California Environmental Protection Agency
Department of Toxic Substances Control

DRAFT

STANDARDIZED HAZARDOUS WASTE FACILITY PERMIT
SERIES B

Facility Name and Location:

J&B Refining dba J&B Enterprises
1650 Russell Avenue
Santa Clara, CA 95054

Facility Owner and Operator:

J&B Refining
1650 Russell Avenue
Santa Clara, CA 95054

Land Owner:

Challenger LLC
1650 Russell Avenue
Santa Clara, CA 95054

EPA ID Number:
CAD982052797

Effective Date:
January 7, 2002

Expiration Date:
January 6, 2012

Modification Date:
December 1, 2008

Pursuant to sections 66270.42 and 66270.43.5, title 22, division 4.5, California Code of Regulations, the Standardized Hazardous Waste Facility Permit (Permit) Series B is hereby issued to J&B Enterprises. Details of the permit modifications are listed in Appendix 1. The modified permit, consisting of 49 pages, is subject to terms and conditions set forth in Attachment A.

Will be signed (once approved) by

Raymond Leclerc, P.E.,
Team Leader
Permitting Program

Date:

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ATTACHMENT "A"

J&B ENTERPRISES
STANDARDIZED HAZARDOUS WASTE FACILITY PERMIT

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ATTACHMENT A

PART I - DESCRIPTION OF THE FACILITY

1. FACILITY OWNER AND OPERATOR NAME AND ADDRESS:

J&B Refining dba J&B Enterprises
1650 Russell Avenue
Santa Clara, CA 95054

LAND OWNER ADDRESS:

Challenger LLC
1650 Russell Avenue
Santa Clara, CA 95054

Deleted: J&B Enterprises¶

PERMITTEE:

The Permittee as used in this Standardized Permit means the owner and operator listed above.

2. LOCATION:

The Permittee's facility (hereafter the Facility) is located at 1650 Russell Avenue, Santa Clara, CA 95054, in Santa Clara County, at latitude 37 23' 13" and longitude 121 57' 20". The facility consists of a single building and adjacent spaces including loading docks, parking areas and buffer zones. The facility is involved in the reclamation of industrially generated nonferrous metals and alloys from new and used scrap metals. Of these, the main focus of the business is in the recovery of precious metals from gold bearing scrap, plating baths and other solutions which are generated primarily by the electronics industry.

The Facility is located on a parcel of approximately 62,000 sq. feet owned by Challenger LLC. Figure 1 is a plot plan of the land on which the facility is located. The corresponding legal description of the landowner's 1.75 acre property is as follows:

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"All that certain Real Property in the City of Santa Clara, County of Santa Clara, State of California described as follows:

ALL OF PARCEL A, shown on that certain Parcel Map prepared by Mark Thomas & Co., Inc. and recorded in Book 513 of Maps at Page 34 in the Office of the Recorder of the County of Santa Clara, being a resubdivision of Parcel 3 as shown on that certain Parcel Map recorded in Book 337 of Maps at Page 36, Santa Clara County Records.

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Excepting there from that portion thereof conveyed to the City of Santa Clara, A Municipal Corporation by Deed dated January 17, 1986 and recorded January 29, 1986 in Book J588 at Page 1193."

3. OPERATIONS:

(a) General description:

The facility is involved in the reclamation of industrially generated nonferrous metals and alloys from scrap metal. Of these, the main focus of the business is reclamation of precious metals from solid gold bearing scrap, plating baths, and other solutions which are generated primarily by the electronics industry.

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(b) Listing of units regulated by this permit:

Unit Number	Description
1.	Hazardous Waste Container Storage Area
2.	Concentrator Tanks (C1,C2,C3)
3.	Precipitation tanks (T1, T2, T3, T4, T5, T6)
4.	Electrowinning Tanks (EW-1, EW-2, EW-3)
5.	Waste Water Treatment System
6.	Evaporator (E-1)
7.	Hazardous Waste Storage Shed
8.	Solder Dross Storage Room
9.	Acid/Water Wash Unit
10.	Crucible Furnace

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4. STANDARDIZED PERMIT APPLICATION

The Standardized Permit Application, dated July 16, 2001 (including all certification and submittal documents, and all responses to the Notice of Deficiency dated May 11, 2001, is hereafter referred to as the "Permittee's Standardized Permit Application." The Permittee's Standardized Permit Application is by this reference made part of this Standardized Permit.

Deleted: A list of all sections of the Standardized Permit Application is included as Attachment 6

5. REFERENCES AND TERMINOLOGY

All parts in this Standardized Permit are identified by Roman numerals. Unless explicitly stated otherwise, all cross-references to items in this Standardized Permit shall refer only to items occurring within the same part. All terms used in this Standardized Permit shall have the same meaning as those terms have in the California Health and Safety Code (H&SC), Division 20 and Title 22, California Code of Regulations (22, Cal. Code Regs.), Div. 4,5, unless expressly provided otherwise by this Standardized Permit.

6. EFFECT OF PERMIT

(a) The Permittee shall comply with the provisions of Chapter 6.5 of Division 20 of the H&SC and Division 4.5 of Title 22 of the California Code of Regulations, as well as all the terms and conditions of this Standardized Permit, and shall conduct all hazardous waste management activities and all facility operations as they are described in the Permittee's Standardized Permit Application. The issuance of this Standardized Permit by the Department of Toxic Substances Control (DTSC) does not release the Permittee from any liability or duty imposed by federal or State statutes and regulations or local ordinances, except the obligation to obtain this Standardized Permit. In particular, the Permittee shall obtain the required permits required by other governmental agencies at the federal, State, and local levels under the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility. If there is overlap in the requirements imposed by any of the above permits, the most protective or stringent requirement, as determined by DTSC, shall apply.

(b) The Permittee is permitted to transfer, store, and treat hazardous waste in accordance with the conditions of this Standardized Permit as specified in Part II and Part III of this Standardized Permit. Any transfer, storage, and treatment of hazardous wastes not specifically authorized in Part II or not listed in Part III of this Standardized Permit is strictly prohibited.

(c) The Permittee shall comply with the conditions of the Standardized Permit, the requirements of Chapter 6.5 of Division 20 of the H&SC, and with the

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regulations adopted by DTSC pursuant to Chapter 6.5 of Division 20 of the H&SC, including regulations which become effective after the issuance of the Standardized Permit.

(d) Compliance with the terms of this Standardized Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including but not limited to one brought for any imminent and substantial endangerment to human health or the environment. Notwithstanding any term or condition in this Standardized Permit, DTSC may adopt or amend regulations which impose additional or more stringent requirements than those existing at the time this Standardized Permit was issued. DTSC may fully enforce both the Standardized Permit and all additional or more stringent requirements against the Permittee, regardless of the time of adoption of such additional or more stringent requirements.

(e) Failure to comply with any terms or conditions set forth in the Standardized Permit in the time or manner specified herein will subject the Permittee to possible enforcement action, including but not limited to penalties pursuant to H&SC 25187.

(f) In addition, failure to submit any information required in connection with the Standardized Permit, or falsification and/or misrepresentation of any submitted information, is grounds for termination of the Standardized Permit (22, Cal. Code Regs., section 66270.43).

7. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

DTSC has prepared a Negative Declaration and De Minimis Impact Finding in accordance with CEQA (Public Resources Code, section 21000, et seq.) and the State guidelines there under.

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8. CLOSURE COST ESTIMATE:

The closure cost estimate (in 2001 dollars), as approved by DTSC on July 16, 2001 was $84,180.

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9. MODIFICATIONS

(a) The Permittee must request and obtain a permit modification to revise any portion of this Standardized Permit. To request such a revision, the Permittee must comply with the procedures for permit modifications set forth in 22, Cal. Code Regs. section 66270.42.

(b) If at any time DTSC determines that modification of this Part of the Standardized Permit is necessary, DTSC may initiate a modification to this

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Part of the Permit according to procedures in 22, Cal. Code Regs. section 66270.41.

(c) See Appendix 1 for the details of modifications.

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PART II - SPECIAL CONDITIONS

1. The Permittee, J&B Enterprises, is prohibited from any hazardous waste treatment and storage activity not specifically described in Part III of this Permit.

2. Hazardous waste shall not be land disposed at the Facility, whether temporarily or permanently.

3. The Permittee shall not store hazardous waste in excess of one calendar year from the time such waste was first stored.

4. In the event that any cracks, gaps or tears are detected in the dedicated secondary containment for the Hazardous Waste Container Storage Area, the Concentrator Tanks (C 1-3), the Precipitation Tanks (T1 through T6), the Evaporator Tank (E-1), the Electrowinning Tanks (EW-1 through EW-3), the Acid/Water Wash Unit, the Wastewater Treatment System, and the Hazardous Waste Storage Shed, repairs shall be initiated as soon as possible, and completed within one week of discovery of the problem. The Permittee shall notify DTSC within twenty-four (24) hours whenever containment problems are found and notify DTSC in writing within seven (7) days of discovery of the problem, delineating what was done to correct the problem.

5. The following plans required for the Standardized Permit and certified for use by the Permittee in accordance with H&SC section 25201.6(c)(4) shall be maintained at the Facility at all times until Facility closure is completed:

Deleted: , certified by an independent professional engineer registered in California and approved by DTSC, and shall be made available to local, State and federal agencies upon request

   (a) Contingency Plan and Emergency Preparedness.
   (b) Facility Management Practices.
   (c) Facility Siting Information.
   (d) Inspection Plan.
   (e) “Land Ban” Compliance.
   (f) Manifesting.
   (g) Personnel Training.
   (h) Reporting.
   (i) Security Plan.

   The Permittee shall make the documents listed above available to local, state and federal agencies upon request. The Permittee shall recertify any of these documents if changes are made to the document. The Permittee shall submit the new certifications to DTSC within 30 days after any changes are made.

6. Within twenty-four (24) months from the effective date of this Permit, the Permittee shall comply with the secondary containment requirements for container transfer areas specified in 22, Cal. Code Regs, section 66264.175.

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7. This Permit authorizes operation of the Facility units and activities listed in Part III subject to the conditions specified herein. The Permittee shall not treat or store hazardous wastes in any unit other than those specified in Part III. Any modifications to the designated units or permitted activities require the written request and written approval of DTSC in accordance with the permit modification procedures set forth in 22, Cal. Code Regs, sections 66270.41 and 66270.42.

8. This Standardized Permit is hereby granted subject to the condition that all the requirements of H&SC, Division 20, Chapter 6.5, all applicable permitting provisions of 22, Cal. Code Regs., Division 4.5, and all terms and conditions of this Standardized Permit are complied with. If the aforesaid conditions are not met, the Standardized Permit may be revoked and other authorized enforcement action may be taken at the discretion of DTSC.

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PART III - PERMITTED UNITS

UNIT NAME:

Unit #1: Hazardous Waste Container Storage Area

TYPE OF UNIT:

Container storage (55-gallon drums)

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WASTE STREAMS:

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¶
California Waste Codes: 121, 131, 132, 711, 721, 722, 724, 726, 728¶
¶
U.S. EPA Hazardous Waste Codes: D002, D003. D004, D006, D007, D008, D011, F007, F009¶

#1- Aqueous Solution With Cyanide and Precious Metals
#2- Non-Reactive Dragout Solutions with Precious Metals
#3- Non-Cyanide Containing Precious Metals (non-acidic)
#4- Iodine etch solution
#5- Residues Containing Precious Metals
#7- Photographic Solutions with Silver
#8- Cyanide Strip Solution

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See Table 1 for the permitted federal and State Codes for these waste streams.

COMMON NAME OF WASTE:

Caustic and acid solutions, etching and plating solutions, spent cyanide plating bath solutions from electroplating operations, spent stripping and cleaning solutions where cyanides are used in the process, stripping solutions from circuit board metal removal baths.

LOCATION OF UNIT:

Deleted: HAZARDOUS CONSTITUENT OR CHARACTERISTIC OF WASTE:¶
¶
Corrosive, reactive, toxic (arsenic, silver, lead, nickel)¶
¶

This unit is located inside the secondary containment of the gold recovery system in the south western corner of the building. See Figures 2 and 3.

Deleted: Attachments 1 and 2

PHYSICAL DESCRIPTION OF UNIT:

The unit consists of groupings of drums with the following maximum dimensions: no more than two (2) rows per grouping, no more than ten (10) drums per row, and the rows stacked to a maximum height of two drums. A minimum of five (5) feet aisle space must be maintained at all times. Smaller containers (less than 55 Gallons) are also allowed as long as they are stored adjacent to the drum groupings. The unit is inside the gold recovery system secondary containment structure. This secondary containment unit consists of an epoxy coated concrete base surrounded by 8 inch berms.

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ACTIVITY TYPE:

Container storage, pretreatment handling, and consolidation of liquid and solid waste

ACTIVITY DESCRIPTION:

Drum storage of liquid solutions containing precious metals prior to their processing through the treatment systems, consolidation of photographic liquid waste, spent filters and filter cakes into 55-gallon drums.

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MAXIMUM PERMITTED STORAGE CAPACITY:

One hundred 55-gallon drums or other combination of smaller containers for a total combined volume of 5,500 gallons.

COMMENTS/SPECIAL CONDITIONS:

No extremely acidic or caustic wastes (pH<2 or >14.5) are allowed within the secondary containment structure of this unit.

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED:

FEE TYPE: Storage

UNIT SIZE: 5,500 gallons

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UNIT NAME:

Unit # 2: Concentrator Tanks C1, C2, C3

TYPE OF UNIT:

Treatment Tanks

WASTE STREAMS: (waste stream #s as described in Table 1)

#1- Aqueous Solution With Cyanide and Precious Metals
#2- Non-Reactive Dragout Solutions with Precious Metals
#3- Non-Cyanide Containing Precious Metals (non-acidic)
#4- Iodine etch solution
#8- Cyanide Strip Solution

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See Table 1 for the permitted federal and State Codes for these waste streams.

COMMON NAME OF WASTE:

Caustic and acidic solutions, etching and plating solutions, spent cyanide plating bath solutions from electroplating operations, spent stripping and cleaning solutions where cyanides are used in the process, stripping solutions from circuit board metal removal baths.

Deleted: **WASTE CODE AND TYPE:**¶
¶
California Waste Codes: 121, 131, 132, 711, 721, 722, 724, 726, 728¶
¶
U.S. EPA Hazardous Waste Codes: D002, D003. D004, D006, D007, D008, D011, F007, F009¶
¶

LOCATION OF UNIT:

This unit is located inside the secondary containment of the gold recovery system in the south western corner of the building. See Figures 2 and 3.

Deleted: **HAZARDOUS CONSTITUENT OR CHARACTERISTIC OF WASTE:**¶
¶
Corrosive, reactive, toxic, (arsenic, silver, lead, nickel)¶
¶

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PHYSICAL DESCRIPTION OF UNIT:

This unit consists of three rectangular, heated, double wall stainless steel tanks, sitting on 8" high legs, covered by fume hoods and each connected to 8 inch diameter roof blowers. Two of the tanks are 190 gallons each and of dimensions 4' 4" × 3' 4" × 3' 2" (L × W × H). A third tank is 320 gallons of dimensions 5' 4" × 4' × 3' 2" (L × W × H). These tanks are within a secondary containment for the gold recovery system.

ACTIVITY TYPE:

Treatment in tanks

ACTIVITY DESCRIPTION:

Low heat pretreatment and dewatering by low heat evaporation of water into the atmosphere

MAXIMUM PERMITTED TREATMENT CAPACITY:

Treatment is performed on batches no larger than 368 gallons for the large tank and 258 gallons for the smaller tanks.

5,500 gallons per month

COMMENTS/SPECIAL CONDITIONS:

This unit must have a valid, site specific permit from the Bay Area Air Quality Management District (BAAQMD) prior to operation.

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED FOR THE ENTIRE FACILITY:

FEE TYPE: Treatment

UNIT SIZE: 5,500 gallons per month

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UNIT NAME:

Unit #3: Precipitation Tanks T1, T2, T3, T4, T5, T6

TYPE OF UNIT:

Treatment Tanks

WASTE STREAMS: (waste stream #s as described in Table 1)

#1- Aqueous Solution With Cyanide and Precious Metals
#2- Non-Cyanide Containing Precious Metals (non-acidic)
#3- Iodine etch solution
#8- Cyanide Strip Solution

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See Table 1 for the permitted federal and State Codes for these waste streams.

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¶
California Waste Codes: 121, 131, 132, 711, 721, 722, 724, 726, 728¶
¶
U.S. EPA Hazardous Waste Codes: D002, D003. D004, D006, D007, D008, D011, F007, F009¶

COMMON NAME OF WASTE:

Concentrated stripping bath and plating solutions (from Concentrator Tanks C-1, C-2, C-3)

LOCATION OF UNIT:

This unit is located inside the secondary containment of the gold recovery system in the southwestern corner of the building. Because the tanks that comprise the unit are portable, these tanks must be anchored to structures immediately adjacent to the concentrator tanks at all times during use. See Figures 2 and 3.

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HAZARDOUS CONSTITUENT OR CHARACTERISTIC OF WASTE:¶
¶
Corrosive, Reactive, Toxic, (arsenic, silver, gold, lead).¶

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PHYSICAL DESCRIPTION OF UNIT:

This unit consists of six cylindrical, portable, high density polyethylene tanks. The walls of the tanks are translucent and 1/4" thick, the bottom is ½-inch thick. The tanks are identical with a maximum capacity of 150 gallons, and the following dimensions: 31.5 inches × 31.5 inches × 48 inches (L × W × H).

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ACTIVITY TYPE:

Treatment in tanks

ACTIVITY DESCRIPTION:

Precipitation of gold by pH adjustment and gold displacement by addition of powdered zinc. A caustic is used to lower the pH and sodium hydrosulfite is used to stabilize it. Powder zinc is used to displace the gold and accelerate precipitation.

MAXIMUM PERMITTED TREATMENT CAPACITY:

5,500 gallons per month

COMMENTS/SPECIAL CONDITIONS:

All tanks included in this unit must be anchored to structurally appropriate stationary structures at all times during use.

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED FOR THE ENTIRE FACILITY:

FEE TYPE: Treatment

UNIT SIZE: 5,500 gallons per month

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UNIT NAME:

Unit #4: Electrowinning Tanks EW-1, EW-2, EW-3

TYPE OF UNIT:

Treatment tanks

WASTE STREAMS:

#1- Aqueous Solution With Cyanide and Precious Metals
#2- Non-Reactive Dragout Solutions with Precious Metals
#3- Non-Cyanide Containing Precious Metals (non-acidic)
#4- Iodine etch solution
#8-Cyanide Strip Solution

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See Table 1 for the permitted federal and State Codes for these waste streams.

COMMON NAME OF WASTE:

Caustic and acid solutions, etching and plating solutions, spent cyanide plating bath solutions from electroplating operations, spent stripping and cleaning solutions where cyanides are used in the process, stripping solutions from circuit board metal removal baths, and concentrated solutions from those compounds.

Deleted: **WASTE CODE AND TYPE:**¶
¶
California Waste Codes: 121, 131, 132, 711, 721, 722, 724, 726, 728¶
¶
U.S. EPA Hazardous Waste Codes: D002, D003. D004, D006, D007, D008, D011, F007, F009¶
¶

LOCATION OF UNIT:

This unit is located inside the secondary containment of the gold recovery system in the southwestern corner of the building. See Figures 2 and 3.

Deleted: **HAZARDOUS CONSTITUENT OR CHARACTERISTIC OF WASTE:**¶
¶
Corrosive, Reactive, Toxic (arsenic, silver, lead)¶
¶

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PHYSICAL DESCRIPTION OF UNIT:

The unit consists of three rectangular 0.25-inch thick polypropylene tanks with triple welded seams, reinforced by a structural 2-inch steel channel cage. Each tank has an electrolytic treatment unit on top with electrical induction prods and cathodes. The tanks are identical with dimensions as follows: 48 inches wide, 48 inches long by 54 inches high with a maximum working capacity of 530 gallons. The tanks are also equipped with content recirculating pumps. The electrowinning tanks unit is located inside the secondary containment for the gold recovery system, which addresses the secondary containment structure requirements for the unit.

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ACTIVITY TYPE:

Treatment in Tanks

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ACTIVITY DESCRIPTION:

This is a batch process consisting of electrolytic cathodic capture of precious metals. The waste is pumped from the tanks into their corresponding treatment unit. An electrical current is conducted through the waste in the treatment unit. The positive contact of the electrical system (cathode) attracts the ions in the waste capturing them as they get plated to it. After treatment the disposable cathode is removed and the accumulated gold is melted and refined in a furnace and sold as a recycled material.

MAXIMUM PERMITTED TREATMENT CAPACITY:

5,500 gallons per month

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED:

FEE TYPE: Treatment

UNIT SIZE: 5,500 gallons per month

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UNIT NAME:

Unit #5: Wastewater Treatment System

TYPE OF UNIT:

Treatment tanks

WASTE STREAMS: (waste stream #s as described in Table 1)

#10- Precious Metal Precipitate Supernatant /water wash (lean liquor)
#12- Neutralized Acid Solution
#13- Wastewater Sludge without Cyanide
#14- Filter Cake
#15- Non-hazardous wastewater effluent
#18- Spent ion Exchange Resin
#19- Resin Regenerant Solution

See Table 1 for the permitted federal and State Codes for these waste streams.

Deleted: WASTE CODE AND TYPE:¶
¶
California Waste Codes: 121, 131, 132, 711, 721, 722, 724, 726, 728¶
¶
U.S. EPA Hazardous Waste Codes:,D002, D003. D004, D006, D007, D008, D011, F007, F009¶

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COMMON NAME OF WASTE:

Caustic and acid solutions, etching and plating solutions, spent cyanide plating bath solutions from electroplating operations, spent stripping and cleaning solutions where cyanides are used in the process, stripping solutions from circuit board metal removal baths.

LOCATION OF UNIT:

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¶
Corrosive, Reactive, Toxic (arsenic, silver, gold, lead, nickel)¶
¶

This unit is located in an external shed immediately adjacent to the southern wall of the building. See Figures 2 and 4.

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PHYSICAL DESCRIPTION OF UNIT:

This unit consists of two identical 1,300 gallon tanks, a filter press equipped with a hopper, a four column ion exchange system, diaphragm pumps, and hoses for the transferring of wastewater. The system also contains an ion exchange resin regeneration system used to service the resin in the ion exchange columns. This regeneration system is comprised of a portable, 100-gallon neutralization container, a diaphragm pump and the ion exchange columns themselves. See Figure 8.

The two 1,300-gallon setting tanks are identical cylindrical tanks with conical bottoms. The tanks have the following dimensions: 92 inches in diameter, 146 inches in height with a maximum capacity of 1,300 gallons each. The tanks sit on mild steel structural support baskets, which added to the height of the tanks, give the system a total height of 168 inches (14 feet).

There are four ion exchange columns 14 inches in diameter by 48 inches in height.

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

The waste water treatment system treats lean liquor generated during precious metal recovery and also acid and waste waters from precipitate washing. The waste water mix is batch treated in the settling tanks through pH adjustment induced precipitation, neutralization, destruction of cyanides by chlorine induced oxidation, and ion exchange treatment as needed, prior to disposal into the sanitary sewer.

The Ion Exchange Resin Columns are used for polishing off low metal concentrations in waste water coming from the settling tanks in order to meet sanitary sewer requirements. The resin in the columns is also washed and regenerated periodically as needed, using acids and alkaline solutions.

MAXIMUM PERMITTED TREATMENT CAPACITY:

Waste Water Treatment System: 15,000 gallons per month

Ion Exchange Columns: 7,500 gallons per month

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED:

FEE TYPE: Treatment

UNIT SIZE: 15,000 gallons per month

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UNIT NAME:

Unit #6: Evaporator E-1

TYPE OF UNIT:

Treatment Tank

WASTE STREAMS: (waste stream #s as described in Table 1)

#10- Precious Metal Precipitate Supernatant / water wash (lean liquor)
#12- Neutralized Acid Solution
#19- Resin Regenerant Solution, neutralized, and
#20- Evaporator Solids

See Table 1 for the permitted federal and State Codes for these waste streams.

Deleted: WASTE CODE AND TYPE:¶
¶
California Waste Codes: 121, 131, 132, 711, 721, 722, 724, 726, 728¶
¶
U.S. EPA Hazardous Waste Codes: D002, D003. D004, D006, D007, D008, D011, F007, F009¶

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COMMON NAME OF WASTE:

Caustic and acid solutions, etching and plating solutions, spent cyanide plating bath solutions from electroplating operations, spent stripping and cleaning solutions where cyanides are used in the process, stripping solutions from circuit board metal removal baths.

LOCATION OF UNIT:

Deleted: HAZARDOUS CONSTITUENT OR CHARACTERISTIC OF WASTE:¶
¶
Corrosive, Reactive, Toxic (arsenic, silver, gold, lead, nickel)¶
¶

This unit is located inside the secondary containment of the gold recovery system in the southwestern corner of the building. See Figures 2 and 3.

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PHYSICAL DESCRIPTION OF UNIT:

This unit consists of a heated chamber 7 feet high within which there is a semi-conical process tank. The tank is positioned vertically on its 5 feet high axis with a 3 feet higher diameter and a 2 feet lower diameter. A gas burner within the heating chamber provides the heat and instruments, probes and vents control the heat within. The evaporator is located inside the secondary containment for the gold recovery system, which addresses the secondary containment structure requirements for the unit. See Figure 7.

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ACTIVITY TYPE:

Treatment

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ACTIVITY DESCRIPTION:

Low heat pretreatment and dewatering by low heat evaporation into atmosphere - Evaporation might also involve complete dehydration of wastewater.

MAXIMUM PERMITTED TREATMENT CAPACITY:

3,000 gallons per month

COMMENTS/SPECIAL CONDITIONS:

This unit must have a valid, site-specific permit from the Bay Area Air Quality Management District prior to operation.

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED FOR THE ENTIRE FACILITY:

FEE TYPE: Treatment

UNIT SIZE: 3,000 gallons per month

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UNIT NAME:

Unit #7: Hazardous Waste Storage Shed

TYPE OF UNIT:

Container storage

WASTE STREAMS: (waste stream #s as described in Table 1)

#1-Aqueous Solution With Cyanide and Precious Metals
#8-Cyanide Strip Solution

See Table 1 for the permitted federal and State Codes for these waste streams.

Deleted: WASTE CODE AND TYPE:¶
¶
California Waste Codes: 121, 131, 132, 711, 721, 722, 724, 726, 728¶
¶
U.S. EPA Hazardous Waste Codes: D002, D003. D004, D006, D007, D008, D011, F007, F009¶

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COMMON NAME OF WASTE:

Aqueous solutions containing cyanide and heavy metals, residues containing cyanide and heavy metals, evaporator solids containing cyanide and heavy metals.

LOCATION OF UNIT:

Deleted: HAZARDOUS CONSTITUENT OR CHARACTERISTIC OF WASTE:¶
¶
Corrosive, Reactive, Toxic (arsenic, silver, gold, lead, nickel, cyanide)¶
¶

This unit is located immediately adjacent to the outside of the southern wall of the building. See Figure 2.

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PHYSICAL DESCRIPTION OF UNIT:

The unit is an off the shelf, fire resistant, self-contained, all steel, hazardous material cabinet. The unit is roofed, has secondary containment, and ventilation. The secondary containment consists of a 200-gallon epoxy coated sump. The unit dimensions are: 9.75 inches wide × 5.5 inches long × 7.5 inches high. The unit is anchored with 5/8 inch bolts to prevent sliding or tipping.

ACTIVITY TYPE:

Container Storage

ACTIVITY DESCRIPTION:

This unit is used for storing cyanide-containing waste only.

MAXIMUM PERMITTED STORAGE CAPACITY:

The unit can store nine (9) 55-gallon drums, or smaller containers up to a maximum of 495 gallons.

COMMENTS/SPECIAL CONDITIONS:

No extremely acidic, or caustic wastes (pH<2 or >14.5) are allowed within this unit.

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED:

FEE TYPE: Storage

UNIT SIZE: 495 gallons

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UNIT NAME:

Unit #8: Solder Dross Storage Area

TYPE OF UNIT:

Container storage of non liquid hazardous waste

WASTE STREAM PERMITTED: (waste stream #s as described in Table 1)

#6- Solder Dross

See Table 1 for the permitted federal and State Codes for this waste stream.

Deleted: WASTE CODE AND TYPE:¶
¶
California Waste Codes: 141, 171, 172, 181¶
¶
U.S. EPA Hazardous Waste Codes: D004, D006. D008, D011¶

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COMMON NAME OF WASTE:

Solid Hazardous waste with tin and lead, waste solder dross

LOCATION OF UNIT:

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¶
Toxic (lead)¶
¶

This unit is located in the western side of the inside of the building, between the J&B offices and the gold recovery System. See Figures 2 and 5.

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PHYSICAL DESCRIPTION OF UNIT:

The unit consists of a room with double doors where the waste is stored in 55-gallon drums along two short rows. The storage area is a 20 feet by 20 feet rectangular segment of floor inside the building distinctively marked with safety color lines. A minimum aisle space distance of five feet will be maintained between rows. The floor is solid concrete. The unit has a scrap sorting area in which the waste is sorted, classified and repackaged.

ACTIVITY TYPE:

Container storage, waste sorting and consolidation into larger containers

ACTIVITY DESCRIPTION:

The unit is used to accumulate, process, consolidate and ship out solder dross waste that J&B collect from the same generators that provide the liquid wastes which constitute most of J&B's incoming feed stock.

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MAXIMUM PERMITTED STORAGE CAPACITY:

Twenty four (24) 55-gallon drums.

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COMMENTS/SPECIAL CONDITIONS:

No liquid hazardous wastes are allowed in this unit.

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED:

FEE TYPE: Storage

UNIT SIZE: 1,320 gallons

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UNIT NAME:

Unit # 9: Acid/Water Wash Unit

TYPE OF UNIT:

Treatment in Containers System

WASTE STREAMS PERMITTED: (waste stream #s as described in Table 1)

#9- Precious Metal Precipitate
#11- Acid Purification Solution

See Table 1 for the permitted federal and State Codes for these waste streams.

Deleted: WASTE CODE AND TYPE:¶
¶
California Waste Codes: 171¶
¶
U.S. EPA Hazardous Waste Codes: D004, D006, D007, D008, D011, F007, F009¶

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COMMON NAME OF WASTE:

Precipitate from precious metal recovery.

LOCATION OF UNIT:

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¶
Corrosive, reactive, toxic, (arsenic, silver, gold, lead, nickel)¶
¶

This unit is located inside the secondary containment of the gold recovery system in the southwestern corner of the building. See Figures 2 and 3.

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PHYSICAL DESCRIPTION OF UNIT:

This unit is where the mud from all the recovery processes is prepared for final smelting. The unit consists of a single off the shelf hooded wash unit connected to an 8-inch diameter roof blower and various containers, filters and attachments. This unit is within a secondary containment for the gold recovery system.

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ACTIVITY TYPE:

Treatment in containers

ACTIVITY DESCRIPTION:

This unit is where the mud from all the recovery processes is prepared for final melting. Filtration, aspiration and acid or water wash of precious metal recovery precipitate prior to melting of the metal in the crucible furnace (unit#10). The process consists of washing and draining the precious metal precipitate from the concentration and precipitation processes, through a number of filters and containers. All the treatment activities related to this unit take place under the fume hood.

MAXIMUM PERMITTED TREATMENT CAPACITY:

Batches no larger than 3.0 pounds each, up to a total maximum of 45 pounds per month

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED FOR THE ENTIRE FACILITY:

FEE TYPE: Treatment

UNIT SIZE: 45 lbs. per month

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UNIT NAME:

Unit #10: Crucible Furnace

TYPE OF UNIT:

Treatment Tank

WASTE STREAMS PERMITTED: (waste stream #s as described in Table 1)

#9- Precious Metal Precipitate

See Table 1 for the permitted federal and State Codes for this waste stream.

Deleted: WASTE CODE AND TYPE:¶
¶
California Waste Codes: 171¶
¶
U.S. EPA Hazardous Waste Codes: D004, D006, D007, D008, D011, F007, F009¶

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COMMON NAME OF WASTE:

Washed treatment precipitate containing precious metals (treatment mud)

LOCATION OF UNIT:

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¶
Toxic (nickel, silver, lead)¶
¶

This unit is located inside the furnace room. The furnace room is located inside the facility building in the southeastern corner of the building. See Figure 6.

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PHYSICAL DESCRIPTION OF UNIT:

The unit consists of a crucible inside of a furnace. The furnace has exterior dimensions of 23.5 inches diameter by 17 inches high. Its walls are 5 inches thick and consist of fire brick, concrete and an exterior steel shell.

ACTIVITY TYPE:

Treatment in tank

ACTIVITY DESCRIPTION:

The unit is used to smelt and purify the precious metal containing sludge from the gold recovery system. This is a batch process. The waste, a precipitate from other precious metal processes at the facility, is brought in as a dry sludge (mud) placed in the crucible, heated up to a temperature of 1,400 degrees Fahrenheit and melted thoroughly. Once melted, the material is poured into brick shaped molds.

MAXIMUM PERMITTED TREATMENT CAPACITY:

Batches no larger than 3.0 pounds each, up to a total maximum of 45 pounds per month

COMMENTS/SPECIAL CONDITIONS:

This unit requires a site specific exception or permit from the Bay Area Air Quality Management District (BAAQMD).

FOR THE PURPOSE OF STANDARDIZED PERMIT FEE CALCULATIONS, THE FOLLOWING FEE TYPE AND UNIT SIZE WILL BE USED:

FEE TYPE: Treatment

UNIT SIZE: 45 lbs. per month

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PART IV - CORRECTIVE ACTION

1. AUTHORITY

The Permittee is required to conduct corrective action at the Facility pursuant to sections 25187, 25200.10 and 25200.14 of the California Health and Safety Code (H&SC). Corrective Action, if required, will be carried out under an order issued to the Permittee pursuant to sections 25187 of the California Health and Safety Code (H&SC).

Failure to comply with any term or condition set forth in Part IV of the Standardized Permit in the time or manner specified herein will subject the Permittee to possible enforcement action and penalties pursuant to H&SC section 25187.

In addition, failure to submit the information required in Part IV of the Standardized Permit, or falsification and/or misrepresentation of any submitted information, is grounds for termination of this Standardized Permit (H&SC section 25186; 22, Cal. Code Regs. section 66270.43).

2. STATEMENT OF PURPOSE

The corrective action objectives contained in Part IV of the Standardized Permit are provided to ensure that all threats to human health and/or the environment, resulting from the release or potential release of hazardous waste or hazardous constituents at the perimeter of the Facility, are addressed in an expedient manner.

3. SUMMARY OF CORRECTIVE ACTIONS FOR HISTORICAL RELEASES

(a) The Phase I Environmental Assessment Checklist submitted to DTSC by the Permittee indicated that no further investigation was warranted at the Permittee's facility. After reviewing the Phase I Environmental Assessment Checklist and the findings from DTSC's inspection of the facility, DTSC concurs with the Permittee's finding based upon the submitted information from the Permittee and inspection results. DTSC does not require the Permittee to conduct further investigation at this time based on the information submitted by the Permittee.

(b) DTSC may require that the Permittee conduct further investigation of the Facility if any of the following occurs:

(1) DTSC determines that the information supplied in the Phase I Environmental Checklist is inaccurate, incomplete, falsified, or improperly completed.

(2) DTSC has reason to believe that the Permittee's Facility may be adversely affecting human health and/or the environment.

(3) The Permittee identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers a new SWMU not previously identified.

(c) If DTSC determines at a later time that further investigation is warranted, DTSC will modify Part IV of the Standardized Permit. The modifications will specify requirements that the Permittee shall complete as part of the required further investigation.

(d) If, at any time, DTSC determines that modification of Part IV of the Permit is necessary, DTSC may initiate a modification of Part IV of the Permit according to the procedures in 22, Cal. Code Regs. sections 66270.41 and 66270.42.

4. POTENTIAL OR IMMEDIATE THREATS/NEWLY IDENTIFIED RELEASES/NEWLY IDENTIFIED SWMUs

(a) In the event the Permittee identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers a new SWMU not previously identified, the Permittee shall notify DTSC orally within 48 hours of discovery and notify DTSC in writing within ten (10) days of such discovery, summarizing the findings including the immediacy and magnitude of any potential threat(s) to human health and/or the environment.

(b) DTSC may require the Permittee to investigate, mitigate and/or take other applicable action to address any immediate or potential threats to human health and/or the environment from newly identified releases of hazardous waste and/or hazardous constituents, or newly identified SWMUs. Upon written request by DTSC, the Permittee shall submit to DTSC any required documents within the time specified by DTSC. The required documents shall be developed in a manner consistent with guidance to be provided by DTSC.

(c) DTSC will review the required documents and notify the Permittee in writing of DTSC's approval or disapproval, including any comments and/or modifications. If DTSC determines that immediate action is required, DTSC may orally authorize the Permittee to act prior to DTSC's receipt or approval of any required workplans.

5. SAMPLING/ACCESS

(a) Sampling

(1) The Permittee shall provide confirmatory samples to DTSC within the time requested by DTSC to determine if there is a threat to human

health and/or the environment. The sampling shall be done in accordance with guidance that DTSC supplies to the Permittee.

(2) The Permittee shall notify DTSC in writing at least fourteen (14) days prior to beginning any confirmatory sampling requested by DTSC. If the Permittee believes it must commence emergency confirmatory sampling without delay, the Permittee may seek emergency telephone authorization from DTSC's Permit Streamlining Branch Chief or, if the Branch Chief is unavailable, his/her designee to commence such activities immediately. At the request of DTSC, the Permittee shall provide or allow DTSC or its authorized representative to take split or duplicate samples of all samples collected by the Permittee pursuant to Part IV of this Permit.

(3) The Permittee shall submit to DTSC upon request the results of all sampling and/or tests or other data generated by its employees, divisions, agents, consultants or contractors pursuant to this Standardized Permit.

(4) Notwithstanding any other provisions of this Standardized Permit, DTSC retains all information gathering and inspection authority rights including enforcement actions related thereto, under H&SC and any other applicable State or federal statutes or regulations.

(b) Access

(1) DTSC, its contractors, employees, agents, and/or any U.S. EPA representatives are authorized to enter and freely move about the facility pursuant to the entire Permit for the purposes of: interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part IV of the Permit; conducting such test, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Standardized Permit and Division 20, Chapter 6.5 of the H&SC. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Permittee's Facility and any other property to which access is required for implementation of any provision of this Standardized Permit and any provision of Division 20, Chapter 6.5 of the H&SC and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Standardized Permit or undertake any other activity necessary to determine compliance with applicable requirements.

(2) To the extent that work being performed pursuant to Part IV of the Permit must be done on property not owned or controlled by the Permittee, the Permittee shall use its best efforts to obtain access agreements necessary to complete work required by this Part of the Permit from the present owner(s) of such property within thirty (30) days of approval of any workplan for which access is required. "Best efforts" as used in this paragraph shall include, at a minimum, a certified letter from the Permittee to the present owner(s) of such property requesting access agreement(s) to allow the Permittee and DTSC and its authorized representatives access to such property and the payment of reasonable sums of money in consideration of granting access. The Permittee shall provide DTSC with a copy of any access agreement(s). In the event that agreements for the access are not obtained within thirty (30) days of approval of any workplan for which access is required, or of the date that the need for access becomes known to the Permittee, the Permittee shall notify DTSC in writing within fourteen (14) days thereafter regarding both efforts undertaken to obtain access and its failure to obtain such agreements. In the event DTSC obtains access, the Permittee shall undertake approved work on such property.

(3) Nothing in Part IV of the Standardized Permit shall be construed to limit or otherwise affect the Permittee's liability and obligation to perform corrective action including corrective action beyond the facility boundary, notwithstanding the lack of access. DTSC may determine that additional on-site measures must be taken to address releases beyond the Facility boundary if access to off-site areas cannot be obtained.

(4) Nothing in Part IV of the Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

Table 1 - Description of Waste (Ref. Waste Analysis Plan – Table 2)

#	Waste Streams	Federal Waste Codes	California Waste Codes
1	Aqueous Solution with Cyanide and Precious Metals	F007, F009, D002, D003, D004, D006, D007, D008 and/or D011	121, 131, 132, 141, 551, 711, 722, 724, 726 and/or 728
2	Non-Reactive Dragout Solutions with Precious Metals	F007, F009, D002, D003, D004, D006, D007, D008 and/or D011	123, 131, 132 and/or 135
3	Non-Cyanide Containing Precious Metals (non-acidic)	Non-RCRA or D002, D003, D004, D006, D007, D008 and/or D011	123, 131, 132, 135, 141, 551, 721, 722, 724, 726 and/or 728
4	Iodine etch solutions	Non-RCRA	131, 132, 135, 141, 551 and/or 726
5	Residues Containing Precious Metals	F006, F007, F008, F009, D002, D003, D004, D006, D007, D008 and/or D011	141, 171, 181, 491, 512 and/or 513
6	Solder Dross	D004, D006, D008 and/or D011	141, 171, 172, and/or 181
7	Photographic Solutions with Silver	D007 and/or D011	541
8	Cyanide Strip Solution	D002, D003, D004, D006, D007, D008 and/or D011	121, 131, 132, 711, 721, 722, 724, 726 and/or 728
9	Precious Metal Precipitate	F007, F009, D004, D006, D007, D008 and/or D011	171
10	Precious Metal Precipitate Supernatant /water wash (lean liquor)	F007, F009, D002, D003, D004, D006, D007, D008 and/or D011	121, 131, 132, 711, 721, 722, 724, 726 and/or 728
11	Acid Purification Solution	F007, F009, D002, D004, D006, D007, D008 and/or D011	721, 722, 724, 726 and/or 728
12	Neutralized Acid Solution	F007, F009 D004, D006, D007, D008 and/or D011	132, 721, 722, 724, 726 and/or 728
13	Wastewater-sludge without cyanide	F006, F007, F009, D004, D006, D007, D008 and/or D011	132, 721, 722, 724, 726 and/or 728
14	Filter cake	F006, F007, F009, D002, D004, D006, D007, D008, D010 and/or D011	171 and/or 181

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#	Waste Streams	Federal Waste Codes	California Waste Codes
15	Non-hazardous wastewater effluent	Non-RCRA	Nonhazardous
16	Resin regenerant solution, acidic	F007, F009, D002, D004, D006, D007, D008 and/or D011	132, 721, 722, 724, 726 and/or 728
17	Resin regenerant solution, caustic	F007, F009, D002	122
18	Spent ion exchange resin	F007, F009, D002, D004, D006, D007, D008 and/or D011	181 and/or 722
19	Resin regenerant solution, neutralized	F007, F009, D004, D006, D007, D008 and/or D011	132, 721, 722, 724, 726 and/or 728
20	Evaporator Solids	F007, F009, D002, D004, D006, D007, D008, D010 and/or D011	171 and/or 728

Table 2 – Permitted Units and Associated Waste Streams

#	Unit Description	Permitted Waste Streams
1	Hazardous Waste Container Storage Area	1 through 5, 7 and 8*
2	Concentrator Tanks (C-1, C-2, C-3)	1, 2, 3, 4, and 8*
3	Precipitator Tanks (T1 through T6)	1, 3, 4, and 8*
4	Electrowinning Tanks (EW-1 through EW-3)	1, 2, 3, 4, and 8*
5	Wastewater Treatment System	10*, 12*, 13*, 14*, 15*, 18*, 19*
6	Evaporator (E-1)	10*, 12*, 19*, 20*
7	Hazardous Waste Storage Shed	1 and 8*
8	Solder Dross Storage Area	6
9	Acid/Water Wash Unit	9*, 11*
10	Crucible Furnace (F-1)	9*

An asterisk identifies that the waste is generated on-site.

Table 3 – Waste Generation Information (Ref. Section III – Table 8, Waste Analysis Plan)

#	Waste Streams	Waste Source
1	Aqueous Solution with Cyanide and Precious Metals	Off-site
2	Non-Reactive Dragout Solutions w Precious Metals	Off-site
3	Non-Cyanide Containing Precious Metals (non-acidic)	Off-site
4	Iodine etch solutions	Off-site
5	Residues Containing Precious Metals	Off-site
6	Solder Dross	Off-site
7	Photographic Solutions w/Silver	Off-site
8	Cyanide Strip Solution	On-site
9	Precious Metal Precipitate	From Gold Precipitation Treatment Tank T1 through T6, Water Wash / Filtration Containers, and Acid Wash / Filtration Containers. (On-site)
10	Precious Metal Precipitate Supernatant /water wash (lean liquor)	From Gold Precipitation Treatment Tank T1 through T6 or Electrowinning Tanks EW-1 through EW-4 (On-site)
11	Acid Purification Solution	From Acid Wash / Filtration Containers (On-site)
12	Neutralized Acid Solution	From Neutralization Containers (On-site)
13	Wastewater-sludge without cyanide	From Cyanide Destruction and Metal Precipitation WTS-1 and WTS-2 (On-site)
14	Filter cake	From Filter Press Containers (On-site)
15	Non-hazardous wastewater effluent	From Filter Press Container, Ion-Exchange System Container, Holding Tank WTS-1 and WTS-2 (On-site).
16	Resin regenerant solution, acidic	From Ion Exchange System Container (On-site)
17	Resin regenerant solution, caustic	From Ion exchange System Container (On-site)
18	Spent ion exchange resin	From Ion Exchange System Container (On-site)
19	Resin regenerant solution, neutralized	From pH Neutralization Container (On-site)
20	Evaporator Solids	From Evaporator (E-1) (On-site).

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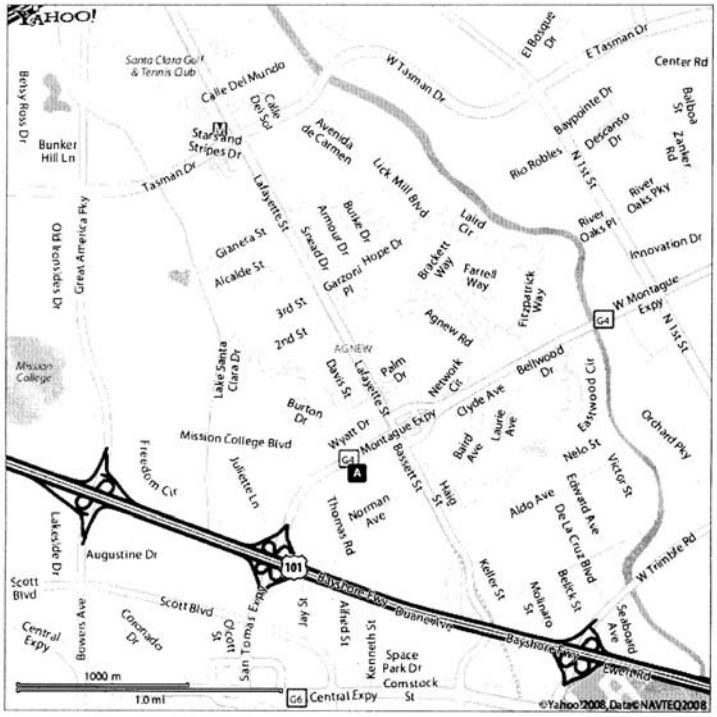
Map of 1650 Russell Ave, Santa Clara, CA 95054-2031 Page 1 of 1

Map of 1650 Russell Ave, Santa Clara, CA 95054-2031 YAHOO! LOCAL Maps



When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.

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Figure 1 – Location of J&B Refining, 1650 Russell Avenue, Santa Clara

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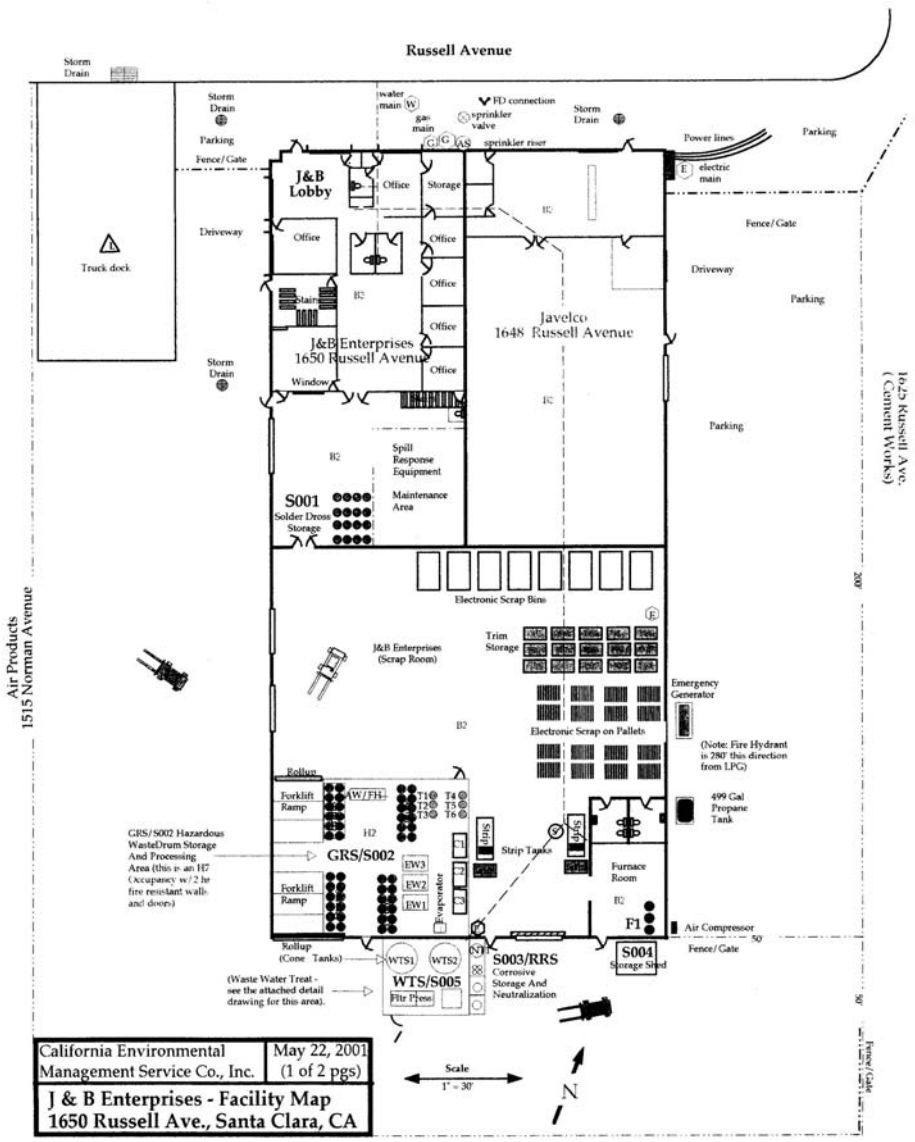

Figure 2 – Spatial Layout of Regulated Areas.

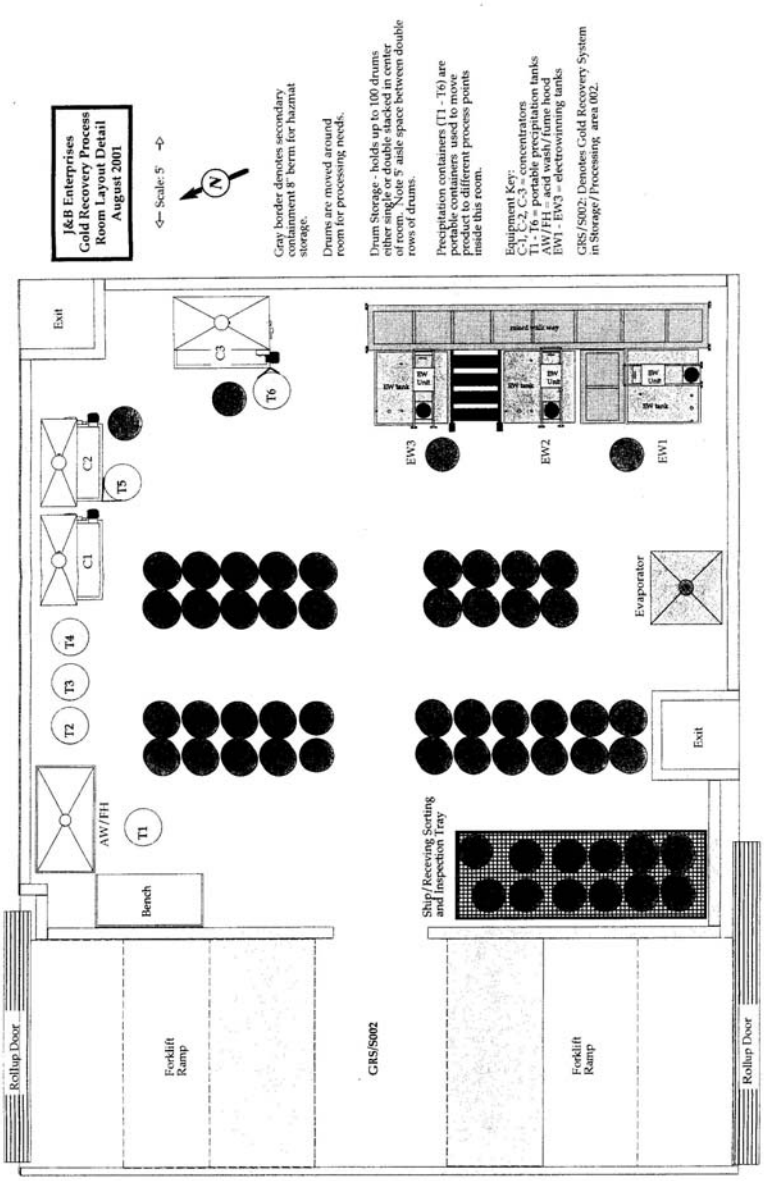

Figure 3 – Plan View of Gold Recovery System

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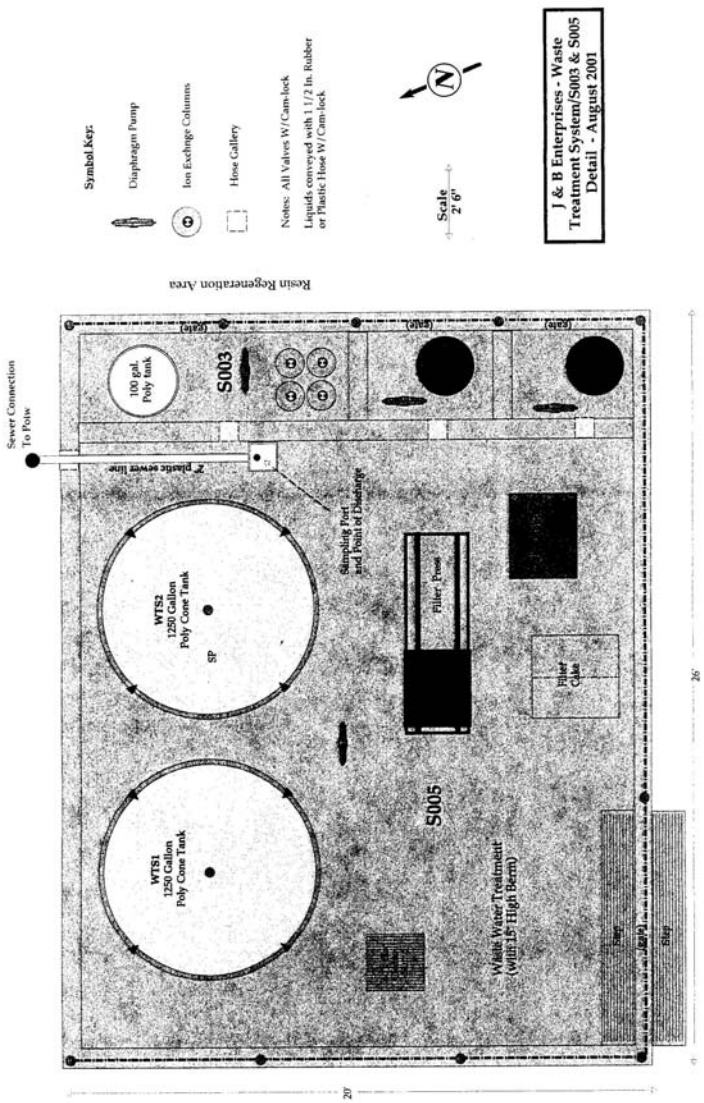

Figure 4 – Plan View of Wastewater Treatment System

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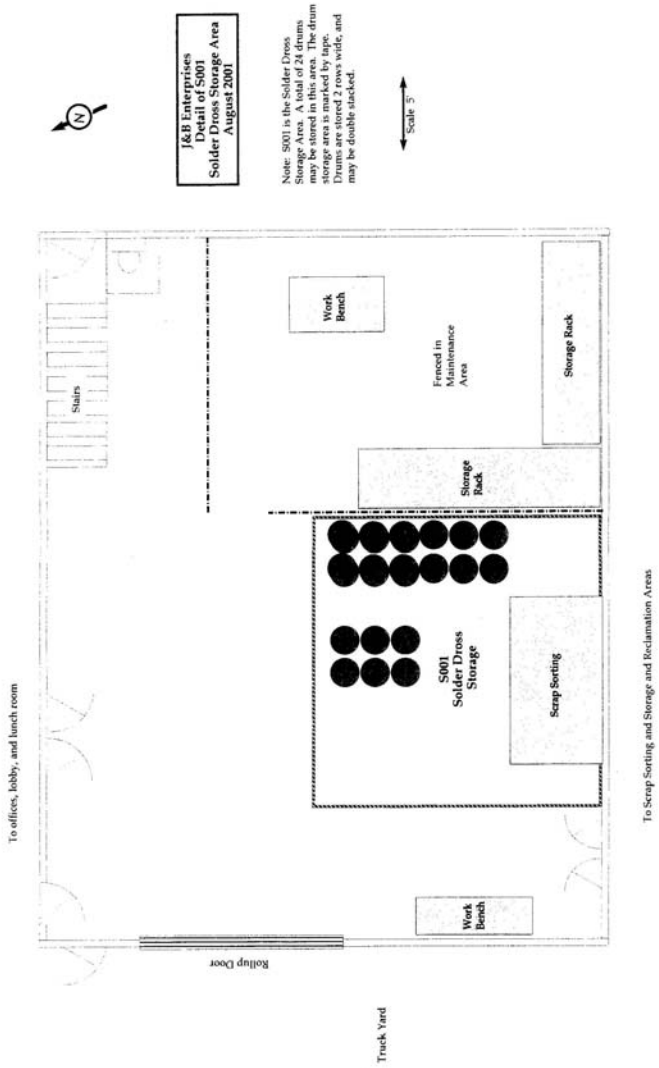

Figure 5 – Plan View of Solder Dross Storage Area

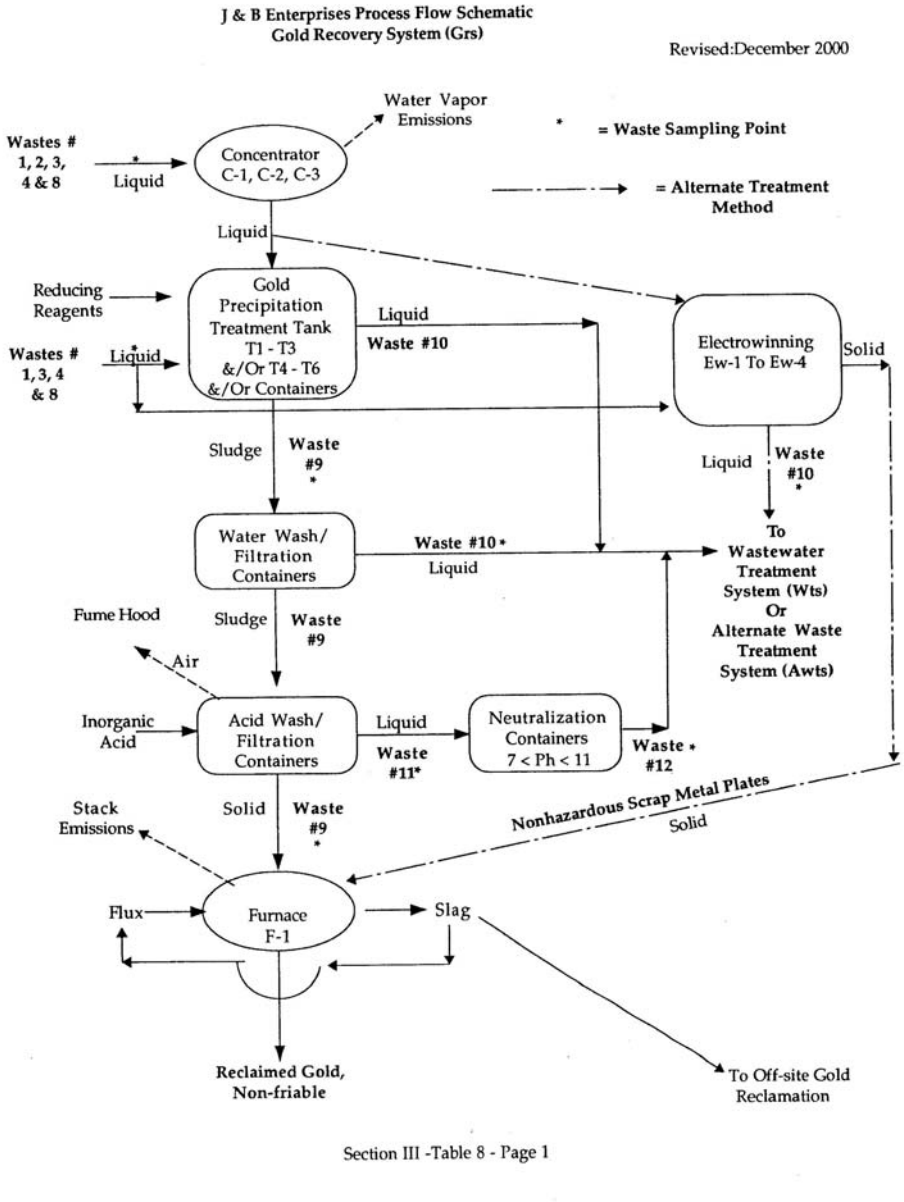

Figure 6 – Process Flow Schematic – Gold Recovery System (GRS)

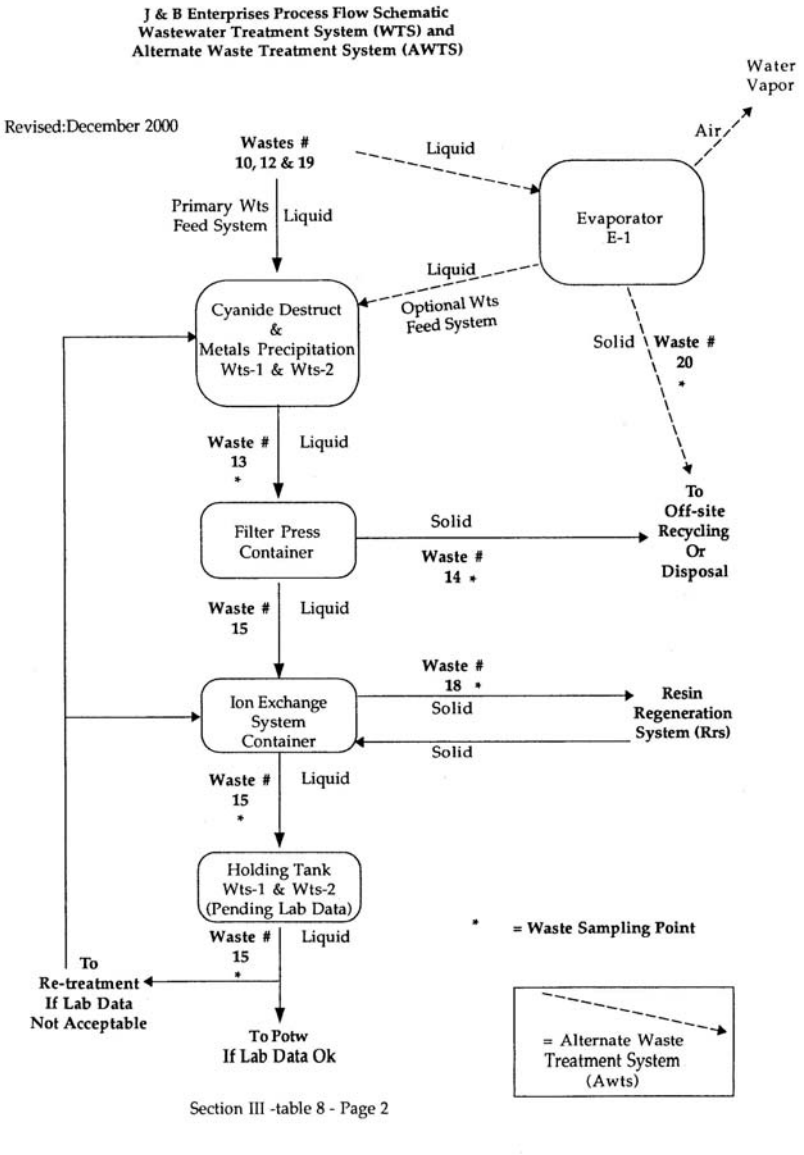

Figure 7 – Process Flow Schematic – Wastewater Treatment System and Alternate Wastewater Treatment System (AWTS)

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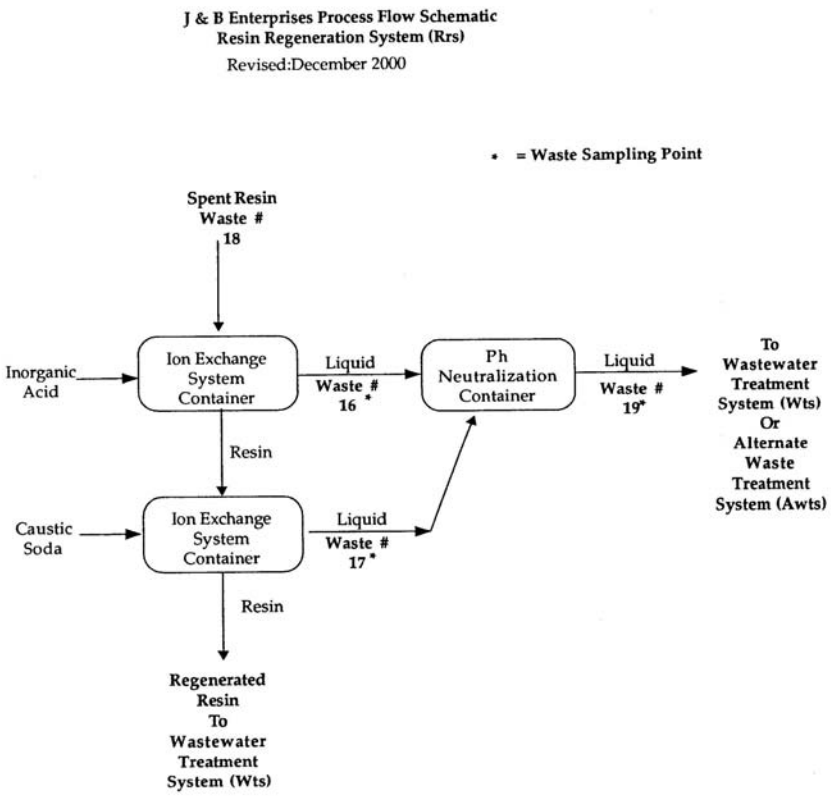

Section III -table 8 - Page 3

Figure 8 – Process Flow Schematic – Resin Regeneration System (RSS)

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Appendix 1 – Modification Details of the Permit Modifications

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October 10, 2008: Agency Initiated Modification

1. On October 10, 2008 DTSC informed the Permittee that DTSC will initiate a permit modification to resolve any discrepancy between the Waste Analysis Plan and the Permit. DTSC provided Tables 1 through 3. Table 1 listed the permitted various waste streams and its corresponding Federal and California Waste Codes. The permitted units and the corresponding permitted waste streams are listed in Table 2. Table 3 identified the permitted waste streams from off-site generators and waste streams generated on-site from various treatment processes.

December 1, 2008: Agency Initiated Modification

1. DTSC revised the Permit as determined on October 10, 2008. A notice of the permit modification will be published in a local newspaper of major circulation. The same notice of the modification will be mailed to all persons on the facility mailing list maintained by DTSC. For details, see Appendix 2.

2. Added Appendices 1 and 2.

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Appendix 2: Details of Modification dated December 1, 2008

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1. Cover Page:

   Revised 'Cover Page' to include the modification date and appropriate citation from the regulations.

1. Table of Contents: Included listing of Tables, Figures and Appendices.

2. Part I.

   Added a Section I.8 "Closure Cost Estimate".

   Added the text "The closure cost estimate (in 2001 Dollars), as approved by DTSC on July 16, 2001 was $84,180." to Section I.8.

   Added the text "See Appendix 1 for the details of the Permit Modification" in Section I.9(c).

3. Part III

   Included a description of the 'Waste Streams' for all units. Referred to Tables 1 through 3 of the Permit.

   Deleted the details of permitted federal and State Codes from all Units.

4. Tables

   Included Table 1 – Description of Waste Streams and associated federal and States Codes as Table 1.

   Included Table 2, "Permitted Units and Associated Waste Streams" that lists description of the Units and the Permitted Waste Streams.

   Included Table 3, "Waste Generation Information" that lists waste source information about the Waste Streams.

5. Figures

   Replaced Attachments 1A, 1B, 2, 3, 4, and 5 with Figures 1 through 8

   1. Map, Location of J&B Refining
   2. Facility Plot Plan, Spatial Layout of Regulated Areas
   3. Gold Recovery Room Plot Plan
   4. Waste Water Treatment System Plot Plan
   5. Solder Dross Storage Area Plot Plan
   6. Process Flow Schematic – Gold Recovery System
   7. Process Flow Schematic – Wastewater Treatment System (WTS) and Alternate Waste Treatment System (AWTS)

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8. Process Flow Schematic – Resin Regeneration System

6. Attachments:

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