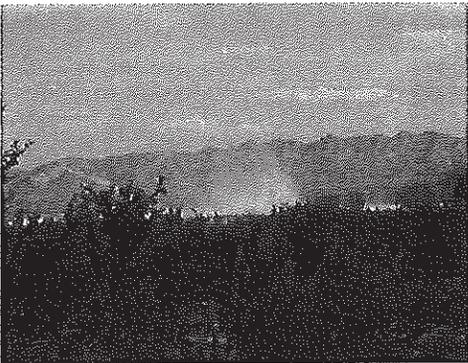
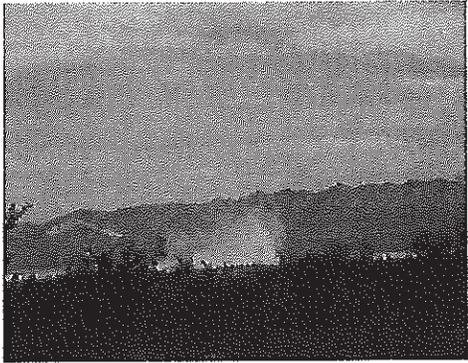
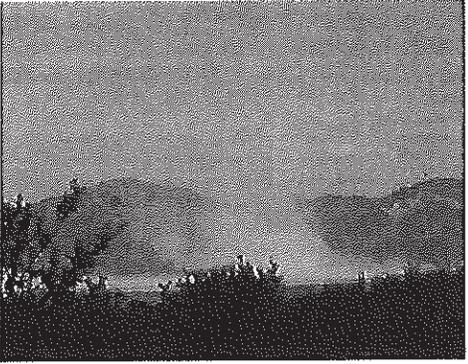
<b>Photo No. 2</b>	
<b>Date:</b> 11/12/2009	
<b>Photo Description:</b> View of the east slope of tailings dam #8 at 12:45 pm.  The inspector observed some fugitive dust emissions from the upper slope of the southernmost 40' of new berm up to the point where the new construction had progressed. This end area was not covered with polymer stabilizer like the rest of the berm. Winds were from the south/southwest.	

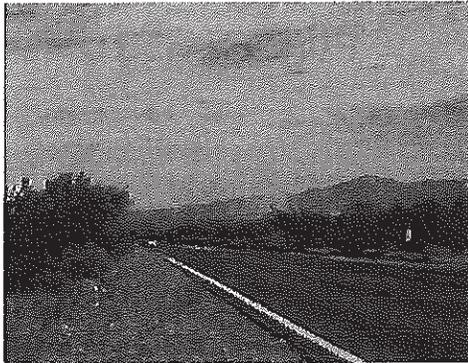
<b>Photo No. 3</b>	
<b>Date:</b> 11/12/2009	
<b>Photo Description:</b>  Another view of the area above where fugitive dust emissions were observed. Winds were from the south/southwest.	

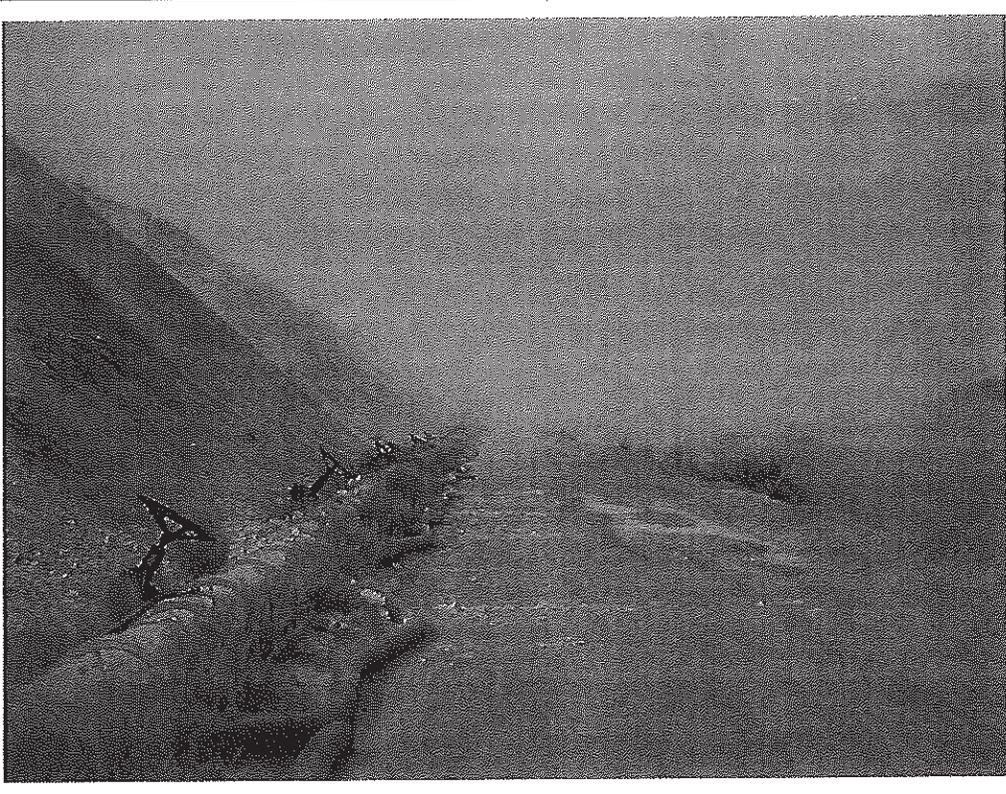
<b>Photo No. 4</b>	
<b>Date:</b> 11/12/2009	
<b>Photo Description:</b>  View of a water/polymer truck returning from tailings dam #8 around 1:12 pm as observed from Helmet Peak Road.	

<p><b>Photo No. 5</b></p>	
<p><b>Date:</b> 11/12/2009</p>	
<p><b>Photo Description:</b></p> <p>View of the north slope of tailings dam #8 at 1:20 pm from along Helmet Peak Road.</p>	

<p><b>Photo No. 6 a, b</b></p>		
<p><b>Date:</b> 11/12/2009</p>		
<p><b>Photo Description:</b></p> <p>View of the top surface of tailings dam #8 as the inspector observed from the side of Helmet Peak Road.</p>		

<p><b>Photo No. 7 a, b, c, d</b></p>	 	
<p><b>Date:</b> 11/12/2009</p>		
<p><b>Photo Description:</b></p> <p>View of a fugitive dust plume generated on the top surface of the tailings dam #8 observed by the inspector. The observation was made between 1:39 pm and 1:41 pm.</p> <p>The windspeed was measured at 17 mph average, 25 mph maximum, and direction from the south/southwest.</p>	<p>a</p> 	<p>b</p>  <p>d</p>

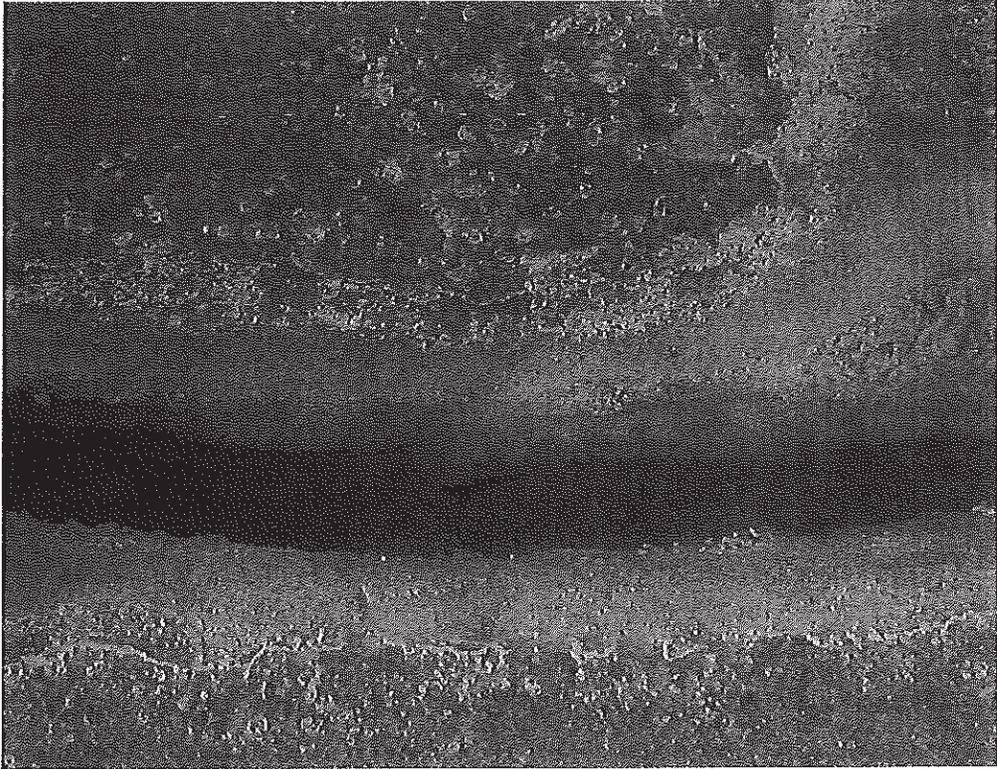
<p><b>Photo No. 8 a, b, c, d</b></p>	 	
<p><b>Date:</b> 11/12/2009</p>		
<p><b>Photo Description:</b></p> <p>View of the above fugitive dust plume continuing north and diffusing across the property boundary at Helmet Peak Road.</p>	<p>a</p> 	<p>b</p>  <p>d</p>

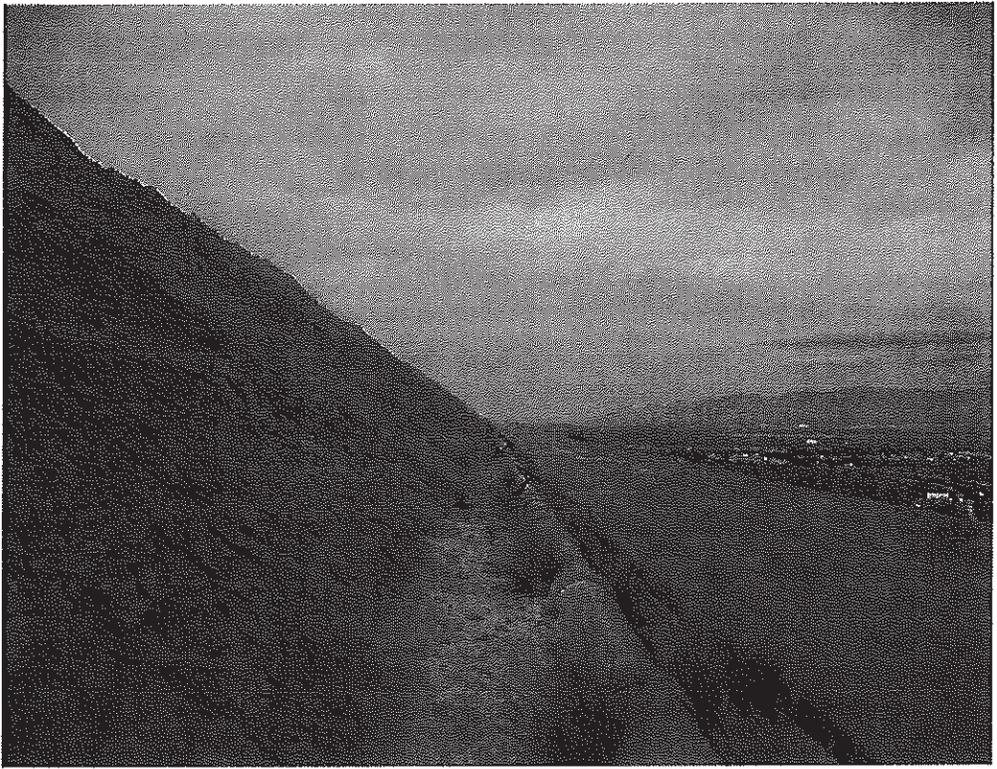
<p><b>Photo No. 9</b></p>	
<p><b>Date:</b> 11/12/2009</p>	
<p><b>Photo Description:</b></p> <p>Fugitive emissions observed at 2:29 pm coming off the end of the new berm area shown in photo #3 as viewed looking North. A VE could not be properly conducted because the emissions were blowing parallel with the viewing direction at the point of observation.</p>	

<p><b>Photo No. 10 a, b, c, d</b></p>		
<p><b>Date:</b> 11/12/2009</p>		
<p><b>Photo Description:</b></p> <p>View of the top surface of tailings dam #8. Some minor fugitive particulate emissions were observed generated on the west side but quickly dissipated.</p> <p>Some emissions were observed from the activity of the water truck applying polymer to the surface.</p> <p>A portion of the south side of the dam was colored blue indicating the area was sprayed with polymer. The windspeed measured 19 mph average, 26 mph maximum, and a direction of south/southwest.</p>		

<p><b>Photo No. 11</b></p>	
<p><b>Date:</b> 11/12/2009</p>	
<p><b>Photo Description:</b></p> <p>View of the southwest area of the top surface where polymer has been applied to tailings dam #8.</p>	

<p><b>Photo No. 12</b></p>	
<p><b>Date:</b> 11/12/2009</p>	
<p><b>Photo Description:</b></p> <p>View of the tailings dam #8 surface. The cracks in the surface are from the shrinkage of the dry tailings at the surface.</p> <p>The scale like areas bounded by salt are the hard encrusted surface that remains from the evaporation of the tailings.</p> <p>The furrowed areas around the scales and between the cracks are where the encrusted surface has eroded exposing unstable tailings below.</p>	

<b>Photo No. 13</b>	
<b>Date:</b> 11/12/2009	
<b>Photo Description:</b>  Close-up photo of a crack in the tailing surface showing the unstable fine tailings material beneath the crusted surface.	

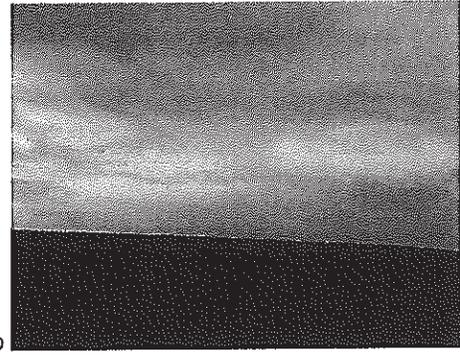
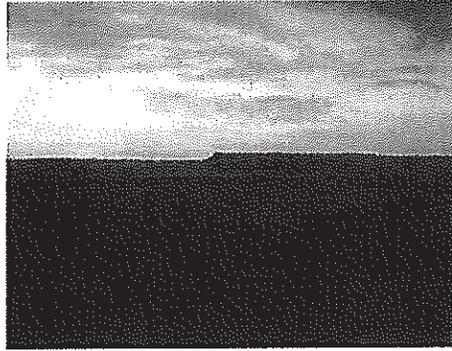
<b>Photo No. 14</b>	
<b>Date:</b> 11/12/2009	
<b>Photo Description:</b>  View of the east slope shown in photo # 9 observed at 2:47 pm returning to the vehicle. The fugitive emissions had diminished considerably.	

**Photo No. 15 a, b**

**Date:**  
11/12/2009

**Photo Description:**

View of the east slope shown in photo # 9 observed at 4:15 pm after returning from surveillance in Green Valley. The inspector observed that polymer had been applied to the newly constructed berm area.



ATTACHMENT 3  
Notification of Inspection Rights Form



**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY**  
 150 West Congress • Tucson • Arizona • 85701  
 PHONE (520) 740-3340 • FAX (520) 882-7709

**NOTIFICATION OF INSPECTION RIGHTS**

**REGULATED PARTY INFORMATION**

Regulated Party ASARCO - Mission Complex Permit # \_\_\_\_\_  
 Site Location Helmet Peak Rd Btw JDA # 8 & # 9  
 Site Contact Janice Echals Phone ~~740~~ 648-  
 Mailing Address \_\_\_\_\_

**PDEQ INFORMATION**

Inspector Name James M. Jones Phone 740-3341  
 Inspection Date 11/12/2009 Time 2:00 pm  
 Accompanied by James M. Jones

**INSPECTION RIGHTS**

Upon entry to the premises, the Pima County Department of Environmental Quality (PDEQ) inspector(s) met with the regulated party, presented photo identification indicating that they are PDEQ employees and explained:

- The purpose of the inspection is to determine compliance with Air Quality Regulations or Pima County Code (PCC) Title 17. The inspection is being conducted pursuant to Arizona Revised Statutes §49-471 *et seq.* and PCC 17.20.050.
- Inspection fee: \$ 0 or  A portion of Activity Permit Fee or  A portion of your annual emission fee
- Regulated parties may accompany the PDEQ inspector(s) on the premises, except during confidential interviews.
- Each person interviewed during the inspection will be informed that statements made by the person may be included in the inspection report.
- The regulated party has the right to copies of any original documents taken by PDEQ during the inspection. A split of any samples taken during the inspection if the split of any samples would not prohibit an analysis from being conducted or render an analysis inconclusive. Copies of any documents will be provided at PDEQ expense.
- Each person whose conversation is tape-recorded will be informed that the conversation is being tape-recorded.
- Administrative hearing rights to appeal an administrative order or permit decision that was made as a result of the inspection are set forth in Arizona Revised Statutes A.R.S. §49.511, 49.490, 49.496 and 49.497 *et seq.* Rights relating to an appeal of a final agency decision are found in A.R.S. §49.480.02 and 49.482 *et seq.*

- I have read this notification and discussed any questions or concerns with the PDEQ inspector(s).
- \_\_\_\_\_ Date: 11/12/09
- \_\_\_\_\_ refused to sign the Notification.
- No authorized on-site representative is present at the facility.

\*\*\*\*\* NOTE: PDEQ inspectors may still proceed with the inspection even if Permittee declines to sign this form.\*\*\*\*\*

ATTACHMENT 4  
Excess Emissions Report dated November 13, 2009



November 13, 2009

**Mission Complex**

Mr. Richard Grimaldi  
Deputy Director, Environmental Quality Division  
Pima County Department of Environmental Quality  
150 West Congress Street,  
Tucson, Arizona 85701



RE: ASARCO LLC – Mission Complex  
Notification of Excess Emissions

Dear Mr. Grimaldi:

This letter constitutes ASARCO LLC – Mission Complex's (Asarco's) notification of excess emissions required by Permit 2026, Part "A", section XIII.B. The permit's excess emissions reporting requirements require the source to provide a notification by facsimile or telephone within 24 hours of the time the owner or operator first learned of the occurrence of excess emissions. Permit 2026, Part "A", section XIII.B.1.a. The owner or operator is then required to supply a detailed written notification by submission of an "excess emissions report" within 72 hours of the 24-hour notification. Permit 2026, Part "A", section XIII.B.1.b. Both reports are to contain the information outlined in Permit 2026, Part "A", section XIII.B.2.

An initial report was made via phone to Mr. Rupesh Patel, Pima County Department of Environmental Quality's Air Quality Permit Engineer at approximately 12:45 PM on November 12, 2009.

**Background.**

Fugitive dust emissions from Asarco's tailings dams are controlled by a protective crust formed by deposition of wet tailings or by application of an acrylic co-polymer. High winds can cause damage to the protective crust on these tailings dams by scouring away this crust. Due to ongoing berm building on Tailings Impoundment #8, the use of wet tailings to control dust emissions has needed to be deferred until enough berm has been constructed. Asarco has been operating 2 tanker trucks dedicated solely to applying dust suppressant polymer on both the surface of Tailings Impoundment #8, as well as to the surface of the newly constructed berm in an effort to prevent dust emissions.

On November 12, 2009, Asarco personnel noted excessive winds which sustained a force between 15 mph and 20 mph and gusts exceeding 30 mph, as indicated by the weather station located at the Administration Building. The wind speeds at the top of the tailings dam were likely to be considerably higher. As a result, from approximately 11:00 AM to 12:00 PM on November 12, 2009, Asarco's Environmental Engineer, Jamie Ekholm, conducted a visual survey of emissions for all tailings impoundments. He noted visible emissions from Tailings Impoundment #8 and conducted EPA Method 9

observations. The maximum 6-minute average opacity was 61%. Emissions, however, were only elevated for a short period of time. During the observation period, occasional sustained wind gusts would generate a dust plume that would travel in a northwesterly direction across the dam and cross Helmet Peak road. Wind speeds at the tailings dam were recorded approaching and in excess of 25 miles per hour. Only minimal emissions were observed from other tailings dams, none of which necessitated conducting a Method 9 observation.

Asarco Mission Complex hereby submits the information required by Permit 2026, Part "A", sections XIII.B.2 as follows:

a. **The identity of each stack or other emission point where the excess emissions occurred:**

Excess emissions were detected from Tailings Impoundment #8. Furthermore, during the Method 9 observation at Tailings Impoundment #8, visible emissions were observed crossing the property boundary at Helmet Peak road. When this occurred, wind speeds approaching 25 miles per hour and in excess of 25 miles per hour were recorded.

b. **The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;**

As discussed, from approximately 11:00 AM to 12:00 PM on November 12, 2009 Jamie Ekholm conducted a visual survey of emissions for all tailings dams and noted visible emissions from Tailings Impoundment #8 with a maximum 6-minute average opacity of 61 per cent. However, these emissions were only elevated for a short period of time. Also, during the observation period, occasional sustained wind gusts would generate a dust plume that would travel in a northwesterly direction across the dam and cross Helmet Peak road. Wind speeds were recorded approaching and in excess of 25 miles per hour.

c. **The time and duration or expected duration of the excess emissions.**

Mr. Ekholm drove the Asarco property earlier in the day and did not notice any visible emissions from any tailings impoundments, including Tailings Impoundment #8. When high winds were noticed, Mr. Ekholm completed a visual survey of all tailings impoundments with Tailings Impoundment #8 being the only one with significant emissions. The previous visual observation survey on Tailings Impoundment #8 performed pursuant to Asarco's Visual Observation Plan did not observe any visible emissions. For these reasons, Asarco believes that the excess emissions in this case were caused by the extreme wind gusts on November 12<sup>th</sup>. The wind speeds increased at approximately 11:30 AM on

November 12<sup>th</sup> and lasted until about 3:30 PM. At approximately 1:30 PM, Mr. Ekholm received a call from PDEQ Air Quality Inspector, James Jones. Mr. Ekholm and Mr. Jones inspected Tailings Impoundment #8 at approximately 2:30 PM and very limited emissions were observed. When Mr. Ekholm and Mr. Jones left Tailings Impoundment #8 at 3:15 PM, no visible emissions from Tailings Impoundment #8 were observed. As a result, any opacity in excess of the 20 percent limit occurred for only a short time.

**d. The identity of the equipment from which the excess emissions emanated.**

The excess emissions occurred from Tailings Impoundment #8.

**e. The nature and cause of the emissions.**

High winds over the past few weeks have scoured the protective crust on Tailings Impoundment #8. Due to ongoing berm building, Asarco has not been able to apply wet tailings to the surface of the impoundment. Although Asarco began immediately applying dust suppressant polymer to Tailings Impoundment #8's surface, the large size of the dam precluded Asarco from being able to repair the entire crust layer at once. The broken crust and excessive wind gusts on November 12<sup>th</sup> were the cause of the excess emissions as described above.

**f. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunction.**

It does not appear that the excess emissions were the result of a malfunction.

**g. The steps that were or are being taken to limit the excess emissions.**

As discussed previously, high winds damaged the protective coatings on Asarco's Tailings Impoundment #8. Asarco took immediate steps to cover the impoundment with dust suppressant polymer. Areas that were suspected of causing dust and those identified as causing dust have been targeted. Areas where no dust has been observed will also be treated until such time as wet tailings can again be applied to the surface. By November 12<sup>th</sup>, 2009, Asarco has used approximately 135,500 gallons of dust suppressant/water mixture as well as 1.13 million gallons of water on Tailings Impoundment #8. As soon as high winds were noticed, Asarco's Surface Crew Supervisor also suspended all berm building in an effort to further minimize any emissions. Throughout the berm building mode, Asarco has followed all requirements set forth in its Non-Point Source Monitoring Plan.

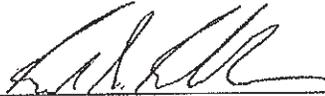
- h. If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.

It does not appear at this time that the dust was the result of a malfunction.

\* \* \*

Asarco believes it has acted in a proactive manner to control fugitive dust emissions from Tailings Impoundment #8. If you have additional questions or concerns, please let me know.

In accordance with Part "A", Section VIII of Air Quality Operating Permit No. 2026, I certify that based on information and belief formed after reasonable inquiry of Asarco staff, the statements and information in this compliance certification and attached documents are true, and complete

Signature  \_\_\_\_\_  
Responsible Official/Authorized Representative

Printed Name and Title: Richard S. Rhoades, General Manager

Date: 11/13/09

ATTACHMENT 5  
National Weather Service, Tucson Airport Weather Conditions for November 12, 2009

# National Weather Service Forecast Office

## Tucson, AZ



Home News Organization Frequently Asked Questions Search

☉ WR ☉ NWS ☉ ALL NOAA

Get Local Forecast for:  
Enter location...  
 Search Help

Show 7 Days Printable Version Show Raw Observations  
Data: MesoWest Disclaimer

For Information Regarding the Accuracy of This

- Current Hazards
- Watches/Warnings
- National Outlooks
- WX Briefing pages
- Submit storm report
- Current Conditions
- Weather Story
- Observations
- Quick Wx pages
- Surface plot map
- National maps
- Radar
- Satellite
- Tropical
- AHPS Rivers/etc.
- El Niño ADVISORY

- Forecasts
- Activity Planner
- Forecast Discussion
- Local Forecasts
- Graphical Forecast
- Forecast Tables

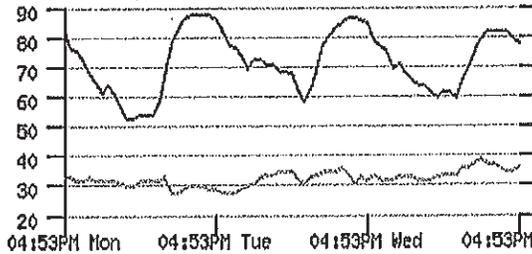
- Fire Weather
- Hydrology
- Aviation Weather
- Numerical Models
- Climate
- Local
- National
- More...
- Drought

- Weather Safety
- Weather Radio
- Monsoon Safety
- Storm Ready
- SkyWarn™
- Additional Information
- Monsoon Info.
- Education/Outreach
- Office staff
- Coyote Crier
- Storm Reviews
- Road Conditions

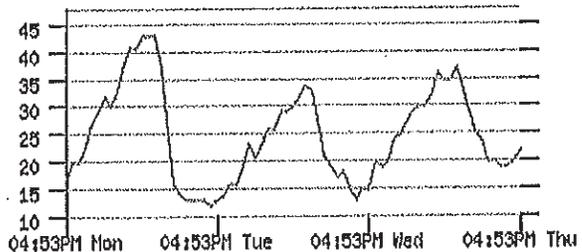
- Contact Us
- Webmaster
- Feedback



Tucson, Tucson International Airport - NWS/FAA  
Temperature and Dewpoint (Degrees F)



Tucson, Tucson International Airport - NWS/FAA  
Relative Humidity (percent)



### Weather Conditions for: Tucson, Tucson International Airport, AZ (KTUS)

Elev: 2641 ft; Latitude: 32.13139; Longitude: -110.95528

Current time: Thu, 12 Nov 17:02 pm (MST)  
Most Recent Observation: Thu, 12 Nov 4:53 pm (MST)

Time (MST)	Temp (F)	Dew (F)	Relative Humidity (%)	Wind Direction	Wind Speed (mph)	Visibility (miles)	WX	Clouds	Sea Level Pressure (mb)	Altimeter Setting (inches)	Station Pressure (inches)	6 Hr Temp Max	6 Hr Temp Min	24 Hr Temp Max	24 Hr Temp Min	Quality Control
12 Nov 4:53 pm	78	36	22	WSW	9	10.00	CLR		1006.0	29.82	27.088	84	78			OK
12 Nov 3:53 pm	80	35	20	WSW	16G23	10.00	CLR		1006.3	29.83	27.098					OK
12 Nov 2:53 pm	82	35	19	SSW	16G29	10.00	CLR		1006.3	29.83	27.098					OK
12 Nov 1:53 pm	82	36	19	SSW	18G24	10.00	CLR		1006.4	29.84	27.107					OK
12 Nov 12:53 pm	82	37	20	SW	16G24	10.00	CLR		1007.5	29.87	27.135					OK
12 Nov 11:53 am	82	37	20	SSW	18G28	10.00	CLR		1008.6	29.91	27.172					OK
12 Nov 10:53 am	79	39	24	S	13	10.00	CLR		1010.2	29.95	27.209	79	60			OK
12 Nov 9:53 am	76	38	25	SSE	8	10.00	CLR		1010.7	29.97	27.227					OK
12 Nov 8:53 am	70	36	29	SSE	8	10.00	CLR		1011.5	29.98	27.236					OK
12 Nov 7:53 am	65	36	34	SSE	14	10.00	BKN090		1011.1	29.97	27.227					OK
12 Nov 6:53 am	60	34	37	SSE	9	10.00	CLR		1011.0	29.96	27.218					OK
12 Nov 5:53 am	62	34	35	SE	10	10.00	CLR		1010.7	29.95	27.209					OK
12 Nov 4:53 am	62	34	35	SSE	9	10.00	CLR		1010.5	29.96	27.218	68	60			OK
12 Nov 3:53 am	60	33	36	SE	8	10.00	CLR		1010.8	29.96	27.218					OK
12 Nov 2:53 am	62	32	32	SE	9	10.00	CLR		1010.9	29.97	27.227					OK
12 Nov 1:53 am	64	32	30	SSE	5	10.00	CLR		1011.4	29.99	27.246					OK
12 Nov 12:53 am	64	32	30	SE	7	10.00	CLR		1011.9	30.00	27.255					OK
11 Nov 11:53 pm	66	33	29	SE	10	10.00	CLR		1011.9	30.00	27.255			88	59	OK
11 Nov 10:53 pm	68	33	27	SSE	7	10.00	CLR		1012.2	30.01	27.264	85	68			OK
11 Nov 9:53 pm	71	33	26	SSE	8	10.00	CLR		1012.4	30.02	27.273					OK
11 Nov 8:53 pm	70	32	24	SE	6	10.00	CLR		1012.9	30.02	27.273					OK
11 Nov 7:53 pm	76	32	20	CALM		10.00	CLR		1012.8	30.02	27.273					OK
11 Nov 6:53 pm	77	32	19	CALM		10.00	CLR		1012.6	30.01	27.264					OK
11 Nov 5:53 pm	79	34	20	W	5	10.00	CLR		1012.2	30.00	27.255					OK
11 Nov 4:53 pm	85	32	15	WNW	3	10.00	CLR		1011.2	29.99	27.246	88	81			OK
11 Nov 3:53 pm	86	33	15	W	7	10.00	CLR		1011.4	30.00	27.255					OK
11 Nov 2:53 pm	87	31	13	SW	6	10.00	CLR		1011.8	30.01	27.264					OK
11 Nov 1:53 pm	87	34	15	SSW	7	10.00	CLR		1012.3	30.03	27.283					OK
11 Nov 12:53 pm	85	36	18	SE	7	10.00	CLR		1013.3	30.05	27.301					OK
11 Nov 11:53 am	84	35	17	VRBL	7	10.00	CLR		1014.4	30.09	27.338					OK
11 Nov 10:53 am	81	35	19	ESE	10	10.00	CLR		1015.9	30.13	27.375	81	59			OK
11 Nov 9:53 am	78	35	21	ESE	13	10.00	CLR		1016.9	30.14	27.384					OK
11 Nov 8:53 am	71	34	26	SSE	12	10.00	CLR		1017.3	30.15	27.394					OK
11 Nov 7:53 am	63	33	33	SSE	12	10.00	CLR		1017.1	30.14	27.384					OK
11 Nov 6:53 am	59	31	34	SSE	8	10.00	CLR		1016.6	30.12	27.366					OK
11 Nov 5:53 am	62	32	32	SE	10	10.00	CLR		1015.8	30.11	27.357					OK
11 Nov 4:53 am	68	35	30	ESE	9	10.00	CLR		1015.4	30.11	27.357	73	68			OK
11 Nov 3:53 am	69	35	29	ESE	9	10.00	CLR		1015.2	30.11	27.357					OK

ATTACHMENT 6  
Email with Attachments dated December 9, 2009

## Dustin Fitzpatrick

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**From:** Ekholm, Jamie [JEkholm@asarco.com]  
**Sent:** Wednesday, December 09, 2009 3:47 PM  
**To:** Dustin Fitzpatrick  
**Cc:** Burgos, Arturo  
**Subject:** RE: Excess Emission Report dated November 13, 2009  
**Attachments:** TD Method 9 111209 and Weather.pdf; Tailings Impoundment #8 Daily Inspections.pdf

Dustin,

Please find Asarco's response to your e-mail found below:

### ASARCO Response:

I have attached a PDF of the EPA Method 9 Observation Form documenting the 61% 6-minute average opacity that was taken on November 12<sup>th</sup> from tailings dam #8

I have also attached pertinent documentation regarding the start date for berm building activity on tailings dam #8. The records show that equipment was moved to the Tailings Dam #8 on September 8<sup>th</sup> and testing of the tailings material was conducted to ensure that it met the characteristics required for proper berm construction. After a determination was made that berm building could proceed on December 10<sup>th</sup>, I notified PDEQ that berm building would commence the following week.

No wet tailings have been applied to the surface of tailings dam #8. Construction of the south berm to the south west corner of the dam must be complete before tailings application can commence. Dust suppression methods during the berm building mode include the application of both water and an acrylic co-polymer (EnviroTac II).

---

**From:** Dustin Fitzpatrick [mailto:Dustin.Fitzpatrick@deq.pima.gov]  
**Sent:** Friday, December 04, 2009 5:04 PM  
**To:** Ekholm, Jamie  
**Cc:** Rhoades, Richard  
**Subject:** Excess Emission Report dated November 13, 2009

Jamie,

I have reviewed the excess emissions report dated November 13, 2009, submitted to the Pima County Department of Environmental Quality (PDEQ). I am requesting additional documentation as follow up to the notification.

Please submit a copy of the EPA Method 9 Observation Form documenting the 61% 6-minute average opacity to PDEQ. In addition, could you also please submit verification of the date that the recent berm building mode began on tailings dam #8 (September 14, 2009 was the date identified on the Initial Inspection of Tailings Dam prior to berm building notification form) and whether or not wet tailings have been applied to tailings dam #8 during the recent berm building to date, including those dates if applicable.

You may submit this documentation to my attention next week. Please contact me if you have any questions.

Thank you,

Dustin Fitzpatrick, Air Compliance Supervisor  
Pima County Department of Environmental Quality  
150 W. Congress Street, Tucson, AZ 85701  
Phone: (520) 740-3331 Fax: (520) 882-7709  
Email: [dustin.fitzpatrick@deq.pima.gov](mailto:dustin.fitzpatrick@deq.pima.gov)

12/23/2009



MONTHLY CLIMATOLOGICAL SUMMARY for NOV. 2009

NAME: Mission1 CITY: STATE:  
 ELEV: 3200 ft LAT: 32° 00' 00" N LONG: 111° 00' 00" W

TEMPERATURE (°F), RAIN (in), WIND SPEED (mph)

DAY	MEAN TEMP	HIGH	TIME	LOW	TIME	HEAT DEG DAYS	COOL DEG DAYS	RAIN	AVG WIND SPEED	HIGH	TIME	DOM DIR
1	69.4	82.9	2:00p	56.1	4:00a	2.3	6.7	0.00	1.5	13.0	8:15a	NW
2	71.2	84.6	3:15p	57.7	6:45a	1.5	7.8	0.00	1.5	14.0	3:00p	NW
3	75.1	91.6	2:30p	60.0	7:15a	0.9	10.9	0.00	1.9	14.0	10:45a	ESE
4	77.7	90.3	1:15p	68.9	6:30a	0.0	12.7	0.00	1.4	15.0	1:15p	SW
5	78.3	90.1	3:15p	67.4	4:00a	0.0	13.3	0.00	1.6	19.0	12:45p	SW
6	72.5	83.4	11:30a	66.6	7:15a	0.0	7.5	0.00	1.5	12.0	12:15p	NW
7	70.8	81.8	3:15p	60.9	7:30a	0.6	6.4	0.00	0.6	6.0	2:30p	W
8	69.8	81.1	1:30p	60.7	4:30a	0.9	5.7	0.00	1.6	13.0	11:00a	NW
9	69.6	80.9	3:30p	58.7	6:45a	1.4	6.0	0.00	1.6	13.0	11:15p	WNW
10	73.2	87.7	2:45p	59.6	5:30a	1.0	9.1	0.00	1.3	10.0	1:15p	E
11	74.5	86.5	2:45p	63.4	5:15a	0.1	9.5	0.00	1.7	14.0	12:30p	SSE
12	72.8	79.6	1:45p	67.7	5:00a	0.0	7.8	0.00	3.3	31.0	11:30a	SW
13	65.8	69.6	12:15a	62.1	7:00a	0.2	0.4	0.00	3.6	21.0	4:15a	SW
14												
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28												
29												
30												
-----												
	72.4	91.6	3	56.1	1	8.9	103.8	0.00	1.8	31.0	12	SW

Max >= 90.0: 3

Max <= 32.0: 0

Min <= 32.0: 0

Min <= 0.0: 0

Max Rain: 0.00 ON 11/01/09

Days of Rain: 0 (>.01 in) 0 (>.1 in) 0 (>1 in)

Heat Base: 65.0 Cool Base: 65.0 Method: Integration

ASARCO LLC - Mission Complex

DAILY TAILINGS IMPOUNDMENT BERM BUILDING ACTIVITIES

Date: 9/8/09 Tailings Impoundment Number: 8  
Report completed by: A.N. GRIJALVA

- N Tailings impoundment in operating mode?  
 N Condition of tailings checked after daily construction?

Condition of tailings: Dry\*  Moist / Wet

- Y  N High winds present during construction?  
Y  N Dusty conditions encountered during daily construction?\*

\*If dusty conditions were encountered, what actions were taken to suppress the dust?

Increase watering frequency / Dust suppressant used

We started Digging  
to see what conditions  
I get the "451" on the  
Right track & some Building <sup>Berm</sup>

ASARCO LLC – Mission Complex

DAILY TAILINGS IMPOUNDMENT BERM BUILDING ACTIVITIES

Date: 9/9/09 Tailings Impoundment Number: 8  
Report completed by: A. N. GRIMALVA

- Y  N Tailings Impoundment in operating mode?  
 Y  N Condition of tailings checked after daily construction?

Condition of tailings: Dry\* /  Moist / Wet

- Y  N High winds present during construction?  
Y  N Dusty conditions encountered during daily construction?\*

\*If dusty conditions were encountered, what actions were taken to suppress the dust?

Increase watering frequency /  Dust suppressant used

STARTED Building  
BERM

ASARCO LLC – Mission Complex

DAILY TAILINGS IMPOUNDMENT BERM BUILDING ACTIVITIES

Date: 9/10/09 Tailings Impoundment Number: 8  
Report completed by: ANGRIJALVA

N Tailings Impoundment in operating mode?

N Condition of tailings checked after daily construction?

Condition of tailings: Dry\*  Moist / Wet

Y  N High winds present during construction?

Y  N Dusty conditions encountered during daily construction?\*

\*If dusty conditions were encountered, what actions were taken to suppress the dust?

Increase watering frequency / Dust suppressant used

CONT. Building BERM/Quit around  
11:30 AM (low on fuel)

"Fuel truck down" for repairs

ASARCO LLC – Mission Complex

DAILY TAILINGS IMPOUNDMENT BERM BUILDING ACTIVITIES

Date: 9-14-05 Tailings Impoundment Number: # 7

Report completed by: Jerry J. ...

Y  N Tailings impoundment in operating mode?

N Condition of tailings checked after daily construction?

Condition of tailings: Dry\* /  Moist / Wet

Y  N High winds present during construction?

Y  N Dusty conditions encountered during daily construction?\*

\*If dusty conditions were encountered, what actions were taken to suppress the dust?

Increase watering frequency / Dust suppressant used

# ASARCO LLC - Mission Complex

## Daily Inspection of Tailings Dam during berm building.

Daily inspection of Tailings Dams that are in the berm building phase performed in compliance with ASARCO LLC - Mission Complex Visual Observation Plan.

Tailings Dam: 8

Berm Building Initiation Date: \_\_\_\_\_

Inspection Date: 9/8/09 Time: 1:00 AM

Inspector (print): A. NGRETA LVA (sign): [Signature]

List each area of the tailings dam that were disturbed by construction on this date

West side / North of conveyer

For each section identified, complete a Response Action.

Response Action for Section: West side

Condition of Tailings: (circle) dry moist wet

If dry, circle all of the following that were applied:

dust suppressant (identify) water  other (identify) \_\_\_\_\_

Volume applied: \_\_\_\_\_ Time applied: 1:30 AM

Other corrective actions taken:

Just started digging on 451  
on track for Berm building

# ASARCO LLC – Mission Complex

## Daily Inspection of Tailings Dam during berm building.

Daily inspection of Tailings Dams that are in the berm building phase performed in compliance with ASARCO LLC - Mission Complex Visual Observation Plan.

Tailings Dam: 8

Berm Building Initiation Date: \_\_\_\_\_

Inspection Date: 9-9-09 Time: 11:00 AM

Inspector (print): A.N. GREENAWALD (sign): [Signature]

List each area of the tailings dam that were disturbed by construction on this date

West side / North of causeway

For each section identified, complete a Response Action.

Response Action for Section: West side

Condition of Tailings: (circle) dry moist wet

If dry, circle all of the following that were applied:

dust suppressant (identify) water other (identify) \_\_\_\_\_

Volume applied: \_\_\_\_\_ Time applied: 1.00

Other corrective actions taken:

# ASARCO LLC - Mission Complex

## Daily Inspection of Tailings Dam during berm building.

Daily inspection of Tailings Dams that are in the berm building phase performed in compliance with ASARCO LLC - Mission Complex Visual Observation Plan.

Tailings Dam: 8

Berm Building Initiation Date: \_\_\_\_\_

Inspection Date: 9/10/09 Time: 10:00 AM - 1:00 PM

Inspector (print): A. N. GRIJALVA (sign): [Signature]

List each area of the tailings dam that were disturbed by construction on this date

West side / North of CRUSA WAY

For each section identified, complete a Response Action.

Response Action for Section: \_\_\_\_\_

Condition of Tailings: (circle) dry moist wet

If dry, circle all of the following that were applied:

dust suppressant (identify) water other (identify) \_\_\_\_\_

Volume applied: \_\_\_\_\_ Time applied: 2:00 PM

Other corrective actions taken:

# ASARCO LLC – Mission Complex

## Daily Inspection of Tailings Dam during berm building.

Daily inspection of Tailings Dams that are in the berm building phase performed in compliance with ASARCO LLC – Mission Complex Visual Observation Plan.

Tailings Dam: 8

Berm Building Initiation Date: 9-8-09

Inspection Date: 9-14-09 Time: 8:30 AM + 12:30 PM

Inspector (print): Breg Grochowski (sign): [Signature]

List each area of the tailings dam that were disturbed by construction on this date

West + North of Causeway

For each section identified, complete a Response Action.

Response Action for Section: \_\_\_\_\_

Condition of Tailings: (circle) dry (moist) wet

If dry, circle all of the following that were applied:

dust suppressant (identify) (water) other (identify) \_\_\_\_\_

Volume applied: 2000 gal. Time applied: 12:30 PM.

Other corrective actions taken:

Attachment No. 7  
PDEQ Inspection Report  
12/22/09