

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**NPDES PERMIT NO. AZ0024635**

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit:

Discharger Name	ASARCO LLC
Discharger Address	4201 West Pima Mine Road
	Sahuarita, AZ 85629
Facility Name	Mission Complex
Facility Location Address	4201 West Pima Mine Road
	Sahuarita, AZ 85629
Facility Rating	Minor

Outfall Number	General Type of Waste Discharged	Outfall Latitude	Outfall Longitude	Receiving Water
002D	runoff North Dump	32E 1' 45" N	111E 1' 0" W	Unnamed ephemeral tributaries of Santa Cruz River

This permit was issued on:	December 5, 2014
This permit shall become effective on:	January 1, 2015
This permit shall expire at midnight on:	December 31, 2019
In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.	

Signed this \_\_5th\_\_ day of \_\_December\_\_\_\_, 2014, for the Regional Administrator.

[ S ]

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Jane Diamond, Director  
Water Division

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**Part I. EFFLUENT DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

**A. Effluent Limits.** Asarco Mission Complex (“Permittee”) is authorized to discharge stormwater and mine drainage from Outfall 002D as described below.

1. Discharges resulting from storm events less than the 100-year 24-hour storm event from Outfall 002D is prohibited;
2. Discharge shall be limited and monitored by the Permittee as specified in Table 1 below:

**TABLE 1: Discharge Limitations and Monitoring Requirements**

Parameter	Maximum Allowable Discharge Limitations	Monitoring Requirements	
	Daily Maximum Concentration Limits	Monitoring Frequency (1)(2)	Sample Type (1)
Flow (MGD) (3)	(4)	Daily (5)	Measured or Estimated (5)
Copper (Total Recoverable)	0.057 mg/L (6)	Once per discharge event	Discrete
Lead (Total Recoverable)	0.015 mg/L	Once per discharge event	Discrete
Zinc (Total Recoverable)	2.491 mg/L (6)	Once per discharge event	Discrete
pH (7)	Not less than 6.5 standard units nor greater than 9.0 standard units.	Once per discharge event	Discrete

Footnotes:

- (1) Except for flow, the measuring frequency and sample type for intermittent flows from all outfalls shall consist of grab samples resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the end of the previous storm event of at least 0.1 inches in magnitude. When field conditions are safe, samples shall be collected during the first hour of the discharge.
- (2) Monitoring results shall be reported quarterly. See Part II.B.1.
- (3) MGD = Million gallons per day.
- (4) Monitoring and reporting required. No limit set at this time.
- (5) Flow rates shall be determined as specified in Part I.F.2 below
- (6) These discharge limitations are based on a hardness of 259 mg/L as CaCO<sub>3</sub>. The discharge must be tested for hardness in the laboratory. Please see the hardness definition in Appendix A, Part B.
- (7) pH must be measured at the time of sampling and does not require use of a certified laboratory.

**B. Monitoring Requirements.**

The permittee shall monitor discharges from Outfall 002D for additional parameters as specified in Table 2. If an assessment level (AL) is established, data results above the assessment level do not constitute a permit violation but may trigger evaluation of Reasonable Potential by EPA. The permittee shall use an approved analytical method with a Method Detection Limit (MDL) lower than the AL value per Part II.A.4.

**TABLE 2: Additional Discharge Monitoring Requirements**

Parameter	Assessment Levels (1)		Monitoring Requirements	
	Daily Maximum Concentration	Reporting Units	Monitoring Frequency (2) (3)	Sample Type (2)
Total Suspended Solids (TSS)	(4)	mg/L	Once per discharge event	Discrete
Chemical Oxygen Demand (COD)	(4)	mg/L	Once per discharge event	Discrete
Nitrate/Nitrite (as Total N)	(4)	mg/L	Once per discharge event	Discrete
Hardness (CaCO <sub>3</sub> )	(4)	mg/L	Once per discharge event	Discrete
Arsenic (Total Recoverable)	420	ug/L	Once per discharge event	Discrete
Cadmium (Total Recoverable)	181 (5)	ug/L	Once per discharge event	Discrete
Chromium (Total Recoverable)	100	ug/L	Once per discharge event	Discrete
Chromium VI (Dissolved) (6)	34	ug/L	(6)	Discrete
Mercury (Total Recoverable)	2	ug/L	Once per discharge event	Discrete
Selenium (Total Recoverable)	33	ug/L	Once per discharge event	Discrete

**Footnotes:**

- (1) Concentration values are calculated based on Arizona Water Quality Standards. Monitoring and reporting required.
- (2) The measuring frequency and sample type for intermittent flows from all outfalls shall consist of grab samples resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the end of the previous storm event of at least 0.1 inches in magnitude. Samples shall be collected during the first hour of the discharge.
- (3) Monitoring results shall be reported quarterly. See Part II.B.1.
- (4) Monitoring and reporting required. No assessment level set at this time.
- (5) This assessment level is based on a hardness of 259 mg/L as CaCO<sub>3</sub>. The discharge must be tested for hardness in the laboratory. Please see the hardness definition in Appendix A. Part B.
- (6) Monitoring for chromium VI (Cr VI) is required only if the detected concentration of total recoverable chromium or its MDL exceeds the Cr VI AL of 34 ug/L. If the concentration of total recoverable chromium detected in any discharge event exceeds the Cr VI AL, all subsequent discharges shall be monitored for both total recoverable chromium and Cr VI.

**C. [Reserved]**

**D. Narrative Standards**

The discharge shall be free from pollutants in amounts or combinations that:

1. Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life;
2. Cause objectionable odor in the area in which the surface water is located;
3. Cause off-flavor in aquatic organisms;
4. Are toxic to humans, animals, plants or other organisms;
5. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth or propagation of other aquatic life or that impair recreational uses;

**E.** The discharge shall be free from oil, grease and other pollutants that float as debris, foam, or scum; or that cause a film or iridescent appearance on the surface of the water; or that cause a deposit on a shoreline, bank or aquatic vegetation.

**F.** Discharge samples taken in compliance with the monitoring requirements specified above shall be discrete samples collected at the outfall using an automated sampling device. When field conditions are safe, samples shall be collected during the first hour of any discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the end of the previous storm event of at least 0.1 inches in magnitude.

1. For each discharge sample collected, the following information about the storm event that generated the sampled runoff shall be recorded:

- a. Date(s) of the storm event
- b. Estimated duration in hours of the storm event
- c. Rainfall measurements in inches

2. For each discharge sample collected, the discharge flow rate in gallons per day shall either be recorded using a flow meter or estimated using one of the methods described in the *NPDES StormWater Sampling Guidance Document* (EPA 833/B-92-001).

3. [Reserved]

**G. Rainfall Monitoring.** For the purposes of this permit, the gauge station used to monitor rainfall shall be that operated by the National Weather Service or the National Oceanographic and Atmospheric Administration nearest to the facility. The Permittee may establish a gauge station at the facility, in which case rainfall shall be recorded on a daily basis. A National Weather Service Standard Rain Gauge shall be used.

## **PART II. MONITORING AND REPORTING**

### **A. Sample Collection and Analysis**

#### 1. Quality Assurance (QA) Manual

The permittee shall keep a QA Manual at the facility that describes the sample collection and analyses processes. If the facility collects samples or conducts sample analyses in-house, the permittee shall develop the QA Manual. If a third party collects and/or analyzes samples on behalf of the permittee, the permittee shall ensure that the third party has an appropriate QA Manual. The QA Manual shall be available for review upon request. The permittee shall take all reasonable steps to ensure the quality and accuracy of all data required under this permit. The QA Manual shall be updated as necessary and shall describe the following:

- a. Project Management, including roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable regulatory or permit-specific limits or Assessment Levels; and personnel qualification requirements for collecting samples.
  - b. Sample collection procedures; equipment used; the type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicates, and equipment or field blanks); preservatives and holding times for the samples (see methods under 40 CFR 136 or 9 A.A.C. 14, Article 6 or any condition within this permit that specifies a particular test method.)
  - c. Approved analytical method(s) to be used; Method Detection Limits (MDLs) and Minimum Levels (MLs) to be reported; required quality control (QC) results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken by the permittee or the laboratory as a result of problems identified during QC checks.
  - d. How the permittee will: perform data review; report results; resolve data quality issues; and identify limitations on the use of the data.
2. Sample collection, preservation and handling shall be performed as described in 40 CFR 136 including the referenced Editions of *Standard Methods for the Examination of Water and Wastewater*. Where collection, preservation and handling procedures are not described in 40 CFR 136, the procedures specified under 9 A.A.C. 14, Article 6 methods for wastewater samples shall be used. The permittee shall outline the proper procedures in the QA Manual and follow those procedures when taking samples to meet the monitoring requirements in this permit .

3. All samples collected for monitoring must be analyzed:
  - a. by a laboratory that is licensed by the ADHS Office of Laboratory Licensure and Certification, and that has demonstrated proficiency within the last 12 months for each parameter to be sampled under the terms of this permit, under R9-14-609. This requirement does not apply to parameters that must be analyzed for at the time of sampling and which are therefore exempt under A.A.C. R 9-14-602. These parameters include flow and pH.
  - b. using a method specified in this permit. If no test procedure is specified within this permit, then the permittee shall analyze the pollutant using:
    - i. a test procedure listed in 40 CFR 136;
    - ii. an alternative test procedure approved by the EPA as provided in 40 CFR 136;
    - iii. a test procedure listed in 40 CFR 136, with modifications allowed by the EPA and approved as a method alteration by the ADHS under A.A.C. R9-14-610(B); or
    - iv. If a test procedure for a pollutant is not available under subparagraphs (3)(b)(i) through (3)(b)(iii), a test procedure listed in A.A.C. R9-14-612 or approved under A.A.C. R9-14-610(B) for wastewater may be used, except the use of Hach Methods is not allowed unless otherwise specified in this permit. If there is no approved wastewater method for a parameter, any other method identified in 9 A.A.C. 14, Article 6 that will achieve appropriate detection limits may be used to analyze that parameter.
  - c. For results to be considered valid, all analytical work shall meet quality control standards specified in the approved methods.
4. The permittee shall use an analytical method with a Method Detection Limit (MDL, as defined in Appendix A of this permit) that is lower than the discharge limitations, Assessment Levels, or water quality criteria specified in this permit. **If all method-specific MDLs are higher than the limits specified in this permit, the permittee shall use the approved analytical method with the lowest method-specific MDL.**
5. The permittee shall use a standard calibration where the lowest standard point is equal to or less than the Minimum Level (ML) as defined under 40 CFR 136. When a method-specific ML is not available 40 CFR 136, the *interim* ML (see Appendix A- definitions) is to be used for calibration.

When neither a ML nor MDL is promulgated under 40 CFR 136, the Laboratory ML, (as defined in Appendix A) shall be used for calibration.
6. In accordance with 40 CFR 122.45(c), discharge analyses for all metals in Table 1, with the exception of chromium VI, shall be measured as “total recoverable metals”. Discharge

levels in this permit are for total recoverable metals, except for Chromium VI, for which the levels listed are dissolved.

## **B. Reporting of Monitoring Results**

### Submittal of DMRs and the Use of NetDMR

The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with effluent limitations and permit requirements. Monitoring results shall be reported during the previous three (3) months on monthly Discharge Monitoring Report (“DMR”) forms (EPA No. 3320-1) supplied by the U.S. EPA Director, to the extent that the results reported may be entered on the forms. The DMR forms shall be submitted quarterly no later than the 28th day of the month following the previous quarterly reporting period. In the case of no discharge, the permittee shall submit a DMR indicating no discharge as required. Duplicate, signed copies of these, and all other reports required herein, shall be submitted to the U.S. EPA at the following addresses:

NPDES Data Team  
U.S. Environmental Protection Agency  
Enforcement Division  
Information Management Section (ENF 4-1)  
75 Hawthorne Street  
San Francisco, CA 94105

For a period of six (6) months from the effective date of the permit, the permittee may submit monitoring results in DMRs to EPA in hard copy form or in DMRs electronically submitted using NetDMR. NetDMR is a web-based tool that allows permittees to electronically submit DMRs and other required reports via a secure internet connection. NetDMR is accessed from: <http://www.epa.gov/netdmr>.

Beginning no later than six months after the effective date of the permit, the permittee shall begin reporting monthly, quarterly, yearly, etc. monitoring data using NetDMR, unless the facility is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs. The permittee shall continue to use the NetDMR tool for reporting all discharge monitoring data. By submitting reports using NetDMR, the permittee will no longer be required to submit hard copies of DMRs to EPA under 40 CFR 122.41 and 403.12.

#### b. Submittal of Reports as NetDMR Attachments

After the permittee begins submitting DMR reports to EPA electronically using NetDMR, the permittee shall electronically submit all reports to EPA as NetDMR attachments rather than as hard copies, unless otherwise specified in this permit. A report submitted electronically as a NetDMR attachment shall be considered timely if it is electronically submitted to EPA using NetDMR with the next DMR due following the particular report due date specified in this permit.



- c. For effluent analyses, the permittee shall utilize an analytical method with a published Method Detection Limit (MDL; as defined in Section G of this permit) that is lower than the effluent limitations (or lower than applicable numeric water quality criteria). If all published MDLs are higher than the effluent limitations or water quality criteria, then the permittee shall utilize the analytical method with the lowest published MDL. The permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the minimum level (ML), as defined in Section G (Definitions) of this permit.
- d. For samples collected during the quarterly reporting period, report on the DMR form:
  - (1) The maximum value, if the maximum value is greater than the ML; or NODI (Q)<sup>1</sup>, if the maximum value is greater than or equal to the laboratory's MDL, but less than the ML; or NODI (B)<sup>1</sup>, if the maximum value is less than the laboratory's MDL; and
  - (2) The average value of all analytical results where 0 (zero) is substituted for NODI (B) and the laboratory's MDL is substituted for NODI (Q), if more than one sample is collected during the quarterly reporting period.

As an attachment to each DMR form submitted during this permit term, the permittee shall report for all parameters with monitoring requirements specified under Section A.2.B. of this permit: the analytical method number or title, preparation and analytical procedure utilized by the laboratory, and published MDL or ML; the laboratory's MDL, the standard deviation (S) from the laboratory's MDL study, and the number of replicate analyses (n) used to compute the laboratory's MDL; and the ML.

### **C. Twenty-four Hour Reporting of Noncompliance**

The permittee shall orally report any noncompliance which may endanger the environment or human health within 24 hours from the time the permittee becomes aware of the event to:

CWA Compliance Office Chief USEPA (415) 972-3505

And ADEQ 24 hour hotline at 602-771-2330

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the noncompliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including dates and times, and, if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance

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<sup>1</sup> *NODI(Q)* means "No discharge/No data" (not quantifiable); *NODI(B)* means "No discharge/No data" (not detected).

#### **D. Monitoring Records**

The permittee shall retain the following monitoring information:

1. Date, exact location and time of sampling or measurements performed, preservatives used;
2. Individual(s) who performed the sampling or measurements;
3. Date(s) the analyses were performed;
4. Laboratory(s) which performed the analyses;
5. Analytical techniques or methods used;
6. Chain of custody forms;
7. Any comments, case narrative or summary of results produced by the laboratory. These comments should identify and discuss QA/QC analyses performed concurrently during sample analyses and should specify whether analyses met project requirements and 40 CFR 136. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, sample receipt condition, holding times and preservation.
8. Summary of data interpretation and any corrective action taken by the permittee.
9. Discharge Limitations or Assessment Levels for analytes/compound being analyzed.

#### **Part III. BEST MANAGEMENT PRACTICES**

- A.** The permittee shall continue to implement a Stormwater Pollution Prevention Plan (SWPPP). Within 30 days of the effective date of this permit, the permittee shall review the existing SWPPP for the facility and revise it as necessary to ensure that it fully and accurately addresses all the following provisions. Any updates or revisions needed shall be completed within 90 days of the effective date of this permit and submitted to EPA.
- B.** The SWPPP shall include provisions for stormwater management such that all stormwater at the Mission Complex will be controlled through one or a combination of the following four methods:
  1. Stormwater run-off will be diverted through berms, channels, or dikes designed to convey the 100 year, 6 hour storm event to containment areas where no discharge of water occurs;

2. Stormwater run-off will be diverted through berms, channels, or dikes designed to convey the 100 year, 6 hour storm event to containment areas designed to hold the 100 year 24 hour storm event;
3. Stormwater run-on (generated from off-site) will be diverted around mining activities to prevent contact with areas disturbed by mining; or
4. Potential stormwater contaminants will be controlled at the source by capping, removing all exposed mineralized materials, or other reclamation and by stabilizing and protecting surface areas to effectively control erosion or leaching of contaminants.

**C.** The SWPPP shall contain the following minimum requirements:

1. **Pollution prevention team.** The SWPPP shall identify individuals at the facility that are members of a Stormwater Pollution Prevention Team who are responsible for assisting the facility management in implementation, maintenance, and revision of the SWPPP. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's SWPPP.
2. **Site Description.** The SWPPP shall include a general description of the site, process operations, hydrology, topography, potential receiving waters, a description of outfall locations and potentially contributing drainage areas to each outfall.
3. **Potential pollution sources.** The SWPPP shall include a description of each area of the mine site (e.g. mining/milling areas; access and haul roads; equipment storage; fueling and maintenance areas; ore piles; materials handling areas; outdoor manufacturing, storage, or material disposal areas; chemical and explosives storage areas; waste rock/overburden; topsoil storage areas; waste storage areas; tailings piles; tailings ponds; tailings conveyances) and its potential for pollutants to be present in significant amounts. Areas of the mine site shall be indicated on the site map.

Factors that shall be considered for determining potential pollution include: the mineralogy of the ore, waste rock and native soils; toxicity and quantity of chemicals used, produced or discharged in the area; likelihood of contact with stormwater; vegetation of site; stabilization of site; history of leaks or spills; and characterization data for acid generating materials.

4. **Control of Runoff and Spills**

- a. The SWPPP shall describe existing and planned diversion and containment structures for the control of mine drainage and stormwater combined with mine drainage such that no discharge occurs except during storm events

larger than those described in Section B.

- b. The SWPPP shall contain a drainage basin assessment to determine the outline of each basin, and its BMP(s) and designated outfall, or termination (if controlled by evapotranspiration or infiltration). The SWPPP shall describe assumptions and methods used to determine the position of drainage divides and present this data on a site map. The method must include field verification. The SWPPP shall provide calculations that demonstrate the stormwater capacities for all retention basins at the site.
  - c. The SWPPP shall include the BMPs utilized to contain spills, and may include BMPs such as grading a road so as to provide containment for spray originating from a failed coupling. The SWPPP shall describe the drainage such that any spills of tailings or process fluids will be directed to sediment ponds or fluid control structures designed to contain the 100-year 24-hour storm event, and the methods to be used to clean up spills. The location of contained process fluids and BMPs to control spills or leaks shall be shown on the map. These areas will be made accessible for regular inspections.
5. **Stormwater diversions.** The SWPPP shall indicate the location and the type of stormwater diversions and conveyances (e.g. dikes, swales, curbs, berms, pipe slope drains, subsurface drains, channels, gutters, rolling dips and road slopes) for all areas of the mine.
6. **Stormwater containment controls.** The SWPPP shall describe appropriate BMPs that will be used to control pollutants in stormwater discharges.
7. **Site Map.** The SWPPP shall include site maps that show all features required in the SWPPP, including potential pollution sources, conveyance structures, stormwater controls, mine features, tailings, drainage area boundary lines, outfall or termination points, stormwater monitoring points, and all features described in Sections C.2-6, above.
8. **Maintenance of Containment Facilities**
- a. The permittee shall monitor the available surge capacity and freeboard in the process impoundment and all stormwater basins designated as no-discharge quarterly and after rainfall events of over 3 inches in 24 hours. After storm events, the permittee shall take measures as soon as practicable to restore the freeboard necessary in the impoundments to contain the design storm event. Such measures shall be continued by the permittee until adequate freeboard is restored.
  - b. The permittee shall assess the siltation of the process ponds and all stormwater basins designated as no-discharge annually and after rainfall events of over 3 inches in 24 hours. The Permittee shall take action to remove solids when liquid storage capacity is less than 80% of the required design volume. The Permittee

shall take measures to maintain the integrity of containment liners during removal of solids.

- c. The permittee shall establish a maintenance program for pump stations, spare pumps, pipelines, containment structures and standby electrical generators to prevent a spill or discharge of tailings. The Permittee shall maintain records for pump station testing and equipment inspections.
  - d. All areas adjacent to pipes transporting tailings and tailings return water will be bermed and/or graded to contain any spill or leak.
9. **Stormwater source controls.** The SWPPP shall include an assessment of areas where stormwater will be controlled at the source instead of diversion and containment. The SWPPP shall describe BMPs that will be used to stabilize and protect surface areas to effectively control erosion at the source. The BMPs shall, at a minimum, include:
- a. Establishment of an effective, permanent vegetative cover at least equal in extent of cover to natural vegetation or that is necessary to achieve the approved post-mining use.
  - b. Establishment of stable slopes to minimize sideslope erosion or gullies. BMPs for creating stable slopes include grading, berming, contour furrowing, limiting slope length, and creating stable slope shapes (concave slopes and complex slopes instead of convex and simple).
  - c. Regulating channel velocity through diversions, grading, rip rap, or other permanent control measure to minimize erosion.
  - d. Demonstration through monitoring that runoff from reclaimed lands meets all applicable surface water quality standards.
10. **Site Inspection and Maintenance.** All BMPs identified in the SWPPP must be maintained in effective operating condition. The SWPPP shall include a procedure for routine inspection of stormwater diversions, stormwater controls, and sediment and erosion controls. The SWPPP shall include inspection and maintenance procedures for storage/containment ponds to assess available freeboard and surge capacity, maintenance of ponds, containment structures, pipelines, pump stations; and structural repair of berms, ditches, dikes, dams, etc.
- a. The BMPs identified in the SWPPP must be inspected at least quarterly and after significant precipitation events.
  - b. The SWPPP shall describe a method to implement repairs to facility deficiencies found during regular maintenance inspections at all stormwater facilities. If site inspections identify BMPs that are not operating effectively, maintenance must be performed before the next anticipated storm event, or as necessary to

maintain the continued effectiveness of stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

- c. The permittee shall conduct detailed visual inspections to determine the structural integrity of all visible portions of tailings reclaim water pipelines at least twice annually for pipelines that are situated such that a leak could contribute to storm water discharges from the site. In addition, a drive-by inspection of the tailings reclaim water pipeline for leaks and spills shall be conducted at least monthly. All repairs deemed necessary based on the findings of the inspections shall be completed as soon as practicable, and all spills and leaks shall be cleaned up in timely manner.
  - d. Records of inspections shall be maintained onsite. The permittee shall implement and maintain an effective system for recordkeeping and tracking of follow-up corrective actions needed and taken in response to inspections.
11. **Employee Training.** The permittee shall ensure that an effective training program is developed and implemented to inform personnel responsible for stormwater management or implementing activities addressed in the SWPPP. The SWPPP shall include a description of this training program. Training shall address topics such as goals of the SWPPP, spill prevention and control, good housekeeping and materials management practices, stormwater spill prevention and response procedures, and stormwater monitoring requirements. The permittee must hold this training at least annually and the training agenda and records of employee attendance must be maintained as part of the SWPPP.
12. **Endangered Species.** The permittee shall follow protocols established with the Fish and Wildlife Service for mitigation when construction and maintenance activities related to the SWPPP affect endangered species.

#### **D. Annual SWPPP Review, Compliance Evaluation, and Annual Report**

1. The permittee shall review the SWPPP on an annual basis and update the plan as necessary. The permittee shall amend the SWPPP whenever a) there is a change in design, construction, operation, or maintenance at the facility which may have a significant effect on the discharges, or potential discharges, authorized by this permit; or b) monitoring results and/or an inspection by the permittee or EPA indicate that the SWPPP is ineffective in controlling storm water discharge quality.
2. The permittee shall conduct a comprehensive site compliance evaluation at least annually to determine whether the BMPs and pollution prevention measures are adequate and properly implemented or whether additional control measures are needed. Structural stormwater management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the SWPPP shall be observed to ensure that they are operating correctly. A visual evaluation of all equipment needed to

implement the plan, including spill response equipment, shall be made.

Based on the results of the evaluation, the permittee shall revise the stormwater pollution prevention measures and controls identified in the SWPPP as appropriate within 2 weeks after the evaluation. The permittee must implement any changes to the plan within 12 weeks after the evaluation.

3. The permittee shall make a report summarizing the scope of the annual site compliance evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWPPP, and actions taken per Parts III.C and IV.A of the permit. The report shall be submitted to EPA on an annual basis and due on the anniversary of the effective date of this permit. The report shall also be retained as part of the SWPPP for at least 3 years from the date of evaluation. The report shall identify any incidents of noncompliance and recommendations for revisions of the SWPPP. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and Part III of this permit. The report shall be signed in accordance with Part 12 of the attached Region 09 "STANDARD FEDERAL NPDES PERMIT CONDITIONS, updated as of June 3, 2002. (Signatory Requirements).

The annual report shall include a certification that the SWPPP has been reviewed, remains accurate or has been revised as necessary, and that the permittee is implementing the SWPPP and the stormwater provisions required by this permit.

#### **E. SWPPP Recordkeeping Requirements**

1. The permittee shall retain a copy of the current SWPPP on site at the facility or locally available for use by any agency with regulatory control over stormwater discharges at the time of an inspection by such authority. A record of SWPPP revisions, including dates, authorizing personnel, and summaries of major changes to each revision, shall be maintained with the current SWPPP. A copy of the SWPPP and record of revisions shall be provided to EPA upon request.
2. The permittee shall maintain all logs, inspection and maintenance reports, and other records required by the SWPPP or this permit on file at the facility for three years where they shall be available for inspection by EPA.

### **Part IV. SPECIAL CONDITIONS**

#### **A. COMPLIANCE SCHEDULE**

The permittee is scheduled to construct stormwater controls as proposed in the related AZPDES permit No. AZ0024597. In recognition of the time necessary to complete construction pursuant to that permit ADEQ has deferred limits for Outfall 007H for 12 months from the effective date

of the AZPDES permit, i.e. until midnight July 1, 2015.

To be consistent with the AZPDES permit compliance with Part I.A.1, the discharge limits of Table 1 to Part I.A.2, and Part III.B of this permit are deferred until the same date, i.e. midnight July 1, 2015.

**B. REOPENER**

This permit may be modified per the provisions of 40 CFR Part 122 and 124. This permit may be reopened based on newly available information; to add conditions or limits to address demonstrated effluent toxicity; to implement any EPA-approved new Arizona water quality standard; or to re-evaluate reasonable potential (RP) based on monitoring conducted under this permit.



## APPENDIX A: DEFINITIONS

*DAILY MAXIMUM CONCENTRATION LIMIT* means the maximum allowable discharge of a pollutant in a calendar day as measured on any single discrete sample or composite sample.

*DISCRETE or GRAB SAMPLE* means an individual **sample of at least 100 mL** collected from a single location, or over a period of time not exceeding 15 minutes.

*HARDNESS* means the sum of the calcium and magnesium concentrations, expressed as calcium carbonate (CaCO<sub>3</sub>) in milligrams per liter.

*INTERIM ML* If a promulgated method-specific ML is not available, then an interim ML must be calculated. The interim ML is equal to 3.18 times the promulgated method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc.

*LABORATORY ML* is to be calculated when neither an ML or MDL are promulgated under 40 CFR 136 or 9 A.A.C. 14, Article 6. A laboratory ML should be calculated by multiplying the best estimate of detection by a factor of 3.18 and rounding the value to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. When a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.

*METHOD DETECTION LIMIT (MDL)* is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater than zero, as defined under 40 CFR 136 or 9 A.A.C. 14, Article 6 methods. The procedure for determination of a laboratory MDL is prescribed under 9 A.A.C. 14, Article 6 methods or by 40 CFR Part 136, Appendix B (1998).

*METHOD SPECIFIC ML* is the promulgated method-specific ML contained in 40 CFR 136 or 9 A.A.C.14, Article 6 (as "Minimum Levels") and must be used if available.

*MINE DRAINAGE* means any water drained, pumped, or siphoned from a mine.

*MINIMUM LEVEL (ML)* is the concentration at which the entire analytical system gives a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all of the method-specified sample weights, volumes, and processing steps have been followed (as defined in EPA's draft *National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels*, March 22, 1994).

**APPENDIX B: SITE PLAN**