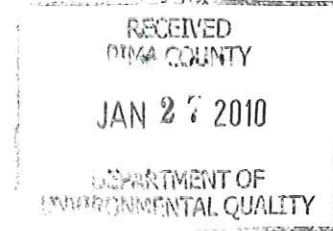




Mission Complex

HAND DELIVERED

January 27, 2010



Pima County Department of Environmental Quality
Air Program
Attn: Mr. Dustin Fitzpatrick, Air Compliance Supervisor
James M. Jones, Civil Engineering Assistant
150 W. Congress St.
Tucson, AZ 85701

Re: Response to NOV Nos. 0911-061 and 0912-067
ASARCO LLC—Mission Complex, Permit No. 2026

Dear Messrs. Fitzpatrick and Jones:

This letter constitutes the response of ASARCO LLC—Mission Complex (“Asarco”) to the Notices of Violation (“NOVs”) Nos. 0911-061 and 0912-067 issued by the Pima County Department of Environmental Quality (“PDEQ”) on December 23, 2009 and December 31, 2009. Asarco is responding to both NOVs at the same time because they contain essentially the same allegations. Asarco’s general response and explanation of its actions and corrective actions taken to ensure compliance is addressed first, followed by each allegation in the NOVs and Asarco’s specific response to those allegations. Asarco’s response ends with a proposed “Berm Building Dust Control Plan” to minimize the likelihood of future recurrence of blowing dust.

General Response and Explanation of Actions that Led to Alleged Violations and Corrective Actions Taken to Ensure Compliance

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. Asarco commenced berm building on September 14, 2009, when it was judged that ambient moisture levels reached the level that would allow berm construction. Asarco adopted the following protocols to minimize emissions during berm building, as required by the Visual Observation Plan (revised July 20, 2007):

- Asarco completed an initial inspection of the dam to look for areas that have the potential for dust emissions and to ensure application of water or dust suppressant i.e., acrylic co-polymer to control dust emissions. Asarco provided notification to PDEQ of the commencement of berm building and the initial inspection results.
- Asarco completed a visual observation each week thereafter as required by Asarco’s Visual Observation Plan. If areas of concern were observed, Asarco took corrective action such as application of co-polymer or water.

- During each day berm building occurred, Asarco inspected the areas disturbed by the berm building operations. If dusty conditions were observed, Asarco would immediately apply water to those areas.
- Each day at the conclusion of berm building, Asarco would spray all disturbed areas with co-polymer or water to minimize dust emissions.

In addition, Asarco instituted the practice that no berm construction would occur during the day if polymer trucks were not available. This assured both periodic maintenance on the trucks and also that no disturbed area would be left untreated at the end of any day because of unavailability of polymer trucks.

On October 20, 2009, Asarco's construction crew reported high winds and some fugitive emissions. Work immediately stopped, co-polymer was applied, and the General Manager authorized the use of additional co-polymer as needed to stabilize affected areas to minimize emissions. Visual observations on October 20, 2009, did not show emissions in excess of 20% opacity. On October 21, 2009, PDEQ inspected Asarco's facility. No blowing tailing were observed on October 21st. Nevertheless, Asarco immediately implemented the following enhanced measures to take "reasonable precautions" to prevent blowing tailings, starting October 20th and is continuing to the present time:

- Asarco expanded co-polymer application to the interior of Tailings Dam #8, initially targeting any area where dust was observed, spraying that area, and then working downwind.
- Asarco sought, to the extent practicable, to expand co-polymer spraying over quadrants of Tailings Dam #8 within areas of the tailings dam reachable by a spray truck.
- On forecast windy days, Asarco discontinued berm building on Tailings Dam #8 to devote resources exclusively to dust control.

The inspection on October 21, 2009 revealed no fugitive emissions or unstable conditions. The inspector also documented that Tailings Dam #7 was wet and moist. The inspector observed that the new berm on Tailings Dam #8 was blue colored, indicating that the co-polymer had been applied consistent with Asarco's reasonable precautions. Observation of both the north side and surface of Tailings Dam #8 showed the areas to be encrusted and stable.

On October 27, 2009, high wind conditions also were present and PDEQ issued an air quality advisory that gusty winds might increase levels of particulate matter in the air. Consistent with its reasonable precaution approach outlined above, Asarco was not conducting berm building activities on this day, but instead had diverted those resources to dust control. A PDEQ inspector was present during part of the day. Most of the mine was under good control, but for a brief period, when the inspector had to sit because of the force of the wind and wind speeds were in excess of 35 mph, the inspector observed some opacity from blowing tails off of Tailings Dam #8. As before, the inspector observed that Asarco had applied polymer to the new berm and had expanded its polymer application to also include targeted areas of the dam surface, consistent with the reasonable precaution measures Asarco described above.

Asarco continued to implement its reasonable precautions practice, including expanded application of polymer on the surface of Tailings Dam #8 during this period. Asarco applied polymer on the surface of Tailings Dam #8 on October 27th, 28th and 29th until all areas reasonably and safely reachable by the polymer spray trucks had been sprayed. Additional polymer was also applied on surface areas that inspection revealed could cause dust on November 12-15th, December 7th, December 22nd, and December 29th. Beginning December 22, 2009, Asarco was able to resume smearing of the top of Tailings Dam #8 with new, wet tails, although Asarco continued to apply polymer as necessary.

Asarco believes that its continuous program of inspection, periodic visual observation monitoring, cessation of activities during days of anticipated high winds, application of water during construction activities, and sealing of all disturbed areas at the conclusion of each construction day meets the regulatory requirement that Asarco take “reasonable precautions” to prevent blowing tails and excess opacity. These activities were increased over time and increased substantially, including use of overtime labor, during periods when fugitive emissions were observed.

Response to Specific Alleged Violations in NOV 0911-061 and 0912-067

Specific measures taken on November 12, 2009 and December 22, 2009, cited in the NOV, are discussed below.

Alleged Violation #1 (NOV 0911-061 & 0912-067)

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 17.16.050B]

- 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 NOV 0911-061

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.

Findings NOV 0912-067

On December 22, 2009, ASARCO, LLC – Mission Complex caused and allowed fugitive emissions from tailings dam #8 to have an average optical density greater than 20 percent, as documented during three separate observation periods.

Requested Corrective Action(s)

- › Immediately employ all necessary control measures required to prevent effluent from fugitive 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.

Asarco Response to Alleged Violation #1, NOV 0911-061 & 0912-067

Asarco concedes that the opacity of blowing tailings from Tailings Dam #8 sporadically exceeded 20% on November 12, 2009 and December 22, 2009. In mitigation, Asarco notes that the maximum wind speeds measured on November 12, 2009 exceeded 25 mph—a condition that the Asarco Permit and the Pima County Regulations explicitly acknowledge is difficult to control. *See, e.g.,* Part B, Condition I.C.3.b; PCC § 17.16.050.D. Similarly, on December 22, 2009, Asarco notes that the maximum wind speeds exceeded 36 mph and 45 mph during two separate measurements by PDEQ’s inspector. Regional gusty winds and corresponding higher particulate levels were documented in an Air Quality Advisory issued by PDEQ on December 22, 2009. On that date, it is clear that regional gusty winds were causing a problem throughout large portions of Pima County and the state and not solely near Asarco’s Mission Complex.

Asarco did immediately employ all necessary control measures to reduce emissions. These measures included cessation of all berm building activity on the days where high winds were anticipated; spraying of water and polymer on the berm, disturbed areas, and the surface of the dam (within areas reachable without risking the safety of Asarco employees); and expenditure of overtime labor on these efforts. The success of Asarco’s efforts is seen in the absence of excess emissions later during that day and during successive days.

Asarco has developed the attached “Berm Building Dust Control Plan” to prevent recurrence.

Alleged Violation #2 (NOV 0911-061 & 0912-067)

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.D1]

- 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 (NOV 0911-061):

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.

Findings (NOV 0912-067):

On December 22, 2009, ASARCO, LLC – Mission Complex caused and permitted the diffusion of visible emissions from tailings dam #8 beyond the property boundaries of Helmet Peak Road and La Canada Drive 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.

Asarco's Response to Alleged Violation #2 (NOVs 0811-061 & 0912-067)

Asarco disagrees with PDEQ's alleged violation #2. First, Asarco did take "reasonably necessary and feasible precautions" to prevent and control fugitive emissions from its property. As stated in the General Response above, Asarco had implemented the following reasonable precautions:

- Asarco completed an initial inspection of the dam to look for areas that could potentially generate excessive emissions and to ensure application of water and dust suppressant to minimize emissions.
- Asarco completed a visual observation thereafter each week as required by Asarco's Visual Observation Plan. If areas of concern were observed, Asarco took corrective action such as application of water and co-polymer.
- During each day berm building occurred, Asarco inspected the berm building operations. If dust generation was observed, Asarco would immediately apply water to those areas.
- Each day at the conclusion of berm building, Asarco would spray all disturbed areas with co-polymer to prevent blowing dust in the future.
- Asarco instituted the practice that if polymer trucks would not be available, no berm construction would occur during that day.

- Commencing upon October 20, 2009, Asarco began enhanced application of co-polymer to the interior surface of Tailings Dam #8 in areas likely to generate fugitive dust.
- As of October 29, 2009, Asarco completed application of co-polymer to all areas of the surface of Tailings Dam #8 reasonably reachable for polymer application, consistent with the safety of Asarco's employees.

Asarco's General Manager directed that all necessary co-polymer and manpower be used for dust control, starting on October 20, 2009. Asarco also expended overtime labor to apply polymer and implement other dust controls. Total polymer and water application during these periods was as follows:

<u>Month</u>	<u>Polymer/Water Mixture</u>	<u>Water</u>
September (part)	16,500 gallons	246,500 gallons
October	85,000 gallons	598,000 gallons
November	132,000 gallons	557,000 gallons
December	157,000 gallons	455,000 gallons

Asarco's application rate of co-polymer increased with time as the tailings became drier. Asarco's actions were fully consistent with its duty to take reasonable precautions commensurate with the size and scope of both Tailings Dam #8 and the berm building project.

Second, Asarco's permit specifically requires that Asarco "employ at least one" of a list of dust control measures. Permit 2026, Part B, Condition I.C.11. Asarco was implementing "use dust suppressants or soil stabilizers," "continuous wetting," "inherent moisture content," "encrustation," "dust suppressants," and "spraying active berms and construction areas with water as necessary." These measures, by permit, fulfill the requirement of Part B, Condition I.C.3. See Permit 2026, Part B, Condition I.C.11 (last sentence). Because Asarco was implementing the approved measures, Asarco satisfied the requirements of Condition I.C.3.

Third, PDEQ's NOV contravenes the permit, which expressly provides:

In the event of significant problematic and persistent property line visible emissions, PDEQ and the Permittee shall confer to determine whether additional reasonably necessary and feasible precautions are needed. In the event that PDEQ and the Permittee agree additional precautions are necessary, the Permittee shall propose for PDEQ approval precautions that seek to diminish, but may not necessarily eliminate, visible emissions at the property line.

Permit 2026, Part B, Condition II.H. Under the permit, if PDEQ believes that Asarco's reasonable precautions are not appropriate, then it must confer with the Permittee and the Permittee is to propose additional measures. Critically, the permit specifically recognizes that elimination of all visible emissions at the property line may not be possible. Read together, Conditions I.C.11 and II.H clearly refute PDEQ's allegation that Asarco has violated Condition I.C.3 of its permit. Asarco was implementing reasonable precautions. If PDEQ believes

additional precautions are needed, the permit requires PDEQ to confer with Asarco and Asarco to propose such measures. An NOV is inappropriate.

Fourth, PDEQ's allegations contravene the provisions of Condition I.C.3.b, which clearly states that the visible emissions at the property line standard does not apply when wind speeds exceed 25 mph. On both days in question, November 12, 2009 and December 22, 2009, wind speeds exceeded 25 mph. PDEQ has provided no basis, nor can it, to support its contention that Asarco's measures were not adequate or commensurate with the size of the facility. Asarco had ceased berm building operations well prior to the start of the event; the bulk of the tailings dam and levee surfaces remained encrusted; Asarco had applied polymer to all areas disturbed by the berm building activity; and Asarco applied co-polymer to reachable sections of the dam surface to prevent or minimize emissions. Asarco's actions were "commensurate with the size or scope of the emission unit" and PDEQ's action in issuing this NOV contravenes Conditions I.C.3.b and II.H of the permit.

In any event, Asarco did immediately employ all necessary control measures to reduce emissions. These measures included cessation of all berm building activity on the days where high winds were anticipated; spraying of water and co-polymer on the berm, disturbed areas, and the surface of the dam (within areas reachable without risking the safety of Asarco employees); and expenditure of overtime labor on these efforts. The success of Asarco's efforts is seen in the absence of excess emissions later during that day and during successive days.

Asarco has developed the attached "Berm Building Dust Control Plan" to prevent recurrence.

Alleged Violation #3 (NOVs 0911-061 & 0912-067)

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 (NOV 0911-061):

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.

Findings (NOV 0912-067):

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. Tailings dam #8 remained in berm building mode on December 22, 2009. ASARCO, LLC – Mission Complex commenced application of fresh tailings to the northwest section of tailings dam #8 at noon on December 22, 2009. The initial application of fresh tailings remained confined to the berm building trench at the outer perimeter of tailings dam #8 and did not cover the surface of the tailings dam where the generation of excessive fugitive dust was originating.

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. Ensure that the fresh tailings do not flow into the berm building trench at the outer

perimeter of tailings dam #8 and do flow out onto the surface of the tailings where the generation of fugitive dust is occurring.

- › 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.
- › Immediately 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.

Asarco's Response to Alleged Violation #3 (NOVs 0911-061 & 0912-067)

Asarco disagrees that it has violated Part B, Condition II.F.1. First, this condition was included to implement the 1998 Settlement Agreement between the Arizona Mining Association, Asarco and Pima County. The condition as reproduced in the permit, however, is in error. The condition that was proposed as part of the Settlement Agreement provides as follows:

Tailings piles, when active during the building mode, will be smeared (light coat of fresh, moist tailings on the surface of dam) once every 60 days unless meteorological conditions make it unnecessary.

Letter from Newman Porter, Lewis & Roca (counsel for AMA/Asarco) to Christopher Straub, Deputy County Attorney, at 2 (July 17, 1998) (emphasis added; copy attached). This condition is now found in Condition II.F.1, absent the language “when active.” This is a significant omission that requires immediate correction by PDEQ. What was proposed and, to Asarco’s knowledge, agreed to in the 1998 Settlement Agreement between Asarco and the County is that Asarco would apply tails every sixty days during berm building when Asarco has the ability to apply the tailings (e.g., when the tailings impoundments are active—meaning the tailings line is active and adequate berm has been constructed to prevent tailings escaping the impoundment).

Second, Asarco and PDEQ discussed this very issue during the 2007 amendments to the Visual Observation Plan (VOP). In amending the VOP, it had been discussed that Asarco should smear tailings even more often, including prior to and during berm building. In a letter dated July 3, 2007, Asarco clearly stated that it is infeasible to “slime” tails before berm building (because that would cause equipment to sink into the tails) or during the construction phase (because the tailing line is disassembled). PDEQ concurred and agreed to the removal of any requirement for sliming during the construction phase (berm building) from the VOP. PDEQ has acknowledged that this condition (II.F.1) applies only when the tailing line is active and sufficient perimeter berm has been constructed to safely contain the tails.

Third, Condition II.F.1 requires monitoring, it does not require that smearing occur. The control requirements in Condition I.C.11 list smearing as one of many options constituting reasonable precaution. In this case, Asarco implemented a number of measures listed in I.C. 11 (discussed above) to comply with the substantive control requirements. Asarco believes that it met the control requirements and that the II.F.1 monitoring condition does not redefine the control

obligation—particularly where Condition II.F. 1 omitted the critical caveat that smearing occur when the tailings dam is “active.”

In any event, Asarco did immediately employ all necessary control measures to reduce emissions. These measures included cessation of all berm building activity on the days where high winds were anticipated; spraying of water and co-polymer on the berm, disturbed areas, and the surface of the dam (within areas reachable without risking the safety of Asarco employees); and expenditure of overtime labor on these efforts. The success of Asarco’s efforts is seen in the absence of excess emissions later during that day and during successive days.

Tailings smearing commenced on December 22, 2009, prior to the issuance of either NOV 0911-061 or 0912-067. Asarco does not believe that the berm building trench significantly affects the flow of tailings for smearing purposes as the quantity of tails produced in a single day is far greater than the volume of the trench. Further, the trench must be filled to allow further development of the dam. Therefore, Asarco does not agree with this aspect of the proposed corrective action in NOV 0912-067 because that action is inconsistent with good engineering practice for tailings impoundment development.

Asarco has developed the attached “Berm Building Dust Control Plan” to prevent recurrence

Asarco’s Plan to Prevent Future Recurrences

Asarco has developed a dust control plan to prevent recurrence. A preliminary draft of the Berm Building Dust Control Plan is attached. Asarco will seek a permit revision to eliminate the error in current Condition II.F.1 and to add a Berm Building Dust Control Plan that will set forth how Asarco will manage the berm building process to minimize the likelihood of future emissions. This plan would augment the VOP already included in Asarco’s permit.

A final plan, which requires some additional engineering review to ensure feasibility of all of the particulars, will be submitted with the permit revision. If PDEQ concurs with the proposed Plan, Asarco anticipates submitting the permit revision request by March 15, 2010.

Request to Meet

As indicated in prior telephone conferences with Dr. Krishna Parameswaran, Asarco would like to meet with PDEQ to discuss the response to this NOV and the proposed Berm Building Dust Control Plan and its accompanying permit revision. Please coordinate times with Dr. Krishna Parameswaran at (520) 798-7792.

ASARCO LLC—Mission Complex
Response to NOVs 0911-061 and 0912-067
January 27, 2010
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Please contact either Dr. Parameswaran at the number listed above, or Jamie Ekholm, Mission Complex Environmental Engineer, at (520) 393-4671, if you have any questions concerning this response.

Sincerely,



Richard S. Rhoades
General Manager

Enclosures

Preliminary Draft Berm Building Dust Control Plan
Letter from Newman Porter, Esq., dated July 17, 1998

ENCLOSURES

Preliminary Draft Berm Building Dust Control Plan

PRELIMINARY DRAFT

**ASARCO LLC—MISSION COMPLEX
BERM BUILDING DUST CONTROL PLAN
(January 27, 2010)**

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ASARCO LLC—MISSION COMPLEX
BERM BUILDING DUST CONTROL PLAN

INTRODUCTION

ASARCO LLC—Mission Complex (“Asarco”) is committed to complying with existing environmental, safety and health laws and regulations. The Clean Air Act, regulations and its Title V permits require Asarco to employ reasonable precautions in the construction and operation of its tailings dams to minimize dust emissions, prevent excessive amounts of particulate matter from becoming airborne off of its tailings dams and not permit diffusion of fugitive visible emissions, including fugitive dust across the property line. This Berm Building Dust Control Plan is adopted by Asarco to comply with these requirements. This Plan may be revised from time to time to enhance controls, based upon lessons learned from the implementation of this Plan and changes in technologies and control strategies available to Asarco.

The Mission Complex operates three active tailings dams: Tailings Dams #4, #7 and #8. Each tailings dam has three operational phases or modes: active (receiving tails); inactive (not receiving tails and/or preparation for berm building); and berm building (constructing perimeter berms). The berm building mode entails two different types of activities: (1) perimeter berm construction and (2) periodic pipeline lift and associated service road construction.

This Plan describes how the Mission Complex tailings dam berm construction procedures will be modified and outlines the dust control measures that will be utilized for these two activities in order to minimize fugitive dust generation. The main modification in the construction procedure is (1) a dam undergoing berm building will be partially divided into segments by construction of dikes that extend from the perimeter berm to the general vicinity of the ponded water near the decant tower(s) and (2) the use of wet construction techniques.

Operation of tailings dams or segments of tailings dams in the active and inactive modes will continue consistent with historical Mission Complex practice and are unaffected by this Plan.

PLAN DETAILS

1.0 Preparation for Berm Building

The segment(s) of the tailings dam planned for berm building are filled to capacity by depositing tailings slurry in preparation for raising the perimeter berm. The reclaim water flows to the decant tower where it is decanted off and reused in the milling processes. After the segment(s) are filled, evaporating time is required to enable the heavy equipment to work in the area. This evaporating period is also required to allow moisture content reduction needed for adequate compaction of the erected perimeter berm. The length of time that is required to achieve the proper moisture content is a variable controlled by weather conditions. During the preparation period, smearing of tailings is not possible.

2.0 Berm Building Mode Controls

2.1 Perimeter Berm Construction Controls

2.1.1 Notice of Commencement of Perimeter Berm Building. Asarco will give notice to PDEQ, of the commencement of perimeter berm building, along with the initial inspection results, as required by the current Visual Observation Plan.

2.1.2 Operational Control. The next time a tailings dam (Tailings Dam #4, #7 or #8) enters the berm building mode, that dam will be partially divided into segments by construction of dikes that extend from the perimeter berm to the general vicinity of the ponded water near the decant tower(s). This change will allow one or more segments of each tailings dam to remain active receiving wet tailings, while berm construction or drying in preparation for berm building is going on in other segments, thereby reducing the potential for fugitive dust generation from berm construction activities. Asarco will keep approximately 50% or less by area (depending upon the number of segments and absent any extraordinary circumstances such as during periodic pipeline lift) of each tailing dam in berm building mode to reduce potential fugitive dust generation.

Attempts to start as early as possible shall be made by using a low-ground pressure bulldozer to compact the surface and accelerate moisture reduction of the material that will be used as borrow material for the berm and to stabilize the area for the excavator to begin berm construction. The active berm building segment(s) shall be worked as wet as possible while maintaining a moisture content that will not jeopardize berm compaction and the overall stability of the dam. A combination of a low ground pressure bulldozer and a large hydraulic excavator will be used to place and shape the berm in a single lift. Lifts are typically, but not always, 10 feet. At normal, full production rates, the perimeter berms at the Mission Complex tailings dams are raised approximately ten feet each year.

2.1.3 Controls Employed During Perimeter Berm Construction. During the berm building mode, Asarco will implement additional dust control measures including those in the current Visual Observation Plan and the proposed revision to the VOP dated December 23, 2009. These measures include:

2.1.3.1 Construction Period—Daily Controls. Water will be applied during the operating day to areas of the berm, disturbed areas, or access roads as necessary to minimize dust, unless adequate rain renders this unnecessary. Co-polymer binder will be applied at the end of construction each day to all new areas disturbed by construction activity including any new berm constructed during the day. If inspection of the segment identifies interior areas within the segment that require additional dust control, co-polymer binder will be applied to those areas if safe and practicable.

2.1.3.2 Construction Period—Weekly Controls. Co-polymer binder will be applied systematically to the surface of the segment as it becomes sufficiently dry to permit safe

spray application as set forth in this paragraph. Each week, the segment will be inspected to identify areas exhibiting loss of encrustation and to determine if co-polymer application can be safely extended towards the decant tower. If the inspection reveals that the encrustation is compromised and that the segment can support the spray application vehicle, Asarco will systematically apply co-polymer as needed in areas judged safe for application.

2.1.3.3 Construction Period—Supplementary Controls. If Asarco's monitoring detects that tailings dams in the berm building mode are becoming dry and the morning weather forecast at <http://weather.yahoo.com/united-states/arizona/-12794670/> predicts sustained wind speeds for the day in excess of 20 mph, then Asarco will implement the following supplementary controls, as appropriate, to ensure reasonable precautions are taken to prevent fugitive dust:

- Asarco will not schedule berm construction work for days with sustained winds predicted in excess of 20 mph, unless it is raining sufficiently to prevent dust from becoming airborne.
- Asarco will inspect the surface of the new berm, any service road or dam surface area disturbed by berm building and will apply co-polymer or water as appropriate.
- Asarco will inspect the dam surface for signs of potential fugitive dust emissions and will apply co-polymer where safe and practicable.
- Asarco will deploy overtime labor, if needed, to ensure fugitive dust emissions remain within permit limits.

2.1.4 Construction Completion and Smearing. Once a sufficient portion of the berm construction is complete and the tailings spigots can be reinstalled and extended, tailings deposition will commence on the segment of the dam where the berm was raised in order to rewet the tailings surface. Tailings deposition will be stepped through the available spigots on a systematic basis. Asarco typically operates four to six spigots at a time, but this may vary based upon tailings production. Asarco will commence smearing with fresh tails within any active berm building segment within sixty (60) days after the date Asarco commenced perimeter berm building, as stated in Asarco's Notice of Commencing of Perimeter Berm Building.

2.2 Periodic Pipeline Lift and Associated Service Road Construction.

Approximately every three to four years, the tailing supply pipeline around the perimeter of each tailing dam is raised to a higher working elevation to maintain a safe and practical operating pressure for the spigots. Since tailings deposition occurs at a rate of approximately ten feet per year, the pipeline is typically raised approximately 30 feet to the new working elevation. This pipe lift construction period takes several additional weeks to dismantle, repair or replace and prepare the existing pipeline so it can be lifted to the new elevation. Additionally, a new service

road must be surveyed and built to support the pipeline and all pipeline maintenance and operational infrastructure at the new level.

2.2.1 Notice of Start of Periodic Pipeline Lift and Associated Service Road Construction. Asarco will give notice to PDEQ of the commencement of periodic pipeline lift and associated service road construction within seven (7) days of starting. The notice will also state the anticipated time that the tailings supply line will be inactive due to pipeline lift and road construction activities.

2.2.2 Operational Control. The next time a tailings dam (Tailings Dam #4, #7 or #8) enters the berm building mode, that dam will be partially divided into segments by construction of dikes that extend from the perimeter berm to the general vicinity of the ponded water near the decant tower(s). This change will allow one or more segments of each tailings dam to remain active receiving wet tailings, while berm construction or drying in preparation for berm building is going on in other segments, thereby reducing the potential for fugitive dust generation from berm construction activities. Because of the need to disassemble the tailings supply line, it is not always possible to keep other segments of the tailings dam undergoing the periodic pipeline lift and associated service road construction active. Asarco will seek to minimize the time the tailing supply line is out of service.

2.2.3 Controls Employed During Perimeter Berm Construction. During the periodic pipeline lift and associated service road construction period, Asarco will implement additional dust control measures including those in the current Visual Observation Plan and the proposed revision to the VOP dated December 23, 2009. These measures include:

2.2.3.1 Construction Period—Daily Controls. Water will be applied during the operating day to areas of the berm, disturbed areas, or access roads as necessary to minimize dust, unless adequate rain renders this unnecessary. Co-polymer binder will be applied at the end of construction each day to all new areas disturbed by construction activity including any new berm or service road constructed during the day. If inspection of the dam identifies interior areas that require additional dust control, co-polymer binder will be applied to those areas if safe and practicable.

2.2.3.2 Construction Period—Weekly Controls. Co-polymer binder will be applied systematically to the surface of the dam as it becomes sufficiently dry to permit safe spray application as set forth in this paragraph. Each week, the dam will be inspected to identify areas exhibiting loss of encrustation and to determine if co-polymer application can be safely extended towards the decant tower. If the inspection reveals that the encrustation is compromised and that the dam can support the spray application vehicle, Asarco will systematically apply co-polymer as needed in areas judged safe for application.

2.2.3.3 Construction Period—Supplementary Controls. If Asarco's monitoring detects that the tailings dam in the pipeline lift and associated service road construction period

are becoming dry and the morning weather forecast at <http://weather.yahoo.com/United-States/arizona/-12794670/> predicts sustained wind speeds for the day in excess of 20 mph, then Asarco will implement the following supplementary controls, as appropriate, to ensure reasonable precautions are taken to prevent fugitive dust:

- Asarco will not schedule berm construction work for days with sustained winds predicted in excess of 20 mph, unless it is raining sufficiently to prevent dust from becoming airborne.
- Asarco will inspect the surface of the new berm, any service road or dam surface area disturbed by berm building and will apply co-polymer or water as appropriate.
- Asarco will inspect the dam surface for signs of potential fugitive dust emissions and will apply co-polymer where safe and practicable.
- Asarco will deploy overtime labor, if needed, to ensure fugitive dust emissions remain within permit limits.

2.2.3.4 Construction Period—Service Road Controls. Service road construction areas will be inspected and areas that may be susceptible to wind erosion shall be identified and addressed in accordance with the *Daily, Weekly and Supplementary Controls*. In addition, Asarco will also implement the following additional measures:

- The service road will be capped with native soil as soon as practicable after completion.
- Water trucks will be used as required to control fugitive dust during road construction and capping and on service roads utilized during service level construction.

2.2.4 Notice of Reactivation of Tailing Supply Line. Within two business days of completing the lifting of the Tailing Supply Line to its new elevation and completion of any required testing and repair to ensure its integrity, Asarco shall give notice to PDEQ of the date that the Tailing Supply Line was reactivated.

2.2.5 Completion of Pipeline Lift and Commencement of Smearing. Once a sufficient portion of the berm construction is complete the pipeline lift is completed and the tailings spigots can be reinstalled and extended, tailings deposition will commence on the segment of the dam where the berm was raised in order to rewet the tailings surface. Tailings deposition will be stepped through the available spigots on a systematic basis. Asarco typically operates four to six spigots at a time, but this may vary based upon tailings production. Asarco will commence smearing with fresh tails within any active berm building segment within sixty (60) days after the date Asarco reactivates the tailings supply line following Periodic Pipeline Lift and Associated Service Road Construction, as stated in Asarco's Notice of Reactivation of Tailings Supply Line.

3.0 Notification of Delay and Resumption of Construction

Completion of berm building may be delayed by force majeure conditions, including but not limited to strikes, severe weather, or weather conditions that render the segment too wet or unsafe to work. In the event this occurs, Asarco will notify PDEQ within two business days of becoming aware of the delay and will implement *daily* and *supplementary controls* to the extent feasible. *Weekly controls* are not feasible if the surface of the dam or berm is too wet or unsafe to work. *Daily* and *supplementary controls* will be implemented to the extent possible from the service road and extended back to the new berm construction area and/or dam surface as soon as safe and practicable. Asarco will notify PDEQ as soon as it is possible to resume regular construction.

Letter from Newman Porter, Esq., dated July 17, 1998

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Our File Number
28244-00034

July 17, 1998

VIA FACSIMILE

Christopher Straub, Esq.
Deputy County Attorney
Pima County Attorney - Civil Division
32 North Stone, Suite 1500
Tucson, Arizona 85701-1412

Re: *Settlement Agreement; AMA et al. v. Pima County et al.*

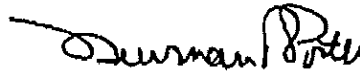
Dear Chris:

An attachment to my letter to you yesterday set forth language to be incorporated into the Title V permit for Asarco's Mission Complex. There is an error in the first sentence of paragraph (2) of the attachment that was the product of a misunderstanding on our part.

The paragraph should be amended to read, "Tailings piles, when active during the building mode, . . ."

We apologize for this mistake. A corrected version is attached.

Sincerely,


Newman R. Porter

NRP/mm
Enclosure

cc: Robert Comer (via facsimile)
Amy R. Porter
Steven J. Burr

1065501

- (1) On active unpaved roads within 200 yards of the property boundary permittee shall use appropriate means, such as berms, signs, or other effective procedures, to limit traffic usage to treated or speed restricted roadways.

Permittee shall post a maximum speed of 25 mph for all vehicles traveling on active unpaved roads within 200- yards of the property line and shall apply water once per day unless meteorological conditions make it unnecessary.

- (2) Tailings piles, when active during the building mode, will be smeared (light coat of fresh, moist tailings on surface of dam) once every 60 days unless meteorological conditions make it unnecessary.

Vehicular traffic on the dam surface will be restricted to those vehicles necessary for construction and maintenance.

Active roadways associated with operational tailings facilities will be watered once per day unless meteorological conditions make it unnecessary.

Vehicular speed will be posted 25 mph.

- (3) Waste Conveyor System – Water sprays shall be installed, operated and maintained while conveyor system is in operation.

Additional water will be added at the shovels in the mine as meteorological conditions warrant.

- (4) Blasting shall be conducted in accordance with good mining practices.