

Since Rosemont cannot guarantee their operations will do no harm or that their releases will be any different from ASARCO (a bankrupt company and originator of 18 Superfund sites from similar industry practice), I feel that the Rosemont Mine is a danger to the public health.

It is my intention to provide additional details to support my claim of public health risk from the proposed Rosemont Mine using both published and new data from the ASARCO mining operation here in Sahuarita/Green Valley.

Dr. Stephen Chrisman (Retired Family Physician)
Sahuarita, Arizona

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Asarco Mission Complex
FACT SHEET
FINAL March 5, 2003
EPA PERMIT NO. AZ0024597

This document gives pertinent information concerning the issuance of the NPDES permit listed below. The effluent limitations contained in this permit will maintain the Water Quality Standards listed in Arizona Administrative Code (AAC.) R18-11-101 et. seq. This permit, for a Major facility as specified in 40 CFR 122.2, is proposed to be issued for a period of 5 years.

Permittee's Name: ASARCO Inc. - Mission Complex

Mailing Address: P.O. Box 111
Sahuarita, AZ 85629

Plant Location: 4201 West Pima Mine Road
Sahuarita, AZ 85629

Contact Person: John D. Low
General Manager

NPDES Permit No. AZ0024597

ADEQ Inventory No. 100508

I. STATUS OF PERMIT(s)

The ASARCO Mission Complex filed its Notice of Intent (NOI) for coverage under the Multi-Sector Stormwater General Permit (AZRO5A72F) dated January 25, 2001. Discharges of stormwater from the facility are currently covered under a multi-sector general stormwater permit ID Number AZRO5A72F. Previous NOIs were dated January 26, 1999 (ID number AZRO5A51F) and February 3, 1993 (ID number AZR00A14F).

As the result of an inspection report (dated May 3, 2002 prepared by John Hillenbrand, U.S. EPA), Asarco was issued a Finding of Violation and Order for Compliance on June 20, 2002. Due to potential for exceeding water quality standards and due to non-compliance with components of the MSGP, EPA determined that Asarco Mission Complex was no longer eligible for coverage under the MSGP. As part of the order, EPA required that the Asarco Mission Complex apply for an individual NPDES permit by August 5, 2002.

The Mission Complex submitted a NPDES permit application to EPA on August 2, 2002.

The U.S. Environmental Protection Agency (EPA) and the Arizona Department of Environmental Quality (ADEQ) have prepared draft National Pollutant Discharge Elimination System (NPDES) permits for the discharge of mine drainage and stormwater from the Asarco Mission Complex located in Pima County, Arizona. The State of Arizona obtained primacy for the NPDES

program on December 5, 2002. The ASARCO Mission Complex is located on both private and tribal lands, and therefore the Mission Complex is subject to the jurisdiction of both the U.S. Environmental Protection Agency (EPA) and the Arizona Department of Environmental Quality (ADEQ). Therefore, EPA is issuing a NPDES permit for the discharges located on Tribal Lands, and ADEQ is issuing a AZPDES permit for discharges not located on Tribal Lands. Permit conditions in the two permits are largely identical, with the exception of the discharge points authorized by each permit; the inclusion in the AZPDES permit of several conditions related to activities occurring solely on non-Tribal land; the requirements to comply with the federal Endangered Species Act contained in the EPA NPDES permit, and the requirements contained in the ADEQ permit regarding EPA review of the permit.

II. GENERAL FACILITY INFORMATION

The Mission Complex is a commercial open pit copper mine and underground copper mine. The facility is located near Sahuarita, Arizona (18 miles south of Tucson). The mine site is spread out over an area of approximately 23 square miles and includes an open pit (measuring approximately 2.5 miles long by 1.5 miles across), associated crushing, grinding and flotation facilities, tailings facilities, waste rock dumps, and warehouse, maintenance and administrative areas. The underground mine is accessed through declines from within the pit. The area of the Mission Complex north of Pima Mine Road is located on Tribal land of the San Xavier district of the Tohono O'Odham Nation while the area south of the Pima Mine Road is primarily owned by ASARCO.

Copper mining has been conducted on the site beginning with prospectors in the 1900s. Mining continued with vertical and decline shafts in the 1920s, 1930s and 1940s. During WWII, the mine area also produced tungsten due to the high demand and price for tungsten. Open pit stripping began in 1959.

The facility has a production capacity of 400,000 tons per year of copper concentrate. The mill has processed up to 60,000 tons of ore per day although the facility is currently mining 9,200 tons of ore per day. Future production rates are likely to depend on copper prices. Ore is crushed via the primary gyrotory crusher, rod mill and ball mill. The ground ore is pumped as a slurry to froth flotation cells, where chalcopyrite is separated from non-copper bearing minerals. Lime, xanthates (a biodegradable additive that serves as a collecting agent), pine oil (a frothing agent), and methyl isobutyl carbonal are added to the mixture to facilitate separation of the copper mineral. In the flotation stage, the chalcopyrite attaches to the air bubbles and is skimmed off. The first stage, "roughing" removes approximately 88% of chalcopyrite. The skimmed materials from the roughing stages are re-ground and sent to secondary froth flotation cells (two stages). Tailings are collected from the roughing and secondary flotation cells and gravity-fed to the tailings ponds. None of the tailings facilities have been permanently reclaimed. For final processing, the copper concentrate (containing approximately 27% copper) is sent off-site for smelting.

From 1973 to 1978, a leaching plant was operated at the facility to acid leach copper from the oxide ore. However, the very high carbonate content of the orebody, and consequently the acid requirements for leaching made recovery from this orebody via leaching uneconomic, and leaching ceased. At the request of the Tribe, ASARCO currently selectively stockpiles oxidized

materials at the San Xavier Dump on Tribal lands. A typical copper porphyry deposit, such as that found at the Mission Complex can contain other minerals including silver, molybdenum, lead, zinc and manganese, and other elements such as traces of arsenic and tungsten.

III. RECEIVING WATER

The State of Arizona has adopted water quality standards to protect the designated uses of its surface waters. Streams have been divided into segments and designated uses assigned to these segments. The water quality standards vary by the designated use depending on the level of protection required to maintain that use.

Outfalls from the Mission Complex discharge to unnamed tributaries of the Santa Cruz River. All tributaries in the vicinity of the Mission Complex are ephemeral washes that only flow during a storm event. These tributaries eventually reach the Santa Cruz River in an ephemeral segment located between the Tubac bridge and the Roger Road WWTP. Pursuant to Arizona's water quality standards, unlisted ephemeral tributaries (such as those that would receive any discharge from the outfalls at the Mission Complex) are protected by the Aquatic and Wildlife ephemeral (A&We) and Partial Body Contact (PBC) designated uses. See A.A.C. R18-11-105.

Arizona's 1998 Water Quality Limited Waters List (ADEQ, EQR-98-8, July 1998) does not list as impaired the ephemeral washes near Mission or the portion of the Santa Cruz River into which these washes could flow. Thus, the receiving waters are considered "Tier 2" water bodies with respect to Arizona Water Quality Standards at Arizona Administrative Code (A.A.C.) R18-11-107.

The numeric effluent limitations in the EPA permit apply only to the discharges from the following NPDES discharge points:

Outfall No.	Description of discharge	Location of discharge
Outfall 001A	runoff from roadway next to San Xavier Oxide dump	Latitude: 32° 1' 30" N Longitude: 111° 4' 30" W
Outfall 002D	runoff from Tailings No. 2, 3, and North Dump	Latitude: 32° 1' 45" N Longitude: 111° 1' 0" W
Outfall 006L	runoff from San Xavier Dump	Latitude: 32° 2' 30" N Longitude: 111° 4' 30" W

The numeric effluent limitations in the ADEQ permit apply only to the discharges from the following AZPDES discharge points:

Outfall No.	Description of discharge	Location of discharge
Outfall 003G	runoff from Tailings No. 6 and 7	Latitude: 31° 58' 15" N Longitude: 111° 0' 0" W
Outfall 004I	runoff from Tailings No. 8	Latitude: 31° 57' 30" N Longitude: 110° 59' 45" W
Outfall 005K	runoff from South Pima Dump and Mineral Hill Dump; stormwater run-on from west of facility	Latitude: 31° 57' 30" N Longitude: 111° 3' 45" W

IV. DESCRIPTION OF DISCHARGE

Potential pollutants at the Mission Complex are found in the following: process solutions, tailings reclaim water, tailings, waste rock and stormwater contaminated by contact with tailings and acid-generating waste rock. Based on data provided for the aquifer protection permit, the majority of waste rock generated at the Mission Complex is not acid-generating.

ASARCO has provided data from stormwater sampling at the Mission Complex as part of the MSGP. Between seven and eleven sampling episodes were conducted at five different stormwater sampling locations. The sample points include:

- Sample point A - Roadway and rock dumps
- Sample point B - Alluvium dump
- Sample point D - Tails slope and roadway
- Sample point F - roadway
- Sample point H - tails slope, rock dike and dump, alluvium

The sampling data indicate the levels of Arsenic, Cadmium, Copper, Iron, Lead, Magnesium, Manganese, and Zinc have been detected. Additionally, samples indicated that levels of TSS, COD, total nitrogen, cadmium, copper, iron and zinc exceeded benchmark values listed in Tables G1 and G2 of the MSGP.

The following table is a summary of sampling data:

Parameter	Maximum Concentration	Number of Samples
Oil and Grease	4.0 mg/l	9
BOD ₅	6.1 mg/l	9
COD	160 mg/l [exceeds MSGP]	18
TSS	11,874 mg/l [exceeds MSGP]	18
Total N	2.6 mg/l [exceeds MSGP]	9
Total P	ND	9
Antimony	ND	16
Arsenic	86 ug/l	16
Beryllium	ND	16
Cadmium	22 ug/l (total) [exceeds MSGP]	20
Copper	36,000 ug/l (total) [exceeds MSGP]	20
Iron	105,000 ug/l (total) [exceeds MSGP]	16
Lead	160 ug/l (total)	20
Magnesium	3,500 ug/l	16
Manganese	3,400 ug/l (dissolved)	16
Mercury	< 0.5 ug/l	20

Nickel	< 50 ug/l	16
Selenium	< 100 ug/l	16
Silver	< 5 ug/l	16
Zinc	1820 ug/l (total) [exceeds MSGP]	20

V. STATUS OF COMPLIANCE

The ASARCO Mission Complex filed its Notice of Intent (NOI) for coverage under the Multi-Sector Stormwater General Permit dated January 25, 2001. Discharges of stormwater from the facility are currently covered under a multi-sector general stormwater permit ID Number AZRO5A72F. Previous NOIs were dated January 26, 1999 (ID number AZRO5A51F) and February 3, 1993 (ID number AZR00A14F).

As the result of an inspection report (dated May 3, 2002 prepared by John Hillenbrand, U.S. EPA), ASARCO was issued a Finding of Violation and Order for Compliance on June 20, 2002. A summary of compliance problems identified at the Mission Complex include:

- The Stormwater Pollution Prevention Plan (SWPPP) was missing essential elements and was not adequate to address requirements of the MSGP.
- A tailings spill occurred on 5/11/01, consisting of 200 tons of tailings slurry on Pima7 slopes 1 and 2.
- Monitoring data of runoff has demonstrated a reasonable potential to exceed Arizona water quality standards. Exposed mineralized materials were noted to be present at various locations including road construction materials West of the Tailings No 6 and along the outer slopes of tailings piles and rock dumps.
- A lack of BMP's at certain location even though the site was permitted since 1993.

The Order for Compliance included:

- Due to compliance problems listed above, Asarco Mission Complex is no longer eligible for coverage under the MSGP and must apply for an individual NDPES permit
- ASARCO must take all actions necessary to ensure that discharges do not cause or contribute to violations of water quality standards.
- ASARCO must develop an adequate SWPPP that is based on the MSGP but includes more BMP's and monitoring for approval by EPA and ADEQ.
- ASARCO must perform a biological assessment of the Mission Complex to evaluate critical habitat and species protected under the Endangered Species Act.
- ASARCO must perform additional discharge monitoring.

- ASARCO must make permanently accessible for inspection all areas of the Mission Complex where stormwater inspections are required.

The activities to comply with the Order are ongoing at the Mission Complex.

VI. DETERMINATION OF EFFLUENT LIMITATIONS

When determining what parameters need monitoring and or limits included in the draft ASARCO Mission Complex permit, both technology-based and water quality-based criteria were compared and the more stringent criteria applied.

Technology-based Limitations:

The Mission Complex operates a copper concentrator that utilizes the froth flotation process. Process wastewater discharged from the froth flotation process and mine drainage is subject to the effluent limitations at 40 CFR Part 440 Ore Mining and Dressing Point Source Category. Subpart J, the Copper, Lead, Zinc, Gold, Silver, and Molybdenum Ores Subcategory, applies to mines that produce copper, lead, zinc, gold, silver or molybdenum ores, singly or in combination, from open-pit, or underground operations.

The Mission Complex does not discharge wastewater from its froth flotation process due to recycle and containment of the effluent. The reject from the froth flotation process is gravity-fed to large tailing impoundments where the tails settle out. The decanted water is recycled and pumped back to the concentrator for re-use. Additionally, process wastewater generated at the mill location is contained in impoundments designed to contain the 100 year 24 hour storm event. These locations include the South facility (currently inactive) and the North facility. The South facility drainage, consisting of a combination of tailings reclaim water, mine drainage and stormwater run-off from process areas not covered under the multi-sector general stormwater permit are contained in sedimentation basin RB9 and any overflow would be directed to a series of impoundments with containment designed to hold the 100 year 24 hour storm event. RB9 is unlined. There is no proposed discharge location from this area.

The North facility drainage, consisting of a combination of tailings reclaim water, process solution, mine drainage and stormwater run-off from process areas not covered under the multi-sector general stormwater permit are contained in sedimentation basins RB23 and Mission 1. The containment pond RB23 is not lined. These impoundments are designed to contain the 100 year 24 hour storm event and do not have a discharge point.

Any discharge of mine drainage subject to Part 440 Subpart J may qualify for the *Storm exemption for facilities permitted to discharge* as permitted in 40 CFR Part 440.131 (b). This storm exemption allows a source with an allowable discharge under 40 CFR Part 440 to have an overflow as a result of a storm event that does not meet the limitations established in 40 CFR Part 440 if that facility (1) is designed, constructed and maintained to contain the maximum volume of wastewater which would be generated by the 10-year, 24 hour storm event and (2) has taken all reasonable steps to maintain treatment and minimize overflow and (3) provides notification of such discharges.

The Mission Complex will control all areas of mine drainage and areas of potential mine drainage within containment designed to contain the 24 hour, 100-year storm event. Therefore, discharges from the Mission Complex qualify for the stormwater exemption. The requirements for containment, maintenance, and sampling of runoff are detailed in the Section C of the permit requiring that ASARCO establish Best Management Practices and submit a Stormwater Pollution Prevention Plan (SWPPP) for approval of the permitting authority.

Numeric Water Quality Standards: As outlined in A.A.C. R18-11-109 and Appendix A:

Per 40 CFR 122.44(d)(1)(ii), (iii) and (iv), limits have been included in the permit for parameters with 'reasonable potential', that is, those known to be or expected to be present in the effluent at a level that could potentially cause any applicable numeric water quality standard to be exceeded. The procedures used to determine reasonable potential are outlined in the *Technical Support Document for Water Quality-based Toxics Control (TSD)* (EPA/505/2-90-001).

Permit Limitations:

Guidance for the determination of reasonable potential to discharge toxic pollutants is included in both the *Technical Support Document for Water Quality Based Toxics Control (TSD)* - Office of Water Enforcement and Permits, U.S. EPA, dated March 1991 and the *U.S.EPA NPDES Permit Writers Manual* - Office of Water, U.S. EPA, dated December 1996.

EPA's technical support document contains guidance for determining the need for permit limits. In doing so, the regulatory authority must satisfy all the requirements of 40 CFR 122.44(d)(1)(ii). In determining whether the discharge causes, has the reasonable potential to cause or contributes to an excursion of a numeric or narrative water quality criterion for individual toxicants, the regulatory authority must consider a variety of factors. These factors include the following:

- Dilution in the receiving water,
- Type of industry,
- Existing data on toxic pollutants,
- History of compliance problems and toxic impacts,
- Type of receiving water and designated use.

A. Dilution in the receiving water

All discharges from outfalls in the Mission Complex are to ephemeral washes that are tributaries to the Santa Cruz River, itself an ephemeral waterbody in this area. Discharges from the mine site through the NPDES permitted outfalls will only occur during major storm events or during very wet seasons. Discharges during these conditions would be subject to an unknown amount of dilution in the receiving water. Reasonable potential to exceed surface water quality standards in the receiving water would exist if discharges occurred from the facility during dry weather when dilution is not available, but such dry weather discharges should not occur. However, determining reasonable potential to exceed standards during wet weather cannot be accomplished unless the in-stream flow rate is known and the dilution factor can be determined.

B. Type of Industry

The Mission Complex is a copper mine employing the froth flotation process to extract copper. Effluent limitations under Part 440 Subpart J have been developed for copper mines to regulate the following metals: copper, zinc, cadmium, lead and mercury. Copper mines are assigned the highest total toxicity number for discharges under the 1987 Standard Industrial Classification (SIC) code. Reasonable potential exists for discharges from an open-pit copper mine and associated stormwater runoff to exceed surface water quality standards by nature of the type of industry.

C. Determination of Reasonable Potential

Effluent monitoring data for the Mission Complex found hardness levels up to 1140 mg/l. Arizona water quality standards allow a maximum hardness of 400 mg/l to be used in developing water quality standards.

Water quality standards for ephemeral washes are meant to be protective of acute effects, since stormwater is only present for short periods of time. If effluent meets the daily maximum standard, it will be protective of the acute toxics affect on organisms. Therefore, only Daily Maximum Discharge Limits (MDLs) were determined for this permit and were set at the lowest applicable Arizona standard. (Note: The statistical TSD procedures for setting Maximum Daily Discharge Limits and Average Monthly Limits were not used for this permit. The TSD method would only apply when both monthly and daily limits are set.)

The reported maximum effluent value or the statistically estimated maximum effluent value is compared to the lowest applicable water quality criterion to determine the potential for an exceedence of that criterion and the need for an effluent limit. If one of the effluent values is greater than the water quality criterion, then an effluent limit is included in the draft permit.

The following table is a summary of sampling data provided in the permit application.

Parameter	Maximum Concentration	Statistical maximum concentration	Most Stringent water quality standards (total)	Reasonable Potential
Arsenic	86 ug/l	215	420 ug/l PBC	No
Cadmium	22 ug/l	50.6 ug/l	289.5 ug/l A&We	No
Copper	36,000 ug/l	> 36,000	85.9 ug/l A&We	Yes
Iron	105,000 ug/l	---	None	No
Lead	160 ug/l	368	15 ug/l PBC	Yes
Magnesium	3,500 ug/l	---	None	No
Manganese	3,400 ug/l	8,500	196,000 ug/l PBC	No
Mercury	< 0.5	0.575	5.0 ug/l A&We	No
Silver	< 5	6.25	37.4 ug/l A&We	No
Zinc	1820 ug/l	4186	3,599 ug/l A&We	Yes

Based on the above factors, EPA has determined that discharges from NPDES outfalls 001A, 002D, and 006L have the reasonable potential to exceed surface water quality standards for the following metals: copper, lead, and zinc.

Additionally, new Arizona water quality standards list water quality standards for E. coli for PBC. However, due to the nature of mining, the Mission Complex is not expected to contribute E. coli to its discharge that would cause or have the reasonable potential to cause a water quality exceedence of E. coli. Therefore, no limit has been set for E. coli.

D. Establishing Daily Maximum Permit Effluent Limitations Based on Hardness

The permit includes daily maximum permit effluent limitations for metals based on the aquatic and wildlife (ephemeral) acute toxicity criteria for copper and zinc.

The March 31, 2002, revisions to the Arizona Surface Water Quality Standards incorporated footnotes *k.1 and k.2* to Appendix A, Table 2 establishing a hardness 'cap' of 400 mg/l as calcium carbonate. The 400 mg/l 'cap' is applicable to all designated cold-water and warm-water fisheries, effluent dominated water bodies and ephemeral water bodies in Arizona. Footnotes *k.1 and k.2* require that hardness be based on the hardness of the effluent from a sample taken at the same time as the metal sample.

Hardness values have been measured up to 1140 mg/l. Use of the hardness 'cap' of 400 mg/l for the calculation of effluent limitations is therefore appropriate. The permit includes single value effluent limitations for copper and zinc that have been calculated using the equations in the footnotes to Appendix A, Table 2 of the Arizona Surface Water Quality Standards and an upper limit hardness value of 400 mg/l.

The lead limit is based on the newly adopted PBC standard rather than the A&We standard. The PBC standard is not hardness dependent.

E. Establishing Total Recoverable Metals Effluent Limitations from Water Quality Criteria

Arizona's NPDES Permit Writer's Process Guidance Workbook (Appendix L, Water Quality-based Effluent Limitations for Metals and Translator Studies) states that when developing total recoverable effluent limitations for metals, the permit writer should assume that the relationship between total recoverable and dissolved is 1:1 (i.e., translator = 1). Therefore, limitations for copper, lead and zinc have been incorporated into the permit as total recoverable limitations.

F. Final Limitations Summary

For pollutants with demonstrated reasonable potential to exceed surface water quality standards, this permit retains effluent limitations based on the most stringent of either technology-based limitations or state water quality standards. Permit effluent limitations based on the aquatic and wildlife, ephemeral beneficial use, were calculated using the foot-noted equations to Table 2 of the Arizona surface water quality standards and a single value hardness of 400 mg/l.

TABLE 4 - Basis For Final Permit Limitations

Parameter	Basis Daily Max.
pH	6.5 to 9 - A&We (1), PBC (2)
Copper (3)	AZ WQS - A&We (1), acute
Lead (3)	PBC (2)
Zinc (3)	AZ WQS - A&We (1), acute

Footnotes:

(1) AZ WQS - A&We = Arizona Surface Water Quality Standard - Aquatic and Wildlife, ephemeral

(2) AZ WQS PBC = Arizona Surface Water Quality Standard - Partial Body Contact

(3) These standards are written for total dissolved metals so a translator of one to one dissolved to total recoverable is assumed.
The final permit effluent limitations for these metals are listed as total recoverable metals.

VII. NARRATIVE WATER QUALITY STANDARDS

All applicable narrative limitations in A.A.C. R-11-108 are included in the permit.

VIII. MONITORING REQUIREMENTS

Additional monitoring at discharge outfalls

The Mission complex has been regulated by the Multi Sector General Permit for stormwater associated with mining activities. Tables G-1, G-2 and G-3 establish benchmark monitoring parameters for active and inactive stormwater runoff.

Based on data submitted in the permit application, this permit identifies several pollutants with the reasonable potential to cause or contribute to a water quality violation. This permit establishes effluent limitations for all discharge points for pH, copper, lead, and zinc.

Based on the data submitted in the permit application, the following additional parameters have exceeded the benchmark values: TSS, COD, total nitrogen, and iron, although EPA determined that there is no reasonable potential to violate water quality standards based on existing data. Therefore, this permit continues monitoring requirements for TSS, COD, total nitrogen, and iron but does not establish effluent limits for these parameters at this time.

Data has not been submitted for many of the parameters listed in Tables G-1, G-2 and G-3 of the MSGP. Based on available data, soil characteristics, and industry operations, EPA does not have knowledge that any other pollutant has the reasonable potential to cause or contribute to water quality violations. However, the permit requires further monitoring at all outfalls for those parameters listed in Tables G-1, G-2, and G-3 where EPA requires more data to determine reasonable potential. These are the same monitoring requirements that were required in the Findings of Violation and Order for Compliance and that were addressed in ASARCO's sampling plan submitted to EPA on August 2, 2002. The Order requires monitoring for these parameters through June 2006. Monitoring requirements include the following parameters:

Flow Rate
Total Suspended Solids
Chemical Oxygen Demand

Nitrogen as Nitrate plus Nitrite
Hardness
Turbidity
pH

Metals
Arsenic (Total recoverable and Dissolved)
Cadmium (Total recoverable and Dissolved)
Copper (Total recoverable and Dissolved)
Iron (Total recoverable)
Lead (Total recoverable)
Manganese (Total recoverable and Dissolved)
Mercury (Total recoverable and Dissolved)
Selenium (Total recoverable and Dissolved)
Silver (Total recoverable)
Zinc (Total recoverable and Dissolved)

IX. SPECIAL CONDITIONS

Development of Best Management Practices

The ASARCO Mission Complex filed its Notice of Intent (NOI) for coverage under the Multi-Sector Stormwater General Permit dated January 25, 2001. The MSGP requires the preparation and maintenance of a SWPPP as indicated in Part 4 and Part 6.G.6.1 of the MSGP.

As the result of an inspection report (dated May 3, 2002 prepared by John Hillenbrand, U.S. EPA), ASARCO was issued a Finding of Violation and Order for Compliance on June 20, 2002. As part of this order, EPA found that the Mission Complex SWPPP was inadequate and required that the ASARCO Mission Complex submit a revised SWPPP for approval by EPA. The Order for compliance included the following specific requirements for compliance with the SWPPP:

- a. Conduct 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. Describe assumptions and methods used to determine the position of drainage divides. The method must include field verification. Present this data on the site map.
- b. Assess all facilities according to Table G-4 of the MSGP and categorize which facilities and discharges are eligible for coverage under the MSGP, and which facilities and discharges- include process fluids, mine drainage or other pollutants that may cause or contribute to violations of water quality standards- are ineligible for coverage under the MSGP. Process fluid facilities must be designated as such, and represented on the site map. Facilities with a potential to discharge process solution are subject to effluent limitation guidelines under 40 CFR 440. Containment or control must be demonstrated for all disturbed areas of the mine.
- c. Determine stormwater capacities for all MSGP and non-MSGP retention basins and conveyance structures around the site. Diversion and conveyance structures must be able to contain expected monsoon-type flows. Calculations must be provided.

- d. Describe structures that will prevent commingling of MSGP stormwater runoff and process fluids.
- e. Describe appropriate BMPs that you will use to control pollutants in stormwater discharges for areas where BMPs are not currently in place or for ones that need modification. Include performance standards. Design all MSGP appropriate facilities to be as close to the source of pollutants as possible.
- f. Revise the site map and show all features required in Part 6.G.6.1.2. and Part 4.2.2.3. of the MSGP. Include the mine feature (such as topographic lines representing tailings facility 4) to which the BMPs are applied. Include process water controls, and storage facilities, drainage area boundary lines and outfall or termination points.
- g. Describe a method to implement repairs to facility deficiencies found during regular maintenance inspections at all stormwater facilities. Implement monthly inspections and monitoring to insure that inspection maintenance related repairs are being done in accordance with the MSGP.”

To date, ASARCO has complied with the requirements of the order and the activities are ongoing at the Mission Complex. ASARCO submitted a revised SWPPP (dated August 2, 2002) to EPA for approval.

Permit SWPPP requirements

As noted in Section V, EPA determined in the Compliance Order that the Mission Complex is no longer eligible for coverage under the MSGP. Therefore, the draft permit identifies specific BMP requirements to be included in the SWPPP. Some of the requirements of the SWPPP (such as providing a description of the facility and a facility site map) will be completed within three months of the permit issuance, while other requirements of the SWPPP (such as maintenance and employee training) will require ongoing actions throughout the life of the permit.

The permit contains specific requirements for the SWPPP based on the required components of the MSGP and on ASARCO's proposed SWPPP. Specific components to be included in the SWPPP are a site description, evaluation of potential pollution sources, methods for the control of mine drainage, construction of stormwater diversions, stormwater containment controls, stormwater source controls, corrective measures, site inspection and maintenance, employee training, and requirements for a site map.

Due to the potential for runoff generated from the mine site to cause or contribute to a violation of water quality standards, the SWPPP will include provisions for stormwater management.

All stormwater at the Mission Complex will be controlled through one of the following four methods:

1. Stormwater run-off will be diverted through berms, channels, dikes or other means 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 sediment ponds 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 contamination; or

4. Potential stormwater contaminants will be controlled at the source by capping or removing all exposed mineralized materials and establishing a stable slope through grading and establishing vegetative cover. Stormwater runoff generated from areas controlled at the source will not be bermed or diverted to sedimentation ponds.

When the permittee completes the work required by the permit and the compliance order, the Mission Complex will provide 100-year, 24-hour containment for virtually all stormwater at the facility. At that point, most of the outfalls identified in this permit would not discharge except during storm events exceeding the 100-year, 24-hour event. In some cases, EPA and ADEQ have considered facilities providing physical containment (not including pumping) sufficient to contain the 100-year, 24-hour storm event as zero discharge facilities. However, the enhanced containment at Mission has not been completed at the time of drafting this permit, so all of the existing discharge points are identified as outfalls in the permit. At the time of permit renewal, the permittee may raise with the permitting authority the necessity of permitting outfalls that are capable of containing runoff associated with the 100-year, 24-hour storm event.

Regulatory Basis for Best Management Practices Program

The regulations at 40 CFR 122.44(k)(4) state that:

"In addition to the conditions established under § 122.43(a), each NPDES permit shall include conditions meeting the following requirements when applicable.

(k) Best management practices (BMPs) to control or abate the discharge of pollutants when:

(4) The practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA."

The development of BMP plans and individual best management practices for mining operations is supported by the nature of mining operations in general. Disturbance of the overburden due to surface mining causes significant changes in the physical and chemical nature of the mined area, and BMPs are designed to avoid or control discharges which may cause or contribute to violations of water quality standards.

Compliance Schedule

The requirements for schedules of compliance are stated in the Arizona surface water quality standards at A.A.C. R18-11-121. The requirements at A.A.C. R18-11-121 allow, under certain conditions, a compliance schedule to be incorporated into an existing NPDES permit to bring a facility into compliance with a new or revised water quality based effluent limitation (WQBEL). The requirements at A.A.C. R18-11-121 also allows for a compliance schedule to be established to bring a point source discharge of stormwater into compliance with a water quality standard.

Pursuant to Compliance Order No. CWA 402-9-02-31, the Permittee is developing a Work Plan for EPA approval. The Work Plan establishes a schedule to implement the construction and maintenance activities necessary to provide the stormwater containment and control mandated by this permit and the Order. Some of these activities require additional federal or state permits or approvals prior to construction. Therefore, it is appropriate to establish a compliance schedule for the Mission Complex.

EPA has therefore incorporated a compliance schedule that allows the Mission Complex to comply with the schedule established in the approved Work Plan, but that does not delay compliance by more than three years from the issuance of the permit.

X. ENDANGERED AND THREATENED SPECIES

1. Biological Evaluation

Biological surveys were conducted in 1995 and 1997 in connection with a proposed expansion of the Mission Complex. The 1995 and 1997 surveys indicated the presence of the Pima pineapple cactus (PPC) in and around the Mission Complex.

The SWPPP submitted to EPA as part of the Order for Compliance requires Asarco to construct additional stormwater containment facilities for the control of runoff. Due to the known presence of endangered species, Asarco conducted a biological survey to evaluate the potential effects of construction on endangered species.

A new biological survey was conducted in 2002 for the Pygmy Owl and the PPC. No pygmy owl was found on private lands (although a second survey is required on tribal lands). The construction of stormwater controls will affect the PPC. Construction of the stormwater controls will disturb approximately 165 acres, and a survey for PPC was done for 150' around the perimeter. The biological assessment assumed a 100' disturbance (although actual disturbance may be down to 50' in some areas). The survey found 70 PPC, of which 17 PPC will be directly affected by constructing the stormwater controls.

A formal endangered species consultation with the U.S. Fish and Wildlife service was conducted regarding the PPC. EPA, ASARCO Inc., and the Tohono O'Odham propose the following measures to minimize potential adverse effects to the PPC and its habitat:

1. Stormwater controls will be designed in such a way as to avoid individual PPC and areas of PPC concentration insofar as practicable while complying with the SWPPP.
2. The release of channelized run-on stormwater at SWPPP-designated outfalls will be directed into existing ephemeral drainages rather than as sheetwash dispersed over the general area. No PPC or suitable PPC on the Mission complex, or adjoining areas beyond the footprint of the Mission complex, will be adversely affected by discharge of stormwater or invasion of exotic plants as a result of excess water, erosion, or deposition of excessive amounts of silt or other materials.
3. Tohono O'Odham has jurisdiction over PPC on their lands and the disposition of the 13 PPC located on Tohono O'Odham lands will be determined by Tohono O'Odham, San Xavier natural resources staff, and Asarco before removal.
4. The proposed action will result in the permanent removal of 58.5 acres of PPC habitat. Asarco is going to expand its existing 877-acre conservation easement by 58.5 acres to compensate for the loss of PPC habitat. The location of this area will be within the Mission Complex, but not necessarily adjacent to the existing easement. The location will be coordinated with the FWS within one year of the date of this opinion.

5. The four PPC that are on private lands within the Mission complex will be transplanted to Asarco's PPC conservation easement.

The consultation is concluded and the following are recommendations from the Biological Opinion:

- 1) EPA would work with Asarco and FWS to expand the size of the PPC conservation area at the Mission complex.
- 2) EPA would work with Asarco and FWS to transplant affected PPC to the newly expanded segments of the conservation area.
- 3) EPA would participate on the stakeholder participation team developing the Pima pineapple cactus recovery plan and consider contributing to on-going survey efforts in Pima and Santa Cruz counties to determine the status of PPC on State lands.
- 4) EPA, in cooperation with FWS, would develop long-term conservation strategies for PPC and incorporate those strategies into the NPDES program.

XI. PERMIT REOPENER

The draft permit contains a reopener clause to allow for modification of the permit if reasonable potential is demonstrated during the life of the permit.

XII. STANDARD CONDITIONS

Conditions applicable to all NPDES permits are included in accordance with 40 CFR, Part 122.

XIII. ADMINISTRATIVE INFORMATION

Public Notice (A.A.C. R18-9-A907)

The public notice is the vehicle for informing all interested parties and members of the general public of the contents of a draft NPDES permit or other significant action with respect to an NPDES permit or application. The basic intent of this requirement is to ensure that all interested parties have an opportunity to comment on significant actions of the permitting agency with respect to a permit application or permit. This permit will be public noticed in a local newspaper after a pre-notice review by the applicant and other affected agencies.

Public Comment Period (A.A.C. R18-9-A908)

Rules require that permits be public noticed in a newspaper of general circulation within the area affected by the facility or activity and provide a minimum of 30 calendar days for interested parties to respond in writing to EPA. After the closing of the public comment period, EPA is required to respond to all significant comments at the time a final permit decision is reached or at the same time a final permit is actually issued.

Public Hearing (A.A.C R18-9-A908(B))

A public hearing may be requested in writing by any interested party. The request should state the nature of the issues proposed to be raised during the hearing. A public hearing will be held if the Director determines there is a significant amount of interest expressed during the 30-day public comment period, or if significant new issues arise that were not considered during the permitting process.

XIV. Additional Information

Additional information relating to this proposed permit may be obtained from the following locations:

U.S. Environmental Protection Agency, Region IX
CWA Standards & Permits Office Mail Code: WTR-5
75 Hawthorne Street
San Francisco, California 94105-3901
Telephone: (415) 972-3518
Attn: John Tinger

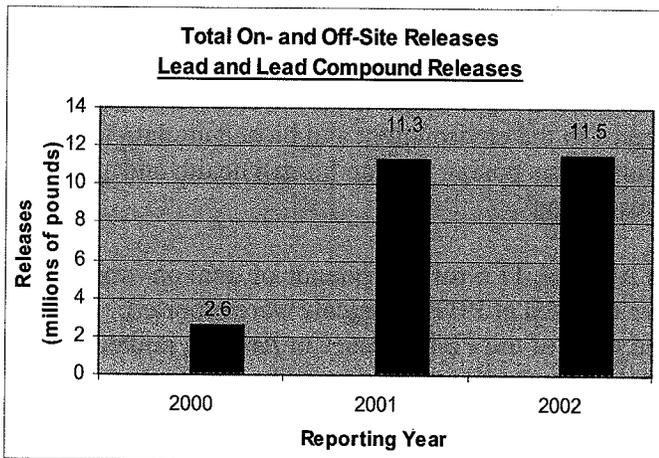
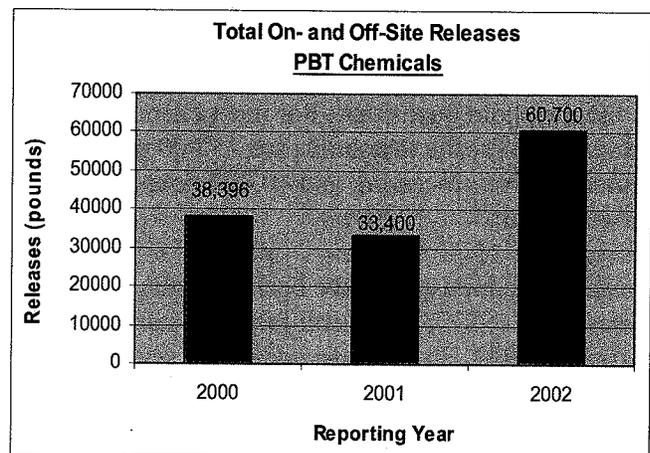
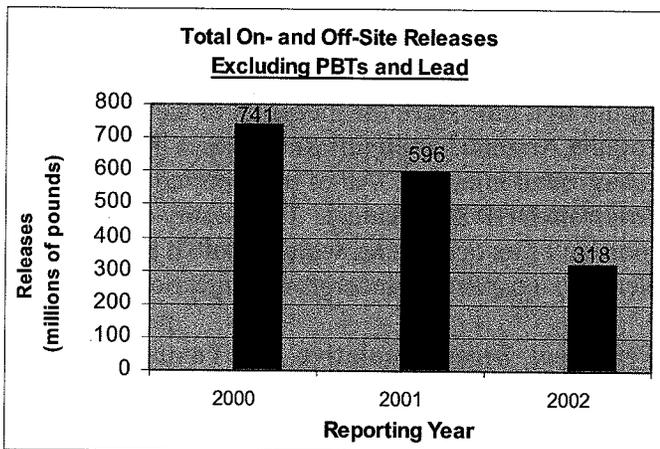
ADEQ
Water Quality Division - Surface Water Permits Unit Mail Code: 5415B-3
Attn: Ingrid Clark
1110 W. Washington Street
Phoenix, Arizona 85007
Telephone:(602)771-4678



Arizona Report: 2002 Toxics Release Inventory

U.S. EPA Region 9
Arizona, California,
Hawaii, Nevada, the
Pacific Islands, and
Tribal Nations

Toxic Chemical Releases: 2000 - 2002



Year	Air	Land	Under-ground Injection	Water	Off-Site
2000	5,206,719	737,230,540	0	9,238	1,283,045
2001	4,586,195	601,487,965	0	6,377	819,101
2002	4,132,814	322,351,577	2,184,988	6,911	432,563

The 2002 Public Data Release

EPA has just made public the 2002 data on toxic chemicals that were released to Arizona's air, water and land. This information comes from the Toxics Release Inventory (TRI), a federal community right-to-know program. In Arizona, 276 facilities reported a

total of 329 million pounds of toxic chemical releases*.

It is important to note that release should not be directly equated with risk. To evaluate risk, release data must be combined with information about

* Release is defined as the amount of a toxic chemical released on-site (to air, water, underground injection, landfills and other land disposal), and the amount transferred off-site for disposal. Year to year data comparisons do not reflect changes in reporting requirements.

chemical toxicity, site-specific conditions, and exposure. In addition, this data does not indicate whether a facility is violating environmental laws. Many of the substances reported through this program are subject to state and federal regulations designed to protect human health and the environment.

Industries

A facility is subject to TRI reporting requirements if it: has 10 or more full-time employees; is classified under a reportable Standard Industrial Classification (SIC) code; and manufactures, processes, or otherwise uses any of the listed toxic chemicals in amounts greater than the threshold quantities. For most chemicals (excluding PBTs) the thresholds are 25,000 pounds for manufactured or processed, and 10,000 pounds for otherwise used.

Manufacturing industries have been reporting their releases since 1987, and federal facilities started reporting in 1994. In 1998, an additional seven industry sectors began reporting their toxic chemical releases for the first time. These sectors are metal and coal mining, electricity generation, commercial hazardous waste treatment, solvent recovery, petroleum bulk terminals, and wholesale chemical distributors.

Releases

On April 2, 2003 the District Court for the District of Columbia issued a decision in *Barrick Goldstrike Mines, Inc. v. Whitman*, (Civ. Action No. 99-958 (TPJ)), regarding the TRI reporting obligations of mining facilities. The court determined that non-PBT chemicals present in waste rock are eligible for the de minimis exemption. The de minimis exemption states that a facility is not required to consider the quantity of a toxic chemical present in a mixture if it is below 1% of the mixture, or 0.1% of the mixture in the case of a toxic chemical which is a carcinogen. Prior to the decision mining facilities were required to consider all concentrations of toxic chemicals in waste rock.

This decision is greatly responsible for the 46% decrease from reporting year 2001 for on- and off-site releases for the state. Primary smelting and refining of copper and copper ore metal mining facilities make up

96.7% of the total on- and off-site releases and experienced a 47% decrease in land releases.

Many mines extract, move, store, process, and dispose of large amounts of waste rock and ore -- materials which often contain low concentrations of naturally occurring metals. The vast majority of this material is placed in surface impoundments or on the land, and the metals are reported as on-site releases to land. This previously buried material is exposed to potential leaching by rain, snow, and acid mine drainage, and must be carefully managed and monitored to prevent any surface water or ground-water contamination.

For the first time since the inception of the TRI program Arizona has significant releases by underground injection. All of the reported releases were from BHP San Manuel. The facility discontinued a portion of its operations, which resulted in a one-time release to a permitted underground injection well.

Persistent, Bioaccumulative, and Toxic Chemicals

In the year 2000, TRI was expanded to include additional persistent, bioaccumulative and toxic (PBT) chemicals, and to require reporting for these chemicals at lower thresholds, ranging from 0.1 grams to 100 pounds. PBT pollutants are toxic chemicals that persist in the environment and bioaccumulate in food chains, thus posing risks to human health and ecosystems.

In Arizona, 11.6 million pounds of total on- and off-site releases of PBT chemicals were reported. Below is a table of the PBT releases in Arizona ranked by total on- and off-site releases. The data is in pounds for all chemicals except dioxin, which is given in grams.

Table of PBT Chemical Releases in Arizona

Chemical	Total On- and Off-Site Releases		Percent Change
	2001	2002	
Lead Compounds	11,198,441.6	11,420,208.43	2
Lead	82,694.95	97,524.96	18
Mercury Compounds	30,097.38	56,873.66	89
Tetrabromobisphenol A	218.21	1,883.00	763
Polycyclic Aromatic Compounds	1,638.35	1,098.30	-33
Mercury	703.01	831.14	18
Dioxin and dioxin-like compounds (in grams)	16.38	13.28	-19
Benzo (g,h,i)perylene	0.74	1.07	44
Polychlorinated Biphenyls	726.00	0.00	-100

Releases of persistent, bioaccumulative and toxic (PBT) chemicals in pounds. Dioxin and dioxin-like compounds data not in Toxicity Equivalence (TEQ).

Lead and Lead Compounds

Starting in the year 2001, lead and lead compounds were reported as persistent, bioaccumulative and toxic (PBT) chemicals. While lead and lead compounds have been on the list of reportable chemicals since 1987, for the year 2001 the reporting threshold was lowered from 25,000 pounds manufactured or processed, and 10,000 pounds otherwise used to 100 pounds for the manufacture, process, or otherwise use of lead and lead compounds. As a result, additional facilities are required to report releases of lead and lead compounds.

Over 11.5 million pounds of total on- and off-site releases of lead and lead compounds were reported in Arizona. Ninety-eight percent of these releases are land releases from copper mining facilities.

Mercury and Mercury Compounds

Much of the mercury and mercury compound releases reported were released to land (nearly 55,000 pounds) by BHP San Manuel. Air emissions of mercury and mercury compounds accounted for 2.7% (1,560 pounds) of the total releases and were released from electric generating facilities.

Top Facilities for Releases

The top 10 facilities for total on- and off-site releases, for all chemicals, in Arizona are:

- ① BHP Copper N.A. San Manuel (San Manuel, Pinal County) with 248.7 million pounds.
- ② ASARCO Inc. Ray Complex Hayden Smelter & Concentrator (Hayden, Gila County), with 34.9 million pounds.
- ③ Phelps Dodge Miami Inc. (Claypool, Gila County) with 22.8 million pounds.
- ④ Phelps Dodge Morenci Inc. (Morenci, Greenlee County) with 4.3 million pounds.
- ⑤ ASARCO Inc. Mission Complex (Sahuarita, Pima County) with 3.1 million pounds.
- ⑥ Tucson Electric Power Springerville Generating Station (Springerville, Apache County) with 2.8 million pounds.
- ⑦ ASARCO Inc. Ray Ops. Mine (Kearny, Pinal County) with 2.3 million pounds.
- ⑧ Navajo Generating Station (Page, Coconino County) with 1.9 million pounds.
- ⑨ Phelps Dodge Sierrita Inc. (Green Valley, Pima County) with 1.6 million pounds.
- ⑩ Cholla Power Plant (Joseph City, Navajo County) with 1.2 million pounds.

The top 10 facilities for total on- and off-site releases, for PBT chemicals, in Arizona are:

- ① BHP Copper N.A. San Manuel (San Manuel, Pinal County) with 55,000 pounds.
- ② Isola Laminate System (Chandler, Maricopa County) with 1,883 pounds.
- ③ Navajo Generating Station (Page, Coconino County) with 733 pounds.
- ④ ASARCO Inc. Ray Ops. Mine (Kearny, Pinal County) with 649 pounds.
- ⑤ Tucson Electric Power Springerville Generating Station (Springerville, Apache County) with 597 pounds.
- ⑥ Coronado Generating Station (Saint Johns, Apache County) with 357 pounds.
- ⑦ Phelps Morenci Inc. (Morenci, Greenlee County) with 341 pounds.
- ⑧ ASARCO Inc. Ray Complex Hayden Smelter & Concentrator (Hayden, Gila County) with 304 pounds.
- ⑨ Cholla Power Plant (Joseph City, Navajo County) with 226 pounds.

- ⑩ Arizona Electric Power Cooperative Inc. (Cochise, Cochise County) with 164 pounds.

The top 10 facilities for total on- and off-site releases, for lead and lead compounds, in Arizona are:

- ① ASARCO Inc. Ray Complex Hayden Smelter & Concentrator (Hayden, Gila County) with 3.4 million pounds.
- ② ASARCO Inc. Mission Complex (Sahuarita, Pima County) with 2.6 million pounds.
- ③ ASARCO Inc. Ray Ops. Mine (Kearny, Pinal County) with 2.0 million pounds.
- ④ Phelps Dodge Miami Inc. (Claypool, Gila County) with 1.4 million pounds.
- ⑤ BHP Copper N.A. San Manuel Ops. (San Manuel, Pinal County) with 1.3 million pounds.
- ⑥ Phelps Dodge Sierrita Inc. (Green Valley, Pima County) with 445.7 thousand pounds.
- ⑦ Phelps Dodge Bagdad Inc. (Bagdad, Yavapai County) with 95.0 thousand pounds.
- ⑧ Tucson Electric Power Springerville Generating Station (Springerville, Apache County) with 74.7 thousand pounds.
- ⑨ U.S. Marine Corps Barry M. Goldwater Range (Yuma, Yuma County) with 21.4 thousand pounds.
- ⑩ Navajo Generating Station (Page, Coconino County) with 18.9 thousand pounds.

On-line Access

For national information on data releases, see:
<http://www.epa.gov/tri>

The TRI data is available through Envirofacts Warehouse, EPA's premier internet site for distributing environmental information at:
<http://www.epa.gov/enviro>

or the TRI Explorer tool:
<http://www.epa.gov/triexplorer>

For general information on the Toxics Release Inventory, including reporting requirements for businesses, go to:
<http://www.epa.gov/region09/toxic/tri>

For more information on the EPA's PBT Chemicals Program, go to:
<http://www.epa.gov/opptintr/pbt/>

Information and Assistance

We are happy to answer your questions and assist you in learning more about the TRI Program in Region 9.

U.S. EPA Region 9
Nancy Sockabasin, TRI Coordinator
(415) 972-3772



U.S./Mexico Border Report

Arizona Section:

2005 Toxics Release Inventory

U.S. EPA Region 9
 Arizona, California,
 Hawaii, Nevada, the
 Pacific Islands, and
 Tribal Nations

Arizona Section of U.S./Mexico Border

This Report provides data from the Toxics Release Inventory (TRI) for the facilities in Arizona that are located within 100 kilometers (using 70 zip code areas) of the U.S./Mexico Border. The EPA has made public the 2005 data on toxic chemicals that were released to the air, water, and land of Arizona's Border Region.*

Releases and Risk

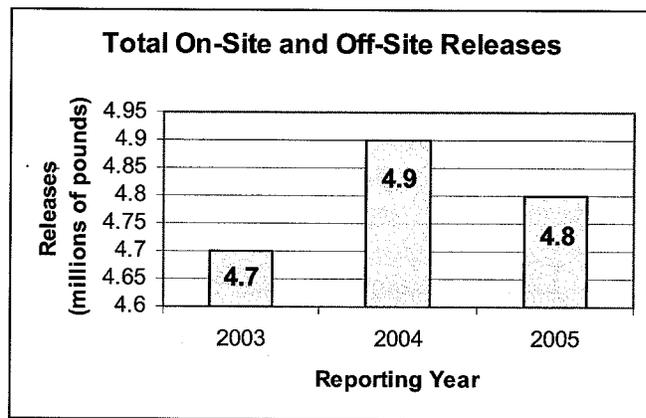
Release is defined as the amount of a toxic chemical released on-site (to air, water, underground injection, landfills, and other land disposal), and the amount transferred off-site for disposal.

It is important to note that releases should not be directly equated with risk. To evaluate risk, release data must be combined with information about chemical toxicity, site-specific conditions, and exposure. In addition, this data does not indicate whether a facility is violating environmental laws. Many of the substances reported through this program are subject to state and federal regulations designed to protect human health and the environment.

A facility is subject to TRI reporting requirements if it: has ten or more full-time employees; is classified under a reportable Standard Industrial Classification (SIC) code; and manufactures, processes, or otherwise uses any of the listed toxic chemicals in amounts greater than the threshold quantities. For most chemicals the thresholds are 25,000 pounds for manufactured or processed, and 10,000 pounds for otherwise used.

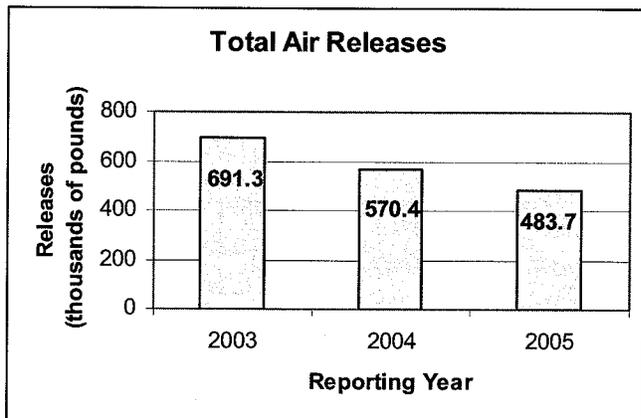
Chemical Releases

Total reported on-site and off-site releases in the Border area of Arizona during the past three years are:**



In comparison to the rest of the state, the Border area of Arizona comprises only 7% of the state's total 65.2 million releases.

Total reported air releases in Border area of Arizona during the past three years are:



* No adjustments were made to account for double counting that could occur as a result of off-site transfers of some TRI facilities also being reported as on-site releases at permitted hazardous waste landfills and other TRI facilities that receive the on-site transfers.

** Year to year data comparisons do not reflect changes in reporting requirements.

Trends in Chemicals Released

In 2005, 69 facilities in the Border area of Arizona reported releases of approximately 4.8 million pounds of toxic chemical to the TRI Program. The following chart tracks releases to the environment for reporting years 2003 through 2005.

Total Releases for Reporting Years 2003 - 2005					
Year	Air	Water	On-Site Land	Under-ground Injection	Off-Site
2003	691,295	6,031	3,828,293	0	145,412
2004	570,389	6,204	4,131,827	0	167,523
2005	483,669	5,683	4,054,362	0	220,547

Largest Releases by Industry Type

During 2005, two industries account for 93% of the total 4.8 million pounds of reported releases in the Border area of Arizona. They are:

Industry	Percentage of Total Releases
Copper Mining	80%
Electricity Generation	13%

Largest Releases by Chemical Type

The top five chemicals released in the Border area of Arizona in 2005, ranked by total on-site and off-site releases, are:

Chemical	Release (pounds)	Percentage of Total Releases
Lead Compounds	2,629,605	55%
Chromium Compounds	444,291	9%
Copper Compounds	210,193	4%
Barium Compounds	197,271	4%
Barium	146,566	3%

Facilities Releasing Largest Quantities of Chemicals

Ten facilities, listed in descending order, released the largest total on-site and off-site releases in the Border area of Arizona:

1. Phelps Dodge Sierrita Inc. (Green Valley, Pima County) with 2.3 million pounds (70% lead compound releases).
2. ASARCO LLC Mission Complex (Sahuarita, Pima County) with 1.3 million pounds (77% lead compound releases).
3. Arizona Electric Power Cooperative Inc (Cochise, Cochise County) with 388 thousand pounds (51% barium compound releases).
4. Irvington Generating Station (Tucson, Pima County) with 226 thousand pounds (65% barium releases).
5. Phelps Dodge Mining Co Copper Queen Branch (Bisbee, Cochise County) with 200 thousand pounds (100% copper compound releases).
6. Learjet Inc. (Tucson, Pima County) with 55 thousand pounds (50% ethylbenzene and 50% naphthalene releases).
7. AACCO Cast Products Inc (Benson, Cochise County) with 42 thousand pounds (85% copper releases).
8. Hart & Cooley Inc (Tucson, Pima County) with 38 thousand pounds (100% glycol ether releases).
9. Imation Corp (Tucson, Pima County) with 24 thousand pounds (78% chromium compound releases).
10. U.S. Army Yuma Proving Ground (Yuma, Yuma County) with 24 thousand pounds (49% copper and 49% nitroglycerin releases).

On-line Access

For national information on data releases, see: <http://www.epa.gov/tri>

The TRI data is available through Envirofacts Warehouse, EPA's premier internet site for distributing environmental information at:

<http://www.epa.gov/enviro>

or the TRI Explorer tool:

<http://www.epa.gov/triexplorer>

**U.S. EPA Region 9 TRI Program
Mariela Lopez (415) 972-3771**

2334



WizzLizzy@aol.com
04/01/2008 12:09 AM

To: comments-southwestern-coronado@fs.fed.us
cc:
Subject: Rosemont Mine Project

Attention Team Leader Rosemont Copper Project,

The Forest Service should STOP ALL ACTIVITY at Rosemont by Augusta until the NEPA PROCESS AND EIS PROCESS are COMPLETE.
The Forest Service should not let Augusta piece-meal this mine, thereby avoiding REAL ENVIRONMENTAL ANALYSIS OF THE IMPACTS.

Elizabeth

Create a Home Theater Like the Pros. [Watch the video on AOL Home.](#)

2332



WizzLizzy@aol.com
04/01/2008 01:06 PM

To: comments-southwestern-coronado@fs.fed.us
cc:
Subject: Attention: Team Leader Rosemont Mine Project

Dear Team Leader for The Rosemont Copper Mine Project,

Knowing that Water runs South to North in Southern Arizona.
I am concerned that TAKING GOOD WATER FROM SAHUARITA HEIGHTS,
WILL NOT ONLY IMPACT SAHUARITA AND GREEN VALLEY,
BUT WILL TUCSON WATER BE AFFECTED IN ANY WAY DUE TO MINING IN THE
SANTA RITA MOUNTAINS? PLEASE EVALUATE THIS CONCERN
in YOUR ENVIRONMENTAL IMPACT STATEMENT!?!...

I have lived in Arizona for 52 years. I remember as a kid when the Water
ran above ground in the Santa Cruz River in Tucson in the 1950's with many
beautiful cottonwood trees along it's banks. Now to see those same beautiful
cottonwood trees, you have to go to Tubac. And the river is now GONE DRY above.

All my life growing up in Tucson, we have heard everyone talking about the
need to conserve water IN THE DESERT, AND CONSTANTLY BEING REMINDED
THAT WE LIVE IN THE DESERT. Now Tucson, Green Valley, Sahuarita, have
grown TREMENDOUSLY. Just to keep up with all the growth causing
increased demands on our water supply is substancial!!!!

My question is this? With a mine using 8,000 acre-feet of water per year,
which translates to BILLIONS OF GALLONS OF WATER PER YEAR FOR 20 YEARS,
HOW CAN THEIR BE ENOUGH WATER FOR THE GROWING COMMUNITY?
Plus what about the fact that ASARCO MINES ARE CLOSE by and they intend to
open up their mine from 10 percent to full capacity. Where do they get their water?
And what IMPACT will they have on the COMMUNITIES?

What happens if there is a MISCALCULATION ON THE AMOUNT OF WATER,
AND THEIR IS NOT ENOUGH to last for even 10 years? Where will the water come
from?????? And who will pay for the MISCALCULATION?

WILL IT BE THE FOREST SERVICE. SINCE YOUR THE AGENCY WHO IS IN
CHARGE?

Thank you for hearing my concerns,
I am anxiously a waiting your response to the the raised
questions in my letter.

Elizabeth Nichols

2333



Jennifer Katcher
<jenniferkatcher@yaho
o.com>

To: comments-southwestern-coronado@fs.fed.us
cc:
Subject: rosemont EIS

04/01/2008 09:02 AM

Hello,

I attended the March 18 public comment meeting in Tucson and I wish to add these comments to the record regarding the proposed Rosemont copper project.

This proposed project represents a threat to the local and regional water supply and should not proceed. I spoke with hydrologist Salek Satiquillah during the meeting, and he told me there is little understanding of the watershed in that area. Pumping the amount of water required by the mine will likely affect wells of local residents. The mine could also leach pollutants into the water table.

A huge concern I have regards the viability of Augusta. This company has never successfully opened a mine. Right now all we have is their word that they will be environmentally sensitive. I think they have already violated the public trust by bussing in people from communities near the mine to the March 18 meeting. Augsta provided a free meal, transportation and "I support mining families" buttons to these individuals. Many of these people did not speak English and clearly did not understand the purpose of the meeting or their role in being present. A Spanish speaking member of the public spoke to some of these individuals and they believed that their presence at this meeting would lead to a job with the mine. To me, this practice was deceptive at best and an outright lie at worst. This is not a company to be trusted to protect the interests of the public!

I had an opportunity to speak with Reta Laford at the meeting as well. From her comments I am optimistic that the process will be fair and as transparent to the public as possible. I was also assured that these email comments will carry as much weight as a hand-written letter. (Otherwise, I would have gladly provided these comments via mail and in handwriting).

Thank you,
Jennifer Katcher
Tucson, AZ

You rock. That's why Blockbuster's offering you one month of Blockbuster Total Access, No Cost.
<http://tc.deals.yahoo.com/tc/blockbuster/text5.com>

2331



"Ken Williamson"
<kenw@sigtechgrp.com
>

To: <comments-southwestern-coronado@fs.fed.us>
cc:
Subject: Hidden Hills - Rosemont Copper Project EIS

04/02/2008 01:45 PM

To Whom it May Concern:

Please refer to the attached document.



Hidden Hills - Rosemont.doc

April 2, 2008

Subject: Rosemont Copper Project EIS

To All Concerned:

The proposed Rosemont Copper Project should be stopped for many reasons that include but are not limited to:

- Noise pollution, air pollution and water contamination impact.
- Huge traffic increases estimated to 600-700 trucks per week on a country highway that is now classified as a "scenic highway".
- Destruction of portions of the Santa Rita Mountains and surrounding desert and grasslands that are globally recognized for biodiversity.
- Augusta wants to fill in Barrel, Wasp, McCleary and Scholefield Canyons, yet claims to have no impact to the Cienega Creek Watershed.
- Negative impact on a growing local tourism based economy.
- EPA reports that mining in Arizona has released over 39 million pounds of toxins already.
- This "foreign owned" Company, Augusta, has no record in mining in an industry that has an abysmal environmental record.
- Recreational uses of this beautiful area will be permanently and negatively impacted.

As an Arizona citizen, taxpayer and concerned Pima County landowner I am appalled that we are again faced with the huge devastation that comes from strip mining of the type being proposed. It does not take long driving around this beautiful state to observe the scars and incredible destruction that has been created by the mining industry. One short trip to communities like Globe and the surrounding area is all it takes to realize that the temporary economic gains that come from mining are hardly worth all of the negative outcomes described above.

Sincerely,

Kenneth E. and Georgia D. Williamson
5030 E. Desert Vista Trail
Cave Creek, Arizona 85331



Roland R Zachary
<rrzachary@raytheon.com>

To: comments-southwestern-coronado@fs.fed.us
cc:
Subject: mine vs water

04/03/2008 07:21 AM

As I understand it they are putting a pipe line to Green Valley. It is proposed to supply half of the amount of water they intend to pull from the mountain. Well what good is that water in the valley going to do for the 100 homes they are going to pull the water from at 4000 feet. Make them haul their water just like we will have to do after they drain it all out and leave our wells dry, impacting the value our homes.

I watched a show on prostitution last week on TV, this mine is much the same. Like pimps they throw a few \$ around rape the land in hiding (behind the dirt brims) abuse the water supply, molest the roads and leave when the value is gone taking their profits. This leaves a wounded soul (big hole in the ground) that no mater how many furs or cars are given (reclamation) the damage is never restored. Remains is a broken economy (100s out of work) damaged roads for the tax payers to rebuild and home values that are devalued without a water supply (my neighborhood range from 300K to 1m+. Put a stop to this now.

Roland Zachary

2328



"Bob Witzeman"
<witzeman@cox.net>
04/02/2008 11:41 PM

To: <comments-southwestern-coronado@fs.fed.us>
cc:
Subject: PUBlic hearings

Dear USFS

The USFS should allow the public to speak at public hearings. We don't want to just hear the USFS officials speak. We think they have their opinions but they should keep them for their EIS documents. The NEPA process should allow the public to speak, the public to provide input and the public to ask for oversight and scrutiny of the projects planned on our public lands.

I have noticed this new tendency of having USFS officials only briefly answer questions from the audience but not allowing the audience, the American Public, to express their views. This is a move in a new direction, certainly not what I have seen in Arizona in past decades. Is it the Bush Administration closing the door to public input? Or is it the USFS just not wanting to bother to hear from the public? I don't know but either way it seems so un-American- more like a Soviet style solution—definitely not the open process NEPA WOULD IMPLY.

Bob Witzeman, Conservation Chair
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4619 E. Arcadia Lane
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2329



<cocoHenry@hughes .net>

04/02/2008 06:54 PM

To: <comments-southwestern-coronado@fs.fed.us>
cc:
Subject: Copper Mining in The Santa Ritas

I am not a resident of the area however my wife and I winter in the area. We use the area for recreation extensively. It would be a real shame to let a Canadian Co. destroy such a beautiful spot. I wonder if they would be allowed to have the same impact on their landscape. I am sending this e-mail to register my opposition to the planned mine. Thanks for the opportunity to comment.

Henry W. HAuffe
PO Box 4053
Covington, LA 70434

2330



"CarolLoCastro "
<carollocastro@co-isp.com>

To: <comments-southwestern-coronado@fs.fed.us>
cc:
Subject: proposed Rosemont Copper Project

04/02/2008 03:56 PM

To the Coronado National Forest:

I am opposed to the construction of an open pit copper mine in the Santa Rita Mountain mainly because of the impact it would have on the aquifer. As a resident of Green Valley, I am very concerned about the future of the water supply in this area. The mine would use a tremendous amount of water and possibly cause a crisis situation for surrounding residents. Carol LoCastro