



December 18, 2009

CERTIFIED MAIL: 7003 2260 0004 2343 0323

Mr. Donald P. Gabrielson, Control Officer
Pinal County Air Quality Control District (PDAQCD)
P.O. Box 987
Florence, AZ 85232

**Re: Minor Permit Revision for Hot Water Heater
ASARCO LLC – Ray Operations
Permit No. V20633.R01**

Dear Mr. Gabrielson:

Please find the attached application for a minor permit revision to the current Title V permit number V20633.R01 submitted by ASARCO LLC - Ray Operations (Asarco), Highway 177, milepost 153, 8 miles north of Kearny, AZ 85137. This minor permit revision application adds a 2.9 MMBtu/hr natural gas fired boiler for heating operations associated with the Solvent Extraction-Electrowinning (SX-EW) operations. This will increase the number of permitted SX-EW natural gas boilers (referred to in the permit as process hot water heaters) to a total of five.

Pursuant to the Minor Permit Revision requirements of section 3-2-190, the addition of a 2.9 MMBtu/hr natural gas fired boiler for SX-EW operations (1) will not violate any applicable requirement; (2) does not necessitate a substantive change to the monitoring, reporting, or recordkeeping requirements of the permit; (3) does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis; (4) does not establish or change a permit term or condition for which there is no underlying applicable requirement and the source assumed to avoid an applicable requirement; (5) is not a modification under Title I of the federal Clean Air Act; (6) is not a modification under Chapter 7, Article 2 of the Pinal County Air Quality Control District Code of Regulations; (8) is not a fuel change; (9) will not result in a significant increase in the source's potential to emit; and (10) is not required to be processed as a significant revision pursuant to section 3-2-195.

The current Title V Permit V20633.R01 incorporates four (4) 5.7 MMBtu/hr natural gas fired hot water heaters to provide heat for the SX-EW process. Total heat input rating for

these four heaters is 22.8 MMBtu. Asarco will add a fifth natural gas heater with a rated capacity of 2.9 MMBtu/hr, increasing the total rated capacity of all natural gas heaters to 25.7 MMBtu/hr. As the attached specifications and calculations demonstrate, combustion emissions from the additional natural gas heater are insignificant.

Asarco proposes that the 2.9 MMBtu/hr process hot water heater would be subject to existing permit conditions 5.K.1 and 2.

K. Process Hot Water Heaters – Fuel Use Limitations [Code §§3-1-081]

1. Primary Fuel

Permittee is allowed to burn natural gas as a primary and propane as a secondary fuel in the process hot water heaters.

2. Other Fuels (Code §§3-1-081.G, 5-23-1010.F)

Permittee shall not use oil, used oil fuel, hazardous waste, and hazardous waste fuel (as defined in federal, state or county codes and rules) in the steam generating units and the combustion turbines without first obtaining a separate permit or an appropriate permit revision.

Additionally, the equipment list in existing permit condition number 12 would be revised to include the 2.9 MMBtu/hr process hot water heater.

ID	Equipment	Amount	Make	Model	Serial #	Date	Capacity
655	5.7 MMBtu/hr Hot Water Heaters	4	Parker Boiler	T5700	50607, 50608, 50609, 50610	1999	5.7 MMBtu
	2.9 MMBtu/hr Hot Water Heater	1	Parker Boiler	T2970	NB#44472	1994 Rec'd 2009	2.9 MMBtu

No other changes to the permit are necessary.

Because this application qualifies as a minor permit revision and Asarco needs to install the capacity immediately, unless Asarco hears otherwise from PCAQCD in five working days, Asarco will proceed with the installation of the 2.9 mmbtu/hr boiler as authorized by PCAQCD § 3-2-190.F. Asarco understands that this installation is at its own risk and that PCAQCD could vary from the requested permit conditions.

Asarco Ray Operations
Minor Permit Revision
Permit No. V20633.R01

If you have any questions regarding information provided in this submission, please contact me at 520-356-2400 or Keith Warren at 520-356-2712. Asarco looks forward to issuance of this permit revision.

Sincerely,

A handwritten signature in black ink that reads "Steven C. Holmes". The signature is written in a cursive style with a large, stylized 'S' and 'H'.

Steven C. Holmes
General Manager – Ray Operations

Inc.: Permit Application
Supplemental Data
Check No. 415463

Revised Permitted Emissions (2.9 MMBtu Natural Gas Heater)

Emission Factors: AP-42 1.4 Natural Gas Combustion Table 1.4-2

Natural Gas Heating Value 1020 MMBtu/MMSCF
 Boiler Rating 2.9 MMBtu/hr
 Small Boilers - Uncontrolled

Pollutant	Emissions	
	(lb/10 ⁶ scf) ^a	(lb/MMBtu) ^b
PM10	7.6	0.0074
PM2.5	7.6	0.0074
SO2	0.6	0.0006
NOX	100	0.0973
CO	84	0.0817
VOC	5.5	0.0054
Lead	0.0005	0.0000

Total consumption at 8760 hours 25,404 MMBtu Natural Gas

- Notes:
 a The emission factors from natural gas consumption are provided in AP-42 Tables 1.4-1 and 1.4-2. The boiler is a small uncontrolled boiler with a heat input of 2.9 MMBtu/hr.
 b Pound Emissions per BTU was calculated assuming natural gas has a heating value of 1020 MMBtu/MMSCF

Pollutant	Emissions from new 2.9 MMBtu heater	
	(lb)	(tons)
PM10	187.81	0.0939
PM2.5	187.81	0.0939
SO2	14.83	0.0074
NOX	2471.21	1.2356
CO	2075.81	1.0379
VOC	135.92	0.0680
Lead	0.0124	0.0000

V20633.R01 Emissions Limitation Section 5(C)(4)
 $E = 1.02Q^{0.769}$
 E = the maximum allowable particulate emissions rate in pounds-mass per hour
 Q = the total heat input of all operating fuel-burning units in MMBtu/hr

$Q = (5.7 \text{ MMBtu} \times 4) + 2.9 \text{ MMBtu} = 25.7 \text{ MMBtu}$
 $E = 12.38 \text{ lbs/hr}$

Asarco LLC - Ray Operations

2.9 MMBtu Hot Water Heater Addition

Solvent Extraction Winning (SX-EW) Operations

600 Operation ID

650 Operating Process

655 Equipment ID

Hot Water Heating Operating Process

Current 5.7 MMBtu Hot Water Heaters

Boiler Manufacturer Information

Parker Boiler Company

5930 Bandidi Boulevard

Los Angeles, CA 90040

Max Pressure: 125psi @ 250 degree F

Min relief valve cap: 6780 lb/hr

Burner heat surface - 678 square feet

Stack Height: 3.83 feet

Inside Stack Diameter: 2.00 feet

Exit Gas Temperature: 300 degree F

Lat: 33 deg. 08' 52"

Long: 110 deg. 58' 33"

PERMIT APPLICATION

(As required by A.R.S. §49-480, and Chapter 3, Article I, Pinal County Air Quality Control District Code of Regulations)

**PINAL COUNTY AIR QUALITY CONTROL DISTRICT
P.O. BOX 987 · FLORENCE, AZ 85232 · PHONE (520) 866-6929**

1. **Permit to be issued to: (Name and legal status (e.g. corporation or proprietorship) or organization that is to receive permit):**

ASARCO LLC

2. **Mailing Address:** P.O. Box 8

City: Hayden **State:** AZ **Zip:** 85135

Billing Address (if different from above): _____

City: _____ **State:** _____ **Zip:** _____

3. **Plant Name (if different from #1 above):** ASARCO LLC - Ray Operations

4. **Name(s) of Owner or Operator:** ASARCO LLC **Phone:** 520-356-7811

5. **Plant/Site Manager:** Steven C. Holmes **Phone:** 520-356-2400 **Fax:** 520-356-2801

6. **Contact Person:** Keith Warren **Phone:** 520-356-2712 **Fax:** 520-356-2801

7. **Equipment/Plant Location or Proposed Location Address:** Highway 177, milepost 153

City: Kearny **Zip:** 85137 **Assessor's Parcel Number:** 106-38-0001

Section/Township/Range: T3S, R13E: sections 13, 14, 23, 24, & 25; T3S, R14E: sections 30, 31, & 32

Latitude/Longitude, Elevation: LAT: 33 09'20"; LONG: 110 58'40"; 2,000 ft elevation

8. **General Nature of Business:** Copper Mine **Standard Industrial Classification Code:** 1021

9. **Type of Organization:**
 Corporation **State of Incorporation:** _____ Individual Owner Partnership
 Arizona Limited Liability Government Entity **(Government Facility Code):** _____
 Other **(Specify):** Arizona LLC - An Arizona Foreign LLC from the State of Delaware

10. **Permit Application Basis: (Check all that apply)**
 New Source Permit Revision Renewal of Existing Permit
 Portable Source General Permit Permit Transfer

For renewal or modification, include existing permit number: V20633.R01

Date of Commencement of Construction or Modification: as soon as possible

Is any of the equipment to be leased to another individual or entity? Yes No

11. If necessary to preserve this source's status as a less-than-major source, the undersigned agrees that the permit or this source *SHOULD* *SHOULD NOT* include Federally Enforceable Provisions in accord with Code §3-1-084.
12. The undersigned states and certifies that, based on information and belief formed after reasonable inquiry, the statements and information in this document and supporting materials are true, accurate and complete. To the extent that this application pertains to an assignment of an existing permit, the undersigned further agrees to comply with and accept each and every obligation associated with that existing permit. *Knowingly presenting a false certification constitutes a criminal offense under A.R.S. §13-2704.*
13. The undersigned applicant states that he/she currently has, or at the time construction and/or operation begins will have, legal authority to enter upon and use the premises upon which this source will be operated.
14. Attachments describing the process to be permitted or revised including a process description, a list of equipment, capacities, MSDS sheets and anticipated production or throughput should be submitted with the application.
15. For new sources, an application filing deposit fee must be included with the application.

Signature of Responsible Official of Organization: _____ 

Typed or Printed Name of Signer: Steven C. Holmes

Official Title of Signer: General Manager

Date: 12-18-09

ASARCO LLC
Debtor-in-Possession

000049-000049

ASARCO LLC
5285 E. WILLIAMS CIRCLE
SUITE 2000
TUCSON, AZ 85711

Page 001 of 001
Check Number: 0000415463
Check Date: 12/09/2009
Batch Number: 405000549

PINAL COUNTY AIR QUALITY CONTROL
PO BOX 987
FLORENCE, AZ 85232-0987

Invoice Number	PO Number	Control	Invoice Amount	Discount	Deduction	Invoice Net
PCAQCD-BOILER MOD		7000009069	500.00			500.00

Vendor No. 400614 Totals 500.00 500.00

COPY

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VERIFY DOCUMENT AUTHENTICITY - COLORED AREA MUST CHANGE IN TONE GRADUALLY AND EVENLY FROM DARK AT TOP TO LIGHTER AT BOTTOM

ASARCO LLC
Debtor-in-Possession
ASARCO LLC
5285 E. WILLIAMS CIRCLE
SUITE 2000
TUCSON, AZ 85711

91-2/1221
Check Number: 0000415463
Check Date: 12/09/2009

This amount: FIVE HUNDRED DOLLARS AND 00/100 \$**500.00

Pay to the order of: PINAL COUNTY AIR QUALITY CONTROL
PO BOX 987
FLORENCE, AZ 85232-0987

BANK ONE
DRAFTS ACCOUNTS PAYABLE

Joseph F. Lapinsky
Daniel B. Ull

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THE ORIGINAL DOCUMENT HAS AN ARTIFICIAL WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW WHEN CHECKING THE ENDORSEMENT.

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