California Environmental Protection Agency
Department of Toxic Substances Control

STANDARDIZED HAZARDOUS WASTE FACILITY PERMIT, SERIES B

Facility Name: Heraeus Metal Processing, LLC.

Owner Name: Heraeus Metal Processing, LLC.
15524 Carmenita Road
Santa Fe Springs, CA 90670

Operator Name: Heraeus Metal Processing, LLC.
15524 Carmenita Road
Santa Fe Springs, CA 90670

EPA ID Number: CAD 060 398 229

Effective Date: October 31, 2011

Expiration Date: October 31, 2021

Pursuant to California Health and Safety Code sections 25200 and 25201.6, this Standardized Hazardous Waste Facility Permit is hereby issued to: Heraeus Metal Processing, LLC.

The Issuance of this Permit is subject to the terms and conditions set forth in Attachment A. This Permit consists of 51 pages, including this cover page and Attachment A.

//Original signed by//

Alfred Wong, P.E., Team Leader
Used Oil and Tanks Team
Department of Toxic Substances Control

Date: September 26, 2011

HERAEUS METAL PROCESSING, LLC.
15524 CARMENITA ROAD
SANTA FE SPRINGS, CALIFORNIA 90670

STANDARDIZED HAZARDOUS WASTE FACILITY PERMIT

ATTACHMENT "A"

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PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Facility"** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

   For the purpose of implementing corrective action under California Code of Regulations, title 22, division 4.5, a hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

3. **"Permittee"** as used in this Permit means the Owner and Operator.

4. **"RCRA"** as used in this Permit means the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.).

5. **"RCRA hazardous waste"** as used in this Permit has the same definition as in Health and Safety Code section 25120.2.

6. **"Non-RCRA hazardous waste"** as used in this Permit has the same definition as in Health and Safety Code section 25117.9.

PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. Owner of Facility:

   Heraeus Metal Processing, LLC.
   15524 Carmenita Road
   Santa Fe Springs, CA 90670

2. Owner of Real Property:

   Heraeus Metal Processing, LLC
   15524 Carmenita Road
   Santa Fe Springs, CA 90670

3. Operator of Facility:

   Heraeus Metal Processing, LLC.
   15524 Carmenita Road
   Santa Fe Springs, CA 90670

4. Location:

   Heraeus Metal Processing, LLC. facility is located at 15524 Carmenita Road in Santa Fe Springs in Los Angeles County (Facility). The Facility has buildings located at the following addresses: 13409 Alondra Blvd., 13429 Alondra Blvd., 13443 Alondra Blvd., 13501 Alondra Blvd., 15536 Carmenita Road, 15600 Resin Place, 15601 Resin Place, 15610 Resin Place 15611 Resin Place and 15524 Carmenita Road. The building located at 15524 Carmenita Road, has no authorized Units and is used for administration. The Los Angeles County Assessor's parcel numbers for the Facility are 7005-014-043 and 7005-014-070.

5. Description of Facility Operations:

   Heraeus Metal Processing, LLC. is a manufacturer and recycler of precious metals. The manufacturing operations convert precious metals into various alloy products and specialty compounds that are used in catalyst, emission controls, and chemical manufacturing applications. The recycling operation recovers and refines precious metals including gold, silver, platinum, palladium, rhodium and other platinum group metals. Precious metals are recovered from materials such as ores and concentrates, industrial catalysts, ceramics, off specification bullion and solutions, and scrap precious metals and alloys. Recovered metals are further refined to their pure states for formation into precious metal compounds, or they are fabricated into various shapes and sizes for industrial uses. The tray furnace, ball mills, screeners, and blenders connect to a series of baghouses, which are Air Pollution Control Devices. Dust from the treatment process is collected in the baghouses and returned to the pulp sampling. The baghouses

are permitted by the South Coast Air Quality Management District (SCAQMD). The Facility Location Map is shown in Figure 1 and the Facility Plot Plans are shown in Figures 2 through Figure 10.

6. Facility History

DTSC first issued a Permit to the Facility on June 2, 1998. Standardized Hazardous Waste Permits are valid for 10 years from the date of issue. The Permittee submitted a new application for a Permit Renewal on December 7, 2007. As per the California Code of Regulations, Title 22, Section 66270.1, existing permitted hazardous waste facilities may continue to operate under their old Permit until a decision has been made on their application.

The Facility has been in operation since 1970 when it was originally operated under the ownership of PGP Industries, Inc. Heraeus Metal Processing, Inc. acquired the Facility in 2000. In 2008, Heraeus Metal Processing, Inc. changed their name to Heraeus Metal Processing, LLC. Previous owners of the properties on which Facility now stands, include Cal West Industrial Properties, LLC and PGP Industries, Inc.

Since the Standardized Hazardous Waste Permit was first issued on June 2, 1998, the Permit has gone through several modifications, including a Class 2 permit modification on October 5, 2007. This modification authorized the Permittee to install a new waste water treatment system (WWTS) to meet the new industrial waste water discharge requirements set by the Los Angeles County Sanitation District.

7. Facility Size and Type for Fee Purposes:

This Permit is categorized as a “Series B” Standardized Permit pursuant to Health and Safety Code section 25201.6 and for purposes of Health and Safety Code sections 25205.2 and 25205.19.

8. Closure Cost Estimate

The closure cost estimate, as approved by DTSC upon the effective date of this Permit, is $2,534,816.

PART III. GENERAL CONDITIONS

1. PERMIT APPLICATION DOCUMENTS

The Standardized Permit Application dated May 16, 2010 and submitted to DTSC by the Permittee is hereinafter referred to as the "Standardized Permit Application" and is hereby made a part of this Permit by reference.

2. EFFECT OF PERMIT

(a) The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by 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.

(b) The Permittee is permitted to store and treat hazardous wastes in accordance with the terms and conditions of this Permit. Any management of hazardous wastes not specifically authorized in this Permit is strictly prohibited.

(c) Compliance with the terms and conditions of this 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.

(d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

(e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.

(f) Failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., tit. 22, §66270.43).

(g) In case of conflicts between the Operation Plan and the Permit, the Permit conditions take precedence.

(h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards and any conditions imposed pursuant to section 13227 of the Water Code.

3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A negative declaration has been prepared in accordance with the requirements of Public Resources Code section 21000 et seq. and the CEQA Guidelines, section 15070 et seq. of California Code of Regulations, title 14.

4. ANNUAL HAZARDOUS WASTE REDUCTION AND MINIMIZATION CERTIFICATION

The Permittee is exempt from a hazardous waste reduction and minimization program pursuant to Health and Safety Code section 25244.15(d)(3).

5. ACCESS

(a) DTSC, its contractors, employees, agents, and/or any United States Environmental Protection Agency representatives are authorized to enter and freely move about the Facility 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 VI of the Permit; conducting such testing, 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 Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, 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 Permit or undertake any other activity necessary to determine compliance with applicable requirements.

(b) Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes operation only of the facility units and activities listed below. The Permittee shall not treat, store or otherwise manage hazardous waste in any unit other than those specified in this Part IV. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5.

UNIT #1:

Container Storage Area S-1A

LOCATION:

13409 Alondra Blvd. (See Figure 7)

ACTIVITY TYPE:

Storage in Containers

ACTIVITY DESCRIPTION:

This Unit is located in the secondary containment area in the southern half of the 13409 Alondra Blvd. Building. The containers used for hazardous waste storage are either California Department of Transportation (DOT)-complaint fifty-five (55)-gallon or smaller or bulk bags made of steel or polyethylene. Waste Stream A (Spent Catalyst) and Waste Stream B (Precious Metal Waste Solids) are stored in this Unit before going to the tray furnaces. Waste Stream C (Waste Solutions) is stored in this Unit before going to the refining kettles.

PHYSICAL DESCRIPTION:

This Unit measures thirty four (34) feet by fifteen (15) feet with two (2) inch high concrete berms. The Unit is also epoxy coated. The Unit uses a storage racking system consisting of six (6) sets of three (3) tiered shelving with two (2) upright and four (4) horizontal supports. Each set of shelving measures forty-two (42) inches deep by nine (9) feet three (3) inches wide.

MAXIMUM CAPACITY:

The total maximum storage capacity is five thousand sixty (5,060) gallons. Material can be stored in any combination of DOT- compliant drums up to fifty-five (55) gallons in capacity or bulk bags made of steel or polyethylene. A maximum of ninety-two (92) fifty-five (55)-gallon drums or twenty-three (23) bulk bags shall be used. For the purpose of calculating maximum storage capacity, one bulk bag shall be counted as four (4) drums or two hundred twenty (220) gallons.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D018

California Waste Codes: 121, 122, 123, 131, 132, 135, 141, 162, 171, 172, 181, 211, 212, 213, 214, 331, 341, 342, 343, 352, 551, 791, 792

UNIT SPECIFIC SPECIAL CONDITIONS

1. The Permittee shall close this Unit within three (3) months after Unit #2 (Container Storage Area S-1B) is constructed and certified by a professional engineer. (See Unit #2 Special Conditions #1.) All hazardous waste in Unit #1 shall be moved to Unit #2 upon DTSC's approval of the professional engineer's certification for Unit #2.

2. The Permittee shall store wastes using a storage unit with a top, middle, and bottom shelf. The Permittee shall only store liquid wastes in containers on the middle and bottom shelves. Only solid wastes shall be stored in containers on the top shelf. .

3. The Permittee shall place a chain or bar across the top shelf such that it secures the containers on the top shelf. The chain or bar shall be secured and in place at all times except during loading and unloading to the top shelf.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #2:

Container Storage Area S-1B

LOCATION:

15600 Resin Place (Resin East Warehouse) (See Figure 8)

ACTIVITY TYPE:

Storage in Containers

ACTIVITY DESCRIPTION:

This Unit is located in the secondary containment area in the southern half of the 15600 Resin Place Building. The containers used for hazardous waste storage are either DOT complaint drums or bulk bags made of steel or polyethylene.

Waste Stream A (Spent Catalyst) and Waste Stream B (Precious Metal Waste Solids) are stored in this Unit before going to the tray furnaces. Waste Stream C (Waste Solutions) is stored in this Unit before going to the refining kettles.

PHYSICAL DESCRIPTION:

This Unit measures 46.67 feet by 53.25 feet with concrete berms and ramps for secondary containment. The Unit also has an epoxy coating. It contains two rows of storage racks. Each storage rack has three (3) tiers and each shelf is five (5) feet deep and twenty (20) feet wide.

MAXIMUM CAPACITY:

The total maximum storage capacity is five thousand sixty (5,060) gallons. Material can be stored in any combination of DOT- compliant drums up to fifty five (55) gallons in capacity or bulk bags made of steel or polyethylene. A maximum of ninety two (92) fifty-five (55) gallon drums or twenty-three (23) bulk bags shall be used. For the purpose of calculating maximum storage capacity, one bulk bag shall be counted as four (4) drums or two hundred twenty (220) gallons.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D018

California Waste Codes: 121, 122, 123, 131, 132, 135, 141, 162, 171, 172, 181, 211, 212, 213, 214, 331, 341, 342, 343, 352, 551, 791, 792

UNIT SPECIFIC SPECIAL CONDITIONS

1. The Permittee shall complete construction of this Unit and have the Unit certified

by a professional engineer in accordance with California Code of Regulations, Title 22, Section 66264.175 within five months of the effective date of this Permit.

2. No later than fourteen (14) calendar days prior to commencing the construction of Unit #2 Container Storage Area S1-B, the Permittee shall submit to DTSC a schedule detailing the dates and length of time required for the planned construction.

3. No later than thirty (30) calendar days after completing construction of Unit #2 Container Storage Area S1-B and at least fourteen (14) calendar days before the Permittee commences any hazardous waste management activities in the permitted unit, the Permittee shall submit to DTSC an engineer's certification stating that the permitted unit has been constructed in accordance with the approved Standardized Permit Application.

4. The Permittee shall obtain approval from DTSC of regarding any significant deviations from the construction plans provided in the approved Standardized Permit at least seven (7) calendar days prior to any construction activities.

5. No later than one hundred and twenty (120) calendar days after completing construction of the Facility, the Permittee shall submit to DTSC as-built drawings of the Facility.

6. The Permittee shall notify DTSC in writing at least fourteen (14) calendar days before the Permittee commences any hazardous waste management activities to allow DTSC the opportunity to inspect the Facility. If DTSC declines to inspect or fails to respond to the Permittee's written notification, the Permittee may commence the permitted hazardous waste management activities at the Facility at the end of the fourteen (14) day period.

7. The Permittee shall only store liquid wastes in containers on the middle and bottom shelves. Only solid wastes shall be stored in containers on the top shelf.

8. The Permittee shall place a chain or bar across the top shelf such that it secures the containers on the top shelf. The chain or bar shall be secured and in place at all times except during loading and unloading to the top shelf.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #3:

Container Storage Area S-2

LOCATION:

15601 Resin Place (Resin North Warehouse) (See Figure 9)

ACTIVITY TYPE:

Storage in Containers

ACTIVITY DESCRIPTION:

Waste is stored in this Unit in DOT-complaint fifty five (55)-gallon containers or bulk bags before being moved to the metal recovery processing Units.

PHYSICAL DESCRIPTION:

This Unit has a trapezoidal shape sixteen (16) feet eight (8) inches in length and twenty nine (29) feet in height. (See Figure 9) This Unit has an area of four hundred sixty three (463) square feet. Secondary containment is provided by a three (3) inch high concrete berm. The Unit also has an epoxy coating.

MAXIMUM CAPACITY:

The total maximum storage capacity is five thousand five hundred (5,500) gallons. Material can be stored in any combination of DOT- compliant drums up to fifty five (55) gallons in capacity or bulk bags made of steel or polyethylene. A maximum of one hundred (100) fifty five (55)-gallon drums or twenty five (25) bulk bags shall be used. For the purpose of calculating maximum storage capacity, one bulk bag shall be counted as four (4) drums or two hundred twenty (220) gallons.

WASTE TYPES:

Waste Stream A Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D018

California Waste Codes: 121, 122, 123, 131, 132, 135, 141, 162, 171, 172, 181, 211, 212, 213, 214, 331, 341, 342, 343, 352, 551, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #4:

Tray Furnaces (TF-1, TF-2, TF-3)

LOCATION:

13429 Alondra Boulevard (See Figure 5)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

The Facility receives manifested wipes, papers, and other materials containing precious metals from off-site. The wipes, papers and other material are treated in the furnace to form an ash. The ash is milled, screened and blended and is then sent to either the refinery or to an outside processor for refining. This Unit is operated as a batch process.

PHYSICAL DESCRIPTION:

This Unit consists of three (3) natural gas fired tray furnaces of similar size. The Units are made from steel and refractory material.

Furnace Name	Dimensions	Capacity
TF-1	5’L x 6’H x 6’W	45,000 lbs
TF-2	5’L x 6’H x 6’W	45,000 lbs
TF-3	8’L x 8’H x 6’6”W	45,000 lbs.

MAXIMUM CAPACITY:

The total treatment capacity of this Unit is 135,000 lbs at any one time. The maximum treatment capacity of each furnace is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D018

California Waste Codes: 121, 122, 123, 131, 132, 135, 141, 162, 171, 172, 181, 211, 212, 213, 214, 331, 341, 342, 343, 352, 551, 791, 792

UNIT SPECIFIC SPECIAL CONDITIONS:

1. The Permittee shall not process hazardous waste in this Unit that has a total concentration of organic compounds listed in Appendix VIII, Chapter 11, Title 22, California Code of Regulations exceeding five hundred (500) ppm by weight.

2. The Permittee shall operate the air pollution control system to control the hazardous waste emissions whenever a tray furnace is in operation.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #5:

Ball Mills (BM-1, BM-2, BM-3, BM-4)

LOCATION:

13429 Alondra Boulevard (See Figure 5)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

This Unit grinds the ash received from the Tray Furnaces (Unit #4) or materials which do not require thermal treatment into fine powder. From here, the fine powder is then sent to the screeners, then blended and then sent to the refinery. Each ball mill operates as a batch process.

PHYSICAL DESCRIPTION:

This Unit consists of four (4) ball mills. The ball mills are made of steel. The ball mills grind ash material into fine powder before the powder is sent to the refinery for processing. The dimensions of each ball mill are shown below.

Ball Mill Name	Dimensions	Capacity
BM-1	2'D x 2'L	50 lbs
BM-2	2'4"D x 2'L	150 lbs
BM-3	3'6"D x 4'L	200 lbs.
BM-4	4'D x 5'L	800 lbs.

MAXIMUM CAPACITY:

The total treatment capacity of this Unit is one thousand two hundred (1200) lbs. at any one time. The maximum treatment capacity of each ball mill is shown above.

WASTE TYPES:

Waste Stream A Spent Catalyst
Waste Stream B: Precious Metal Waste Solids

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 162, 181

UNIT SPECIFIC SPECIAL CONDITION:

The Permittee shall operate the air pollution control system to control the hazardous waste emissions whenever a ball mill is in operation.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #6:

Screener (SC-1, SC-2, SC-3, SC-4, SC-5, SC-6)

LOCATION:

15536 Carmenita Road (See Figure 5)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

The fine powder from the ball mills (Unit #5) are strained through the Unit to remove any oversize material which is then returned to the ball mill for further grinding. The Unit is an apparatus to move fine particulate matter through circular vibrating screens and separate it from coarse particulate matter. The fine powder from the screener is sent to the blenders. This is a batch process.

PHYSICAL DESCRIPTION:

This Unit consists of six (6) circular steel screeners. The dimensions of each screener and its capacity are shown below.

Screener Name	Dimensions	Capacity
SC-1	4’D	200 lbs
SC-2	4’D	200 lbs
SC-3	4’D	200 lbs
SC-4	2’6”D	100 lbs
SC-5	2’D	75 lbs.
SC-6	1’6”D	30 lbs.

MAXIMUM CAPACITY:

The total treatment capacity is eight hundred and five (805) lbs at any one time. The maximum treatment capacity of each screener is shown above.

WASTE TYPES:

Waste Stream A. Spent Catalyst
Waste Stream B: Precious Metal Waste Solids

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 162, 181

UNIT SPECIFIC SPECIAL CONDITION:

The Permittee shall operate the air pollution control system to control the hazardous waste emissions whenever a screener is in operation.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #7:

Blender (B-1, B-2, B-3)

LOCATION:

15536 Carmenita Road (See Figure 5)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

The fine powder from the screeners (Unit #6) is mixed in the blenders to create a homogenous mixture for sampling.

PHYSICAL DESCRIPTION:

This Unit consists of three (3) blenders. Each blender consists of motor operated mixing units made from steel. The dimensions of each blender and its capacity are shown below.

Blender Name	Dimensions	Capacity
B-1	3 cubic feet	3 cubic feet
B-2	10 cubic feet	10 cubic feet
B-3	75 cubic feet	75 cubic feet

MAXIMUM CAPACITY:

The total treatment capacity of this Unit is eighty eight (88) cubic feet per batch. The maximum treatment capacity of each blender is shown above.

WASTE TYPES:

Waste Stream A. Spent Catalyst
Waste Stream B: Precious Metal Waste Solids

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 162, 181

UNIT SPECIFIC SPECIAL CONDITION:

The Permittee shall operate the air pollution control system to control the hazardous waste emissions whenever a blender is in operation.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #8:

Refinery Kettles (K-12, K-13, K-14, K-15, K-21, K-22, K-23, K-24, K-25, K-31, K-32, K-33, K-34, K-41, K-42, K-44, K-45)

LOCATION:

13443 Alondra Blvd. (Refinery Building) (See Figure 3)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

The first process is extraction. The Permittee adds acid to dissolve the solid material. The resulting solution is heated to boil off the nitric acid. After heating, the solution becomes metal chloride. This metal chloride solution is pumped into the filtration system. Treatment is conducted as a batch process.

PHYSICAL DESCRIPTION:

This Unit consists of seventeen (17) steel tanks. The interior of each tank is lined with glass. A portable pump is used to transfer liquid from one tank to another. The refinery process is vented to scrubbers with a common ducting. The size and capacity of each tank is shown below:

Tank Name	Dimensions	Capacity
K-22, K-23	5’D x 7’6”H	1000 gallons each
K-12, K-13, K-14, K-15, K-31	5’D x 4’6”H	500 gallons each
K-21, K-24, K-25	5’D x 6’H	750 gallons each
K-32, K-33, K-34, K-41, K-42	4’D x 4’H	300 gallons each
K-44	3’6”D x 3’9”H	200 gallons
K-45	2’6”D x 3’H	100 gallons

MAXIMUM CAPACITY:

The total treatment capacity of this Unit is eight thousand five hundred and fifty (8550) gallons at any one time. The maximum treatment capacity of each tank is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D001, D002, D003, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 121, 122, 123, 131, 132, 135, 141, 162, 171, 172, 181, 211, 212, 213, 214, 331, 341, 342, 343, 352, 551, 791, 792

UNIT SPECIFIC SPECIAL CONDITION:

The Permittee shall operate the air pollution control system to control the hazardous waste emissions whenever a kettle is in operation.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #9:

Filter Press Refinery (FP-4)

LOCATION:

13443 Alondra Blvd. (Refinery Building) (See Figure 3)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

This Unit in the refinery process filters insoluble material from the precious metal extraction. The insoluble material is washed prior to being thermally treated in the

furnace. This is a batch process.

PHYSICAL DESCRIPTION:

This Unit is twenty five (25) cubic feet and consists of a steel frame with plastic plates used for filter activities.

MAXIMUM CAPACITY:

The maximum treatment capacity of this Unit is twenty five (25) cubic feet at any one time.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 171, 352, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #10:

Refinery Crude Precipitation Tanks (T-1, T-2, T-3, T-4, T-5, T-6, T-7, T-8, T-9, T-10, T-11, T-12, T-13, T-14, T-16, T-17, T-18, T-19, T-20, T-21, T-22, T-23, T-24, T-25)

LOCATION:

13443 Alondra Blvd. (Refinery Building) (See Figure 4)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

Crude precipitation is carried out by adding a reducing agent. The final stage of the

precious metal recovery is the purification process. The Refinery Crude Precipitation Tanks are part of the crude separation step. Sequestering agents are added to the tanks to precipitate the precious metals. Treatment is conducted in batches.

PHYSICAL DESCRIPTION:

This Unit consists of twenty five (25) fiberglass reinforced tanks. A portable pump is used to transfer liquid from one tank to another. The process is vented to a scrubber. The size and capacity of each individual tank is shown below.

Tank Name	Dimensions	Capacity
T-1, T-2, T-3, T-4, T-11, T-12	5’D x 7’H	800 gallons each
T-13, T-14, T-16, T-17, T-22, T-23		
T-18	4’6”D x 7’6”H	1000 gallons
T-5, T-6, T-7, T-8	6’D x 8’H	1400 gallons each
T-9, T-10, T-19, T-20	6’H x 8’H	1600 gallons each
T-21, T-24, T-25	5’D x 7’7”H	1100 gallons each

MAXIMUM CAPACITY:

The total treatment capacity is 25,900 gallons at any one time. The maximum treatment capacity of each tank is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #11:

Crucible Furnaces (CF-1, CF-2, CF-3)

LOCATION:

13409 Alondra Blvd. (Melt Room in northwest corner of building) (See Figure 5)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

The ore, extraction insoles and off-specification bullion are melted in the crucible furnaces to separate the impurities and recover the precious metals. This is a batch process.

PHYSICAL DESCRIPTION:

This Unit consists of three (3) natural gas fired furnaces made from steel and refractory material. The exhausts of the furnaces are connected to baghouses. The size and capacity of each crucible is shown below.

Furnace Name	Dimensions	Capacity
CF-1, CF-2	3’D x 4’H	600 lbs each
CF-3	2’6”D x 2’10”	100 lbs

MAXIMUM CAPACITY:

The total treatment capacity is one thousand three hundred 1300 lbs at any one time. The maximum treatment capacity of each furnace is shown above.

WASTE TYPES:

Waste B: Precious Metal Waste Solid

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D018

California Waste Codes: 121, 122, 123, 131, 132, 135, 141, 162, 171, 172, 181, 211, 212, 213, 214, 331, 341, 342, 343, 352, 551, 791, 792

UNIT SPECIFIC SPECIAL CONDITION:

The Permittee shall operate the air pollution control system to control the hazardous waste emissions whenever a crucible is in operation.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #12:

Solid Waste Container Storage (S-3)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Storage in Container

ACTIVITY DESCRIPTION:

This Unit is used to store non-RCRA sludge (inorganic solid waste) from the filter presses in roll-off bins, fifty five (55)-gallon drums, or bulk bags. The containers are then shipped offsite to treatment facilities, landfills or processing facilities.

PHYSICAL DESCRIPTION:

This Unit measures 23’9” wide by 39’ long and is epoxy coated.

MAXIMUM CAPACITY:

Material can be stored in any combination of: roll-off containers of up to twenty (20) cubic yards each, California Department of Transportation- compliant drums up to fifty five (55) gallons in capacity or bulk bags made of steel or polyethylene. A maximum of ninety-two (92) fifty five (55)-gallon drums or twenty three(23) bulk bags shall be used. For the purpose of calculating maximum storage capacity, one bulk bag shall be counted as four (4) drums or two hundred twenty (220) gallons.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

California Waste Codes: 181

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #13:

Lift Station (PS301, PS302, PS303, PS304)

LOCATION:

13443 Alondra Blvd. (Refinery Building) (See Figure 3)

ACTIVITY TYPE:

Storage in Tanks

ACTIVITY DESCRIPTION:

This Unit is for storage of corrosive waste water with metals. This Unit pumps waste water from the process areas to the waste water treatment system.

PHYSICAL DESCRIPTION:

This Unit consists of cross-linked polypropylene plastic tanks. The size and capacity of each tank is given below.

Tank Name	Dimensions	Capacity
PS301, PS302, PS303	7'D x 10'H	4000 gallons each
PS304	6'D x 8'H	1500 gallon

MAXIMUM CAPACITY:

The total treatment capacity is thirteen thousand five hundred (13500) gallons. The maximum treatment capacity of each tank is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 121, 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #14:

Lift Station (PS701)

LOCATION:

13409 Alondra Blvd. (See Figure 10)

ACTIVITY TYPE:

Storage in Tank

ACTIVITY DESCRIPTION:

This Unit is used for storage of corrosive waste water with metals. This Unit pumps waste water from the lab area to the Refinery lift station PS301(Unit #13.)

PHYSICAL DESCRIPTION:

This Unit consists of one 2’ x 2’ x 3’ polyethylene tanks with a capacity of seventy (70) gallons.

MAXIMUM CAPACITY:

The total maximum storage capacity is seventy (70) gallons.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 121, 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #15:

Lift Station (PS660)

LOCATION:

13443 Alondra Blvd. (Refinery Building) (See Figure 4)

ACTIVITY TYPE:

Storage in Tank

ACTIVITY DESCRIPTION:

This Unit is used for storage of corrosive waste water with metals and pumps waste water to the ammonia recovery system feed tank EQ661(Unit #16).

PHYSICAL DESCRIPTION:

This Unit is a 5’ by 6’ fiberglass reinforced plastic tank with a capacity of four hundred forty (440) gallons.

MAXIMUM CAPACITY:

The maximum storage capacity is four hundred forty (440) gallons.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 121, 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #16:

Equalization Tanks (EQ601, EQ602, EQ603, EQ604)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

This Unit receives waste water from the lift stations in the process areas or from the ammonia or special batch treatment processes. The purpose of these tanks is to equalize flow and waste water metal loadings.

PHYSICAL DESCRIPTION:

This Unit consists of four (4) identical fiberglass-reinforced plastic tanks. The size and capacity of each tank is shown below.

Tank Name	Dimensions	Capacity
EQ601	12’D x 20’H	15000 gallons
EQ602	12’D x 20’H	15000 gallons
EQ603	12’D x 20’H	15000 gallons
EQ604	12’D x 20’H	15000 gallons

MAXIMUM CAPACITY:

The total treatment capacity is 60,000 gallons at any one time. The maximum treatment capacity of each tank is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 121, 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #17:

Neutralization Tanks (RE605, RE606)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tank

ACTIVITY DESCRIPTION:

This Unit receives wastewater from the equalization tanks (Unit #16). Lime or other neutralization agents are added into the neutralization tanks to achieve a target pH. Chemical agent addition is controlled by pH sensors in the tank. Treatment is conducted in a continuous process.

PHYSICAL DESCRIPTION:

This Unit consists of two (2) polypropylene tanks. The size and capacity of each tank is shown below.

Tank Name	Dimensions	Capacity
RE605	7’D x 11’H	3300 gallons
RE606	7’D x 11’H	3300 gallons

MAXIMUM CAPACITY:

The total treatment capacity is 60 gallons per minute. The maximum treatment capacity of each tank is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 121, 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #18:

Flocculation Tank (RE607)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tank

ACTIVITY DESCRIPTION:

Flocculent is added to the neutralization solution in this Unit. The flocculent is used to help the settlement of particles in the solution. Treatment is conducted in a continuous process.

PHYSICAL DESCRIPTION:

This Unit consists of one polypropylene tank measuring 7’ in diameter and 6’ 6” in height with a capacity of one thousand nine hundred (1900) gallons.

MAXIMUM CAPACITY:

The total treatment capacity is 60 gallons per minute.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #19:

Two-Stage Clarifier (CL607)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tank

ACTIVITY DESCRIPTION:

This Unit precipitates heavy metals as metal hydroxides and removes them by gravity settling. The effluent from this Unit is non-hazardous waste water. Treatment is conducted in a continuous process.

PHYSICAL DESCRIPTION:

This Unit consists of one polypropylene tank. The tank is divided in two parts, the pre-sedimentation portion and the lamella portion. The pre-sedimentation portion measures 8’ by 8’6” by 10’and the lamella portion measures 11’ by 8’5” by 10’. The total capacity of the tank is eight thousand seven hundred (8,700) gallons.

MAXIMUM CAPACITY:

The total treatment capacity is 60 gallons per minute.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #20:

Batch Treatment Tank (RE623, RE624)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

This Unit is used to pre-treat wastewater from the chromium cobalt alloy (CCA) process to remove heavy metals before it is treated in the main wastewater treatment system. Pretreatment is necessary so that precipitation chemistry can be tailored to the CCA process wastewater chemistry.

This Unit is also used to treat wastewater from special operations as well as waste water from wash-downs, sumps, and containment areas. The wastewater in the tank is analyzed and treated to remove heavy metals based on the analytical results. Treatment is conducted in a batch process.

PHYSICAL DESCRIPTION:

This Unit consists of two (2) polypropylene tanks. The size and capacity of each tank is shown below.

Tank Name	Dimensions	Capacity
RE623	9’6”D x 13’H	6,600 gallons
RE624	9’6”D x 13’H	6,600 gallons

The Unit is made from polypropylene.

MAXIMUM CAPACITY:

The total treatment capacity is 13,200 gallons at any one time. The maximum treatment capacity of each tank is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #21:

Thickener (TK617, TK618)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

This Unit receives solids from the Clarifier and store and thickens them prior to dewatering in the filter presses. Treatment is conducted in a batch process.

PHYSICAL DESCRIPTION:

This Unit consists of two (2) polypropylene tanks. The size and capacity of each tank is shown below.

Tank Name	Dimensions	Capacity
TK617	10’D x 15’H	6,300 gallons

TK618	10’D x 15’H	6,300 gallons

MAXIMUM CAPACITY:

The total treatment capacity is twelve thousand six hundred (12,600) gallons at any one time. The maximum treatment capacity of each tank is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #22:

Drain Down Tank (TK622)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tank

ACTIVITY DESCRIPTION:

This Unit is used for overflow of Batch Treatment and for the Thickener Tanks. Treatment is conducted in a batch process.

PHYSICAL DESCRIPTION:

This Unit consists of one polyethylene tank measuring 4’ diameter and 4’ high with a capacity of three hundred (300) gallons.

MAXIMUM CAPACITY:

The maximum treatment capacity is three hundred (300) gallons at any one time.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #23:

Batch Treatment Filter (FP625)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tank

ACTIVITY DESCRIPTION:

This Unit dewaters solids from the Batch Treatment Tanks RE623 and RE624 (Unit #20) as well as Thickener Tanks TK617 or TK618 (Unit #21). Dewatered solids drop from the Filter into a DOT-compliant drum, roll-off container, or bulk bag sitting under the filter. Treatment is conducted on a batch process.

PHYSICAL DESCRIPTION:

Tank Name	Capacity
FP625	60 cubic feet

The Unit is made from steel and polypropylene.

MAXIMUM CAPACITY:

The maximum treatment capacity of this Unit is sixty (60) cubic feet at any one time.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #24:

WWTS Filter (FP619, FP620)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tanks

ACTIVITY DESCRIPTION:

This Unit dewaters solids from the Batch Treatment Tanks RE623 and RE624 (Unit #20) as well as Thickener Tanks TK617 or TK618 (Unit #21). Dewatered solids drop from the WWTS Filter into a DOT-compliant drum, roll-off container, or bulk bag sitting under the filter.

PHYSICAL DESCRIPTION:

This Unit currently consists of one (1) filter press. An additional filter press will be installed. Both filter presses shall be made from steel and polypropylene.

Tank Name	Capacity
FP619	60 cubic feet
FP620 (future)	60 cubic feet

MAXIMUM CAPACITY:

The total treatment capacity is one hundred twenty (120) cubic feet at any one time. The maximum treatment capacity of each filter press is shown above.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 723, 724, 726, 791, 792

UNIT SPECIFIC CONDITION

The Permittee shall notify DTSC within seven (7) days of installation of FP620.

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #25:

Ammonia Recovery System Feed Tank (EQ661)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Storage in Tank

ACTIVITY DESCRIPTION:

This Unit is used to feed solution into the ammonia recovery system RC662 (Unit #26).

PHYSICAL DESCRIPTION:

This Unit consists one (1) fiberglass-reinforced plastic tank measuring 7’6” diameter and 12’ high with a capacity of three thousand eight hundred (3,800) gallons.

MAXIMUM CAPACITY:

The total maximum storage capacity is three thousand eight hundred (3,800) gallons.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

UNIT #26:

Ammonia Recovery System (RC662)

LOCATION:

15610 Resin Place (See Figure 6)

ACTIVITY TYPE:

Treatment in Tank

ACTIVITY DESCRIPTION:

This Unit recovers reusable hydroxide product solution for production processes. The residual waste solutions are transferred to the equalization tank EQ603 (Unit #16).

PHYSICAL DESCRIPTION:

This Unit consists of one (1) reinforced-fiberglass plastic tank measuring 17’ by 36’6” by

47’6” with a capacity of two hundred twenty thousand four hundred seventy nine (220,479) gallons with one (1) fiberglass reinforced plastic column measuring 16” in diameter and 47’6” high with a capacity of five hundred (500) gallons. The feed rate into this Unit is five (5) gallons per minute.

MAXIMUM CAPACITY:

The maximum treatment capacity is five (5) gallons per minute. The maximum tank capacity is 500 gallons.

WASTE TYPES:

Waste Stream A: Spent Catalyst
Waste Stream B: Precious Metal Waste Solids
Waste Stream C: Waste Solution

HAZARDOUS WASTE CODES:

U.S. EPA Waste Codes: D002, D004, D005, D006, D007, D008, D010, D011

California Waste Codes: 121, 132, 723, 724, 726, 791, 792

AIR EMISSION STANDARDS

This Unit is not subject to the applicable requirements of California Code of Regulations, title 22, division 4.5, chapter 14, article 28.5, article 28, or article 27.

PART V. SPECIAL CONDITIONS

1. The Permittee is prohibited from conducting any hazardous waste transfer, storage, treatment or other management activity unless it is specifically described in this Permit or otherwise authorized by DTSC.

2. In the event any cracks, gaps or tears are detected in any hazardous waste management units, repairs shall be initiated as soon as possible and completed within one week of discovery of the problem. The Permittee shall notify DTSC within 24 hours whenever a crack, gap or tear is found. Within seven days of discovery of the problem, the Permittee shall notify DTSC in writing of corrective measures that have been taken.

3. Containers holding hazardous wastes shall be stored only in the authorized areas designated in Part IV of this Permit. Any non-hazardous waste that is stored in a designated hazardous waste storage area as provided by this Permit shall be subject to the conditions of this Permit, including volume calculations, compatibility and inspections.

4. For the purpose of calculating the permitted maximum capacity limitations for storage and for secondary containment, all containers in the authorized units are assumed to be full, and all waste that is stored or located in an authorized unit shall be included in the calculation for that unit, including any hazardous waste that is covered by the transfer facility exemption under California Code of Regulations, title 22, section 66263.18.

5. The Permittee shall store and treat hazardous waste only in tanks that have been properly anchored and have been certified by a professional engineer in accordance with California Code of Regulations, title 22, section 66264.191.

6. The Permittee shall have onsite a movable ladder or staircase tall enough to reach the uppermost shelf of Container Storage Area S-1A (Unit #1) and Container Storage Area S-1B (Unit #2) to facilitate inspection of the containers. Said ladder or staircase shall move freely within Units 1 and 2 and provide access to all containers. The ladder or staircase shall meet federal and California Occupational Safety and Health Administration standards.

7. The Permittee may store and treat intermediary waste streams generated from Waste Stream A only in Units where Waste Stream A is authorized. The Permittee may store and treat intermediary waste streams generated from Waste Stream B only in Units where Waste Stream B is authorized. The Permittee may store and treat intermediary waste streams generated from Waste Stream C only in Units where Waste Stream C is authorized

8. The Permittee shall store drums and bags so that labels and accumulation dates are visible from the aisle space.

PART VI. CORRECTIVE ACTION

1. 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 new Solid Waste Management Units (SWMUs) not previously identified, the Permittee shall notify DTSC orally within 24 hours of discovery and notify DTSC in writing within 10 days of such discovery summarizing the findings including the immediacy and magnitude of any potential threat to human health and/or the environment.

2. 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 and newly identified SWMUs or releases of hazardous waste and/or hazardous constituents. If and when corrective action is required at the Facility, the Permittee shall conduct corrective action under either a Corrective Action Consent Agreement or an Enforcement Order for Corrective Action issued by DTSC pursuant to Health and Safety Code sections 25187 and 25200.10.

3. To the extent that work being performed pursuant to Part VI 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 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 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 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. If there is any conflict between this permit condition on access and the access requirements in any agreement entered into between DTSC and the Permittee, this permit condition on access shall govern.

4. Nothing in Part VI of the 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.

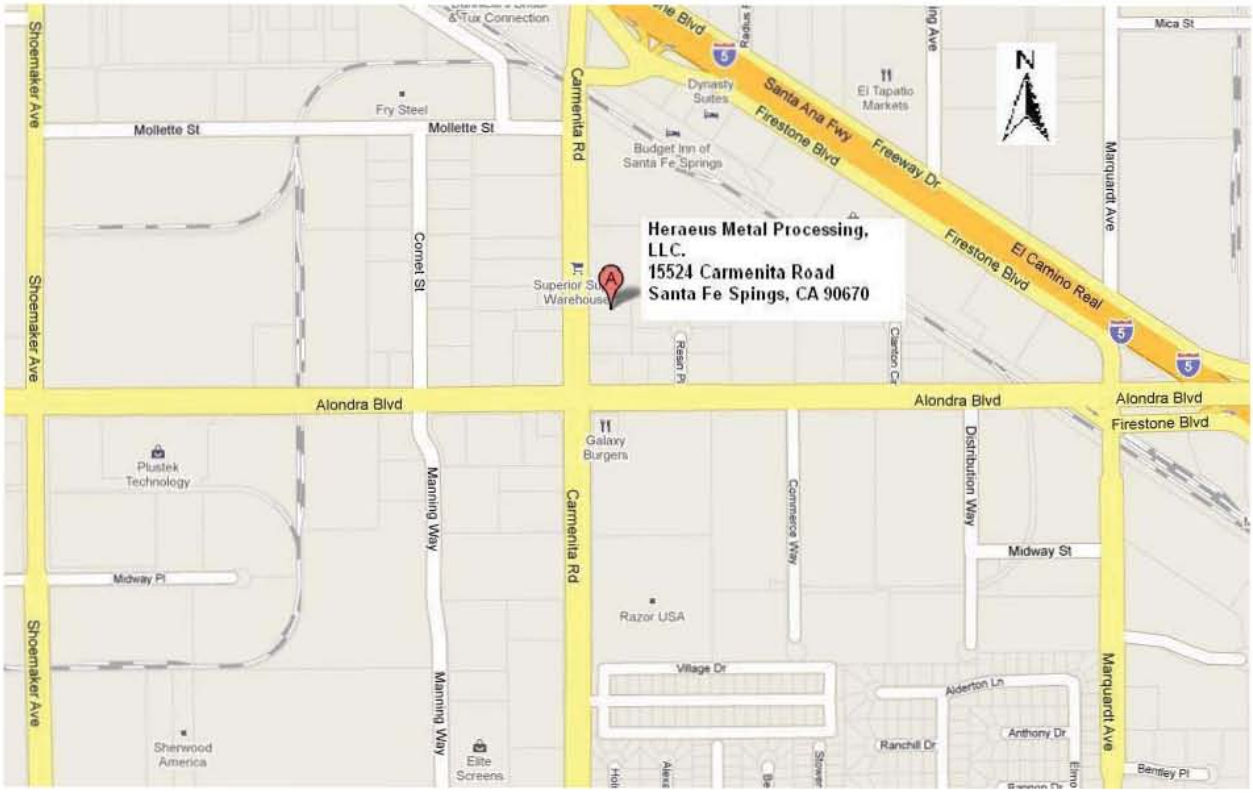

FIGURE 1. FACILITY LOCATION MAP

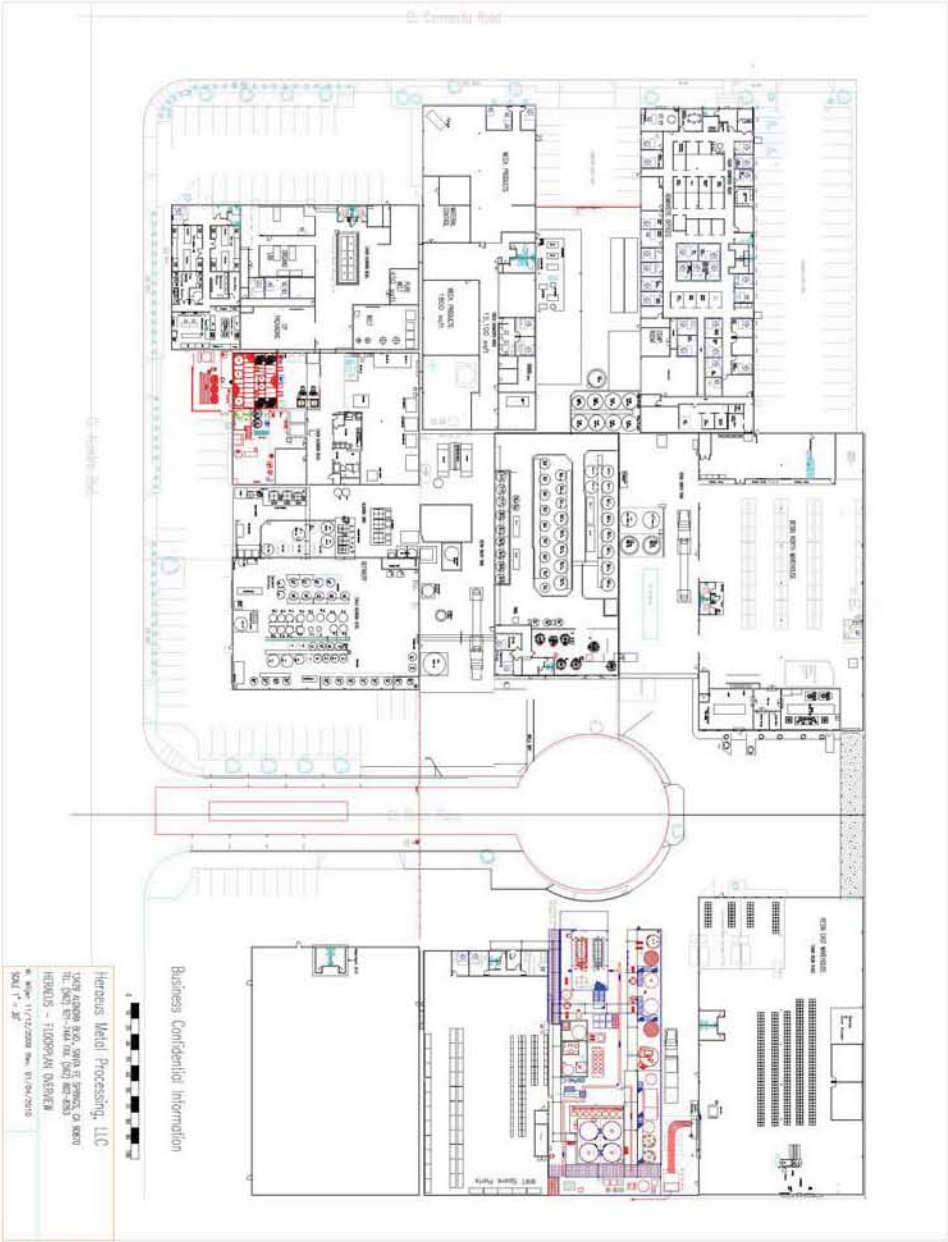

FIGURE 2. FACILITY PLOT PLAN

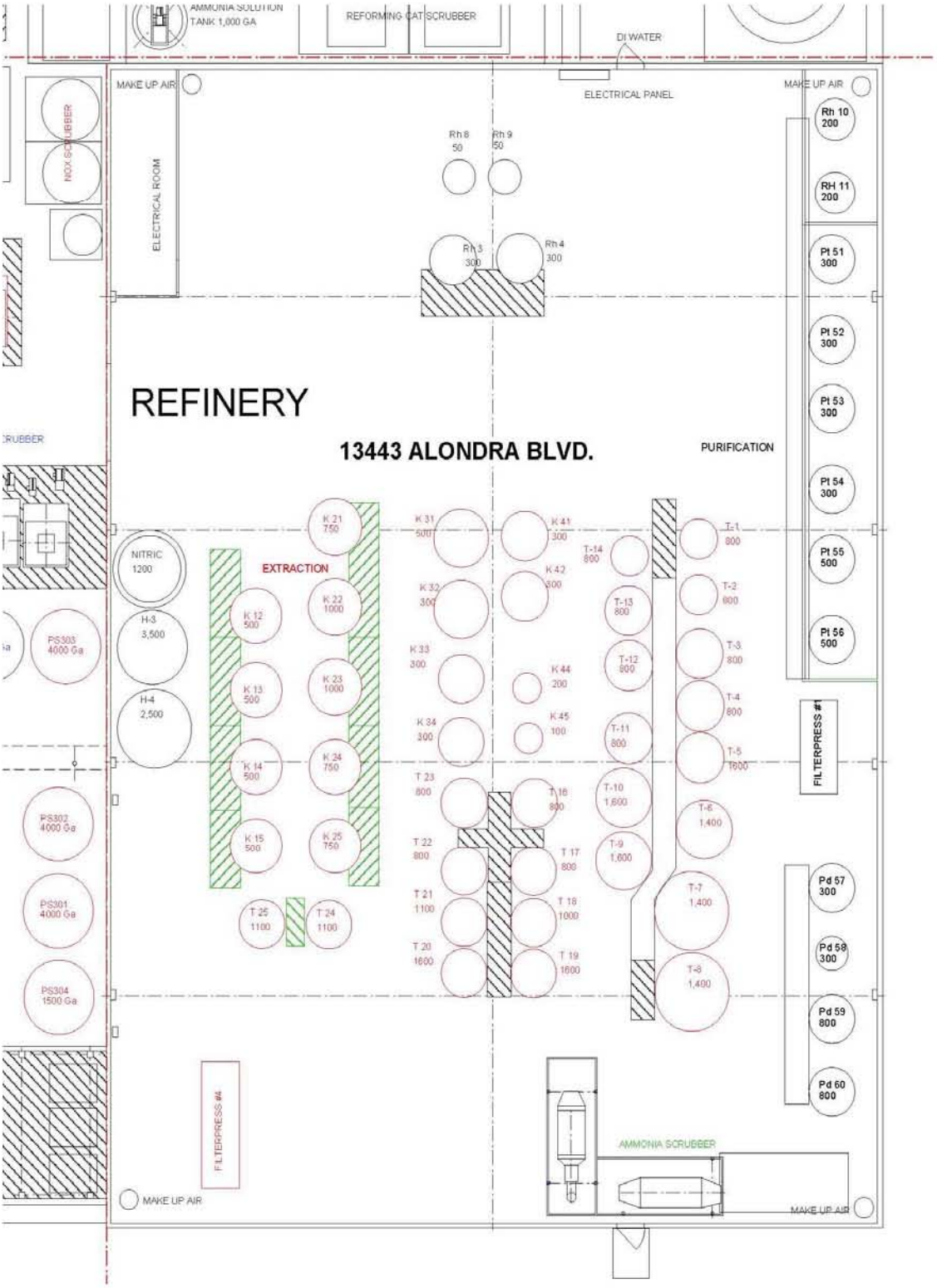

FIGURE 3. REFINERY ROOM

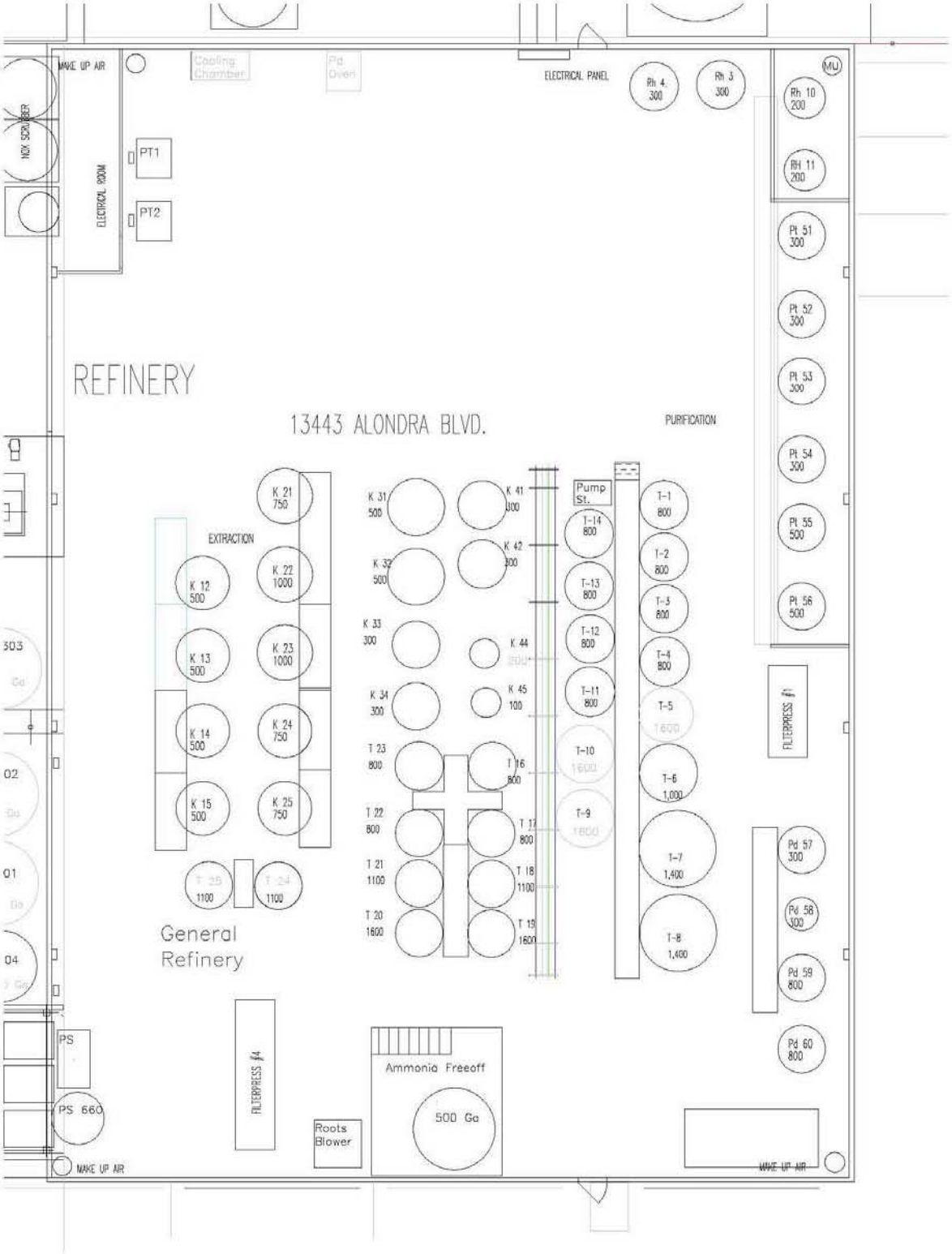

FIGURE 4. REFINERY ROOM (ALTERNATE VIEW)

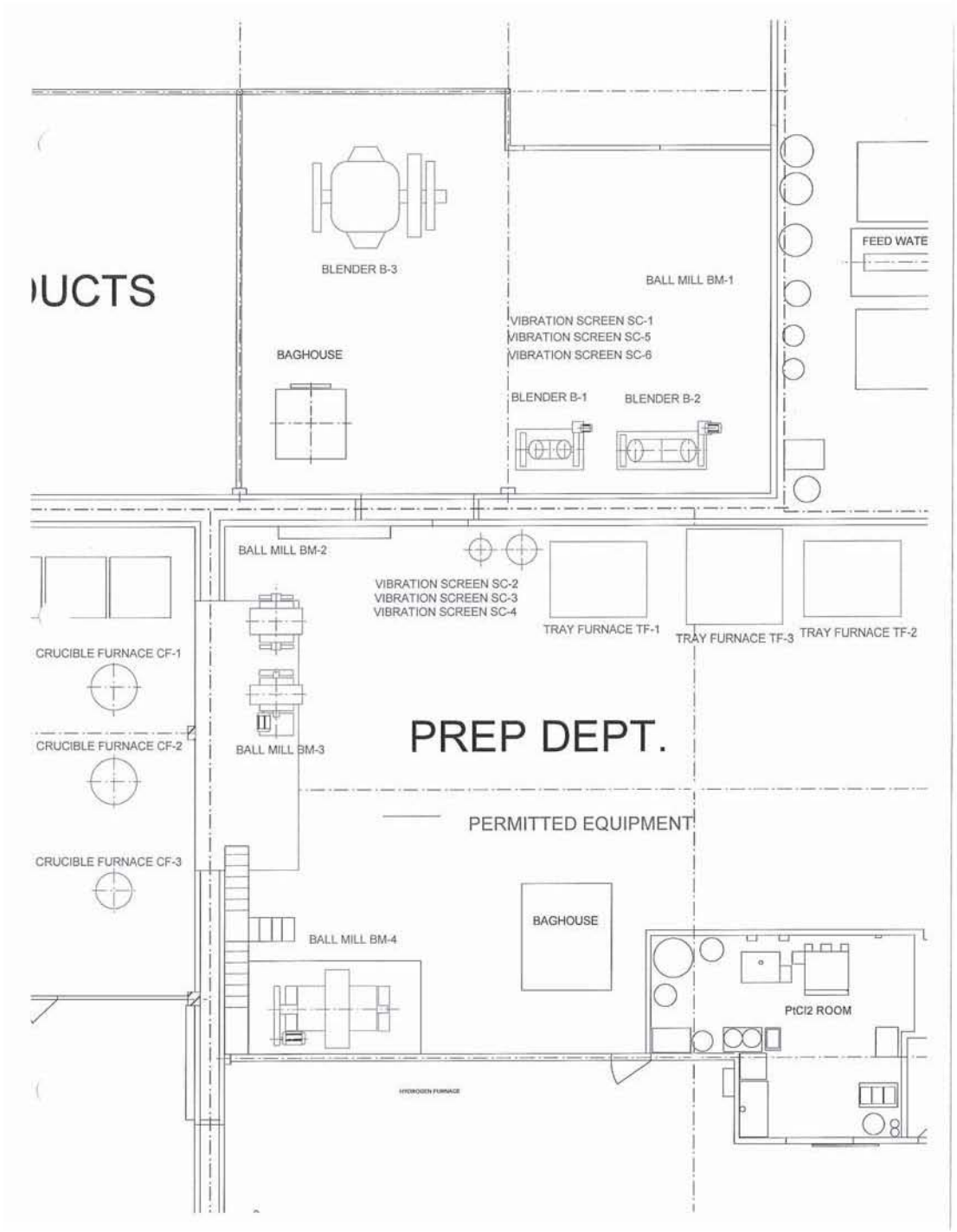

FIGURE 5. PREP ROOM

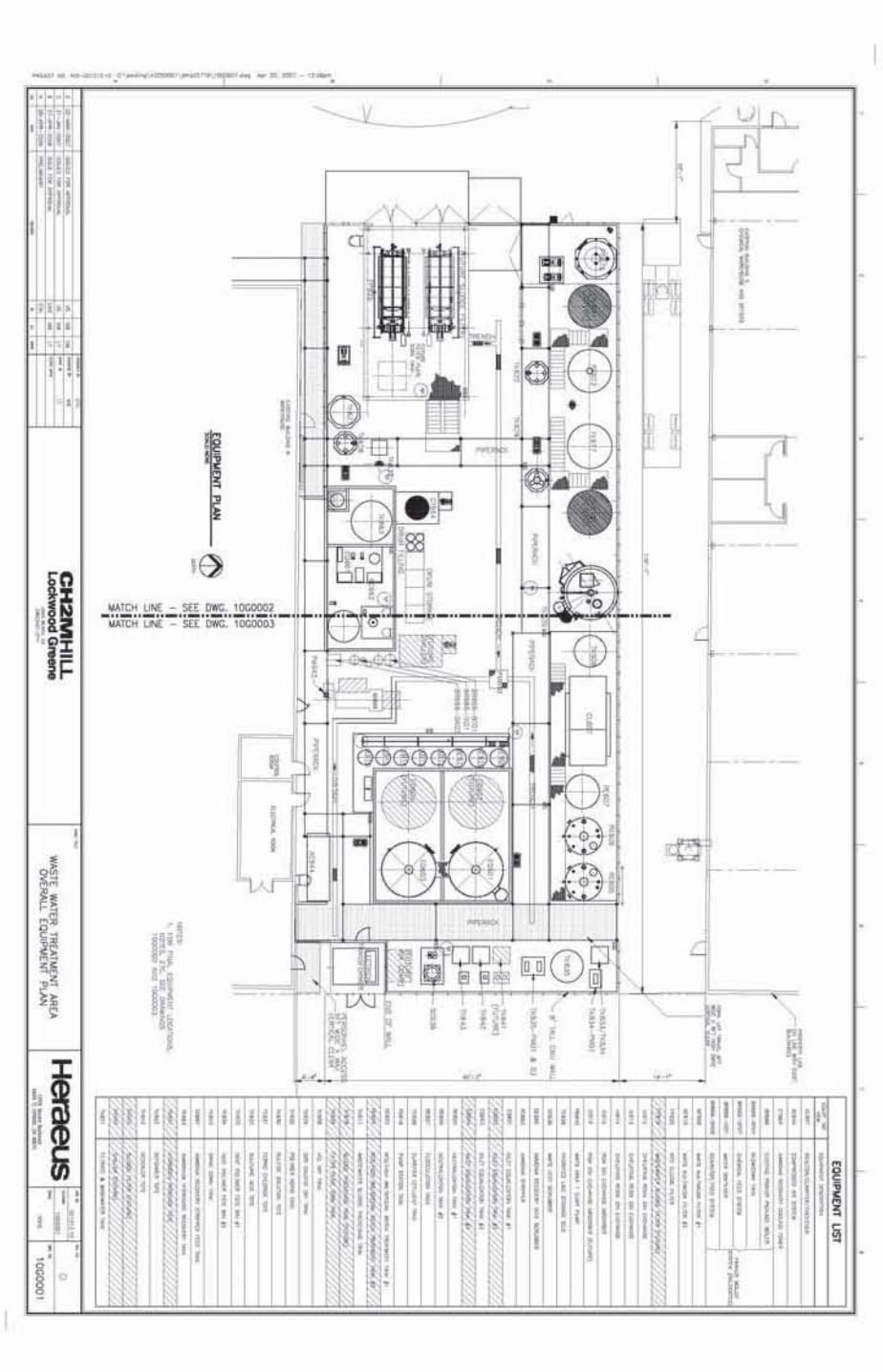

FIGURE 6. WASTEWATER TREATMENT SYSTEM LAYOUT

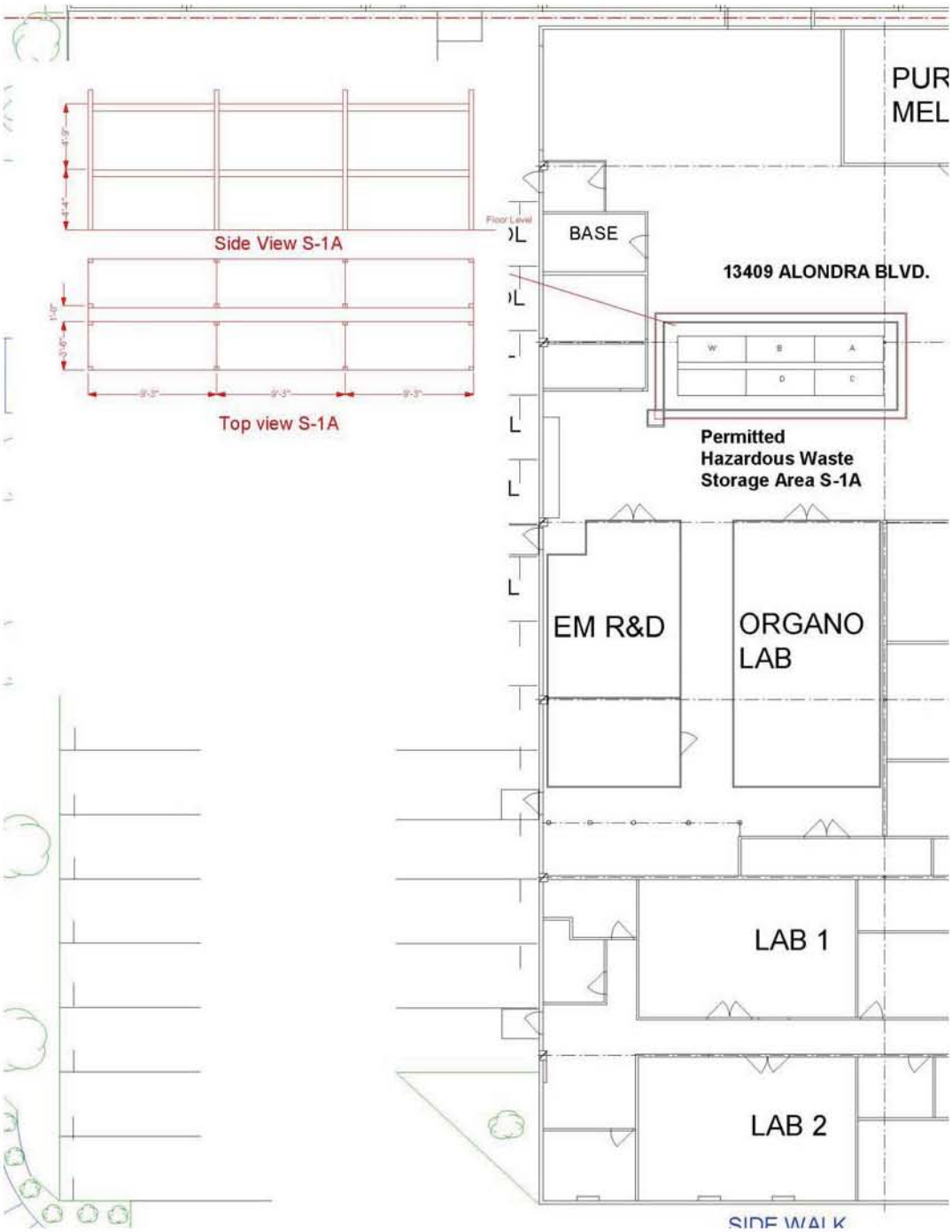

FIGURE 7. CONTAINER STORAGE AREA S-1A

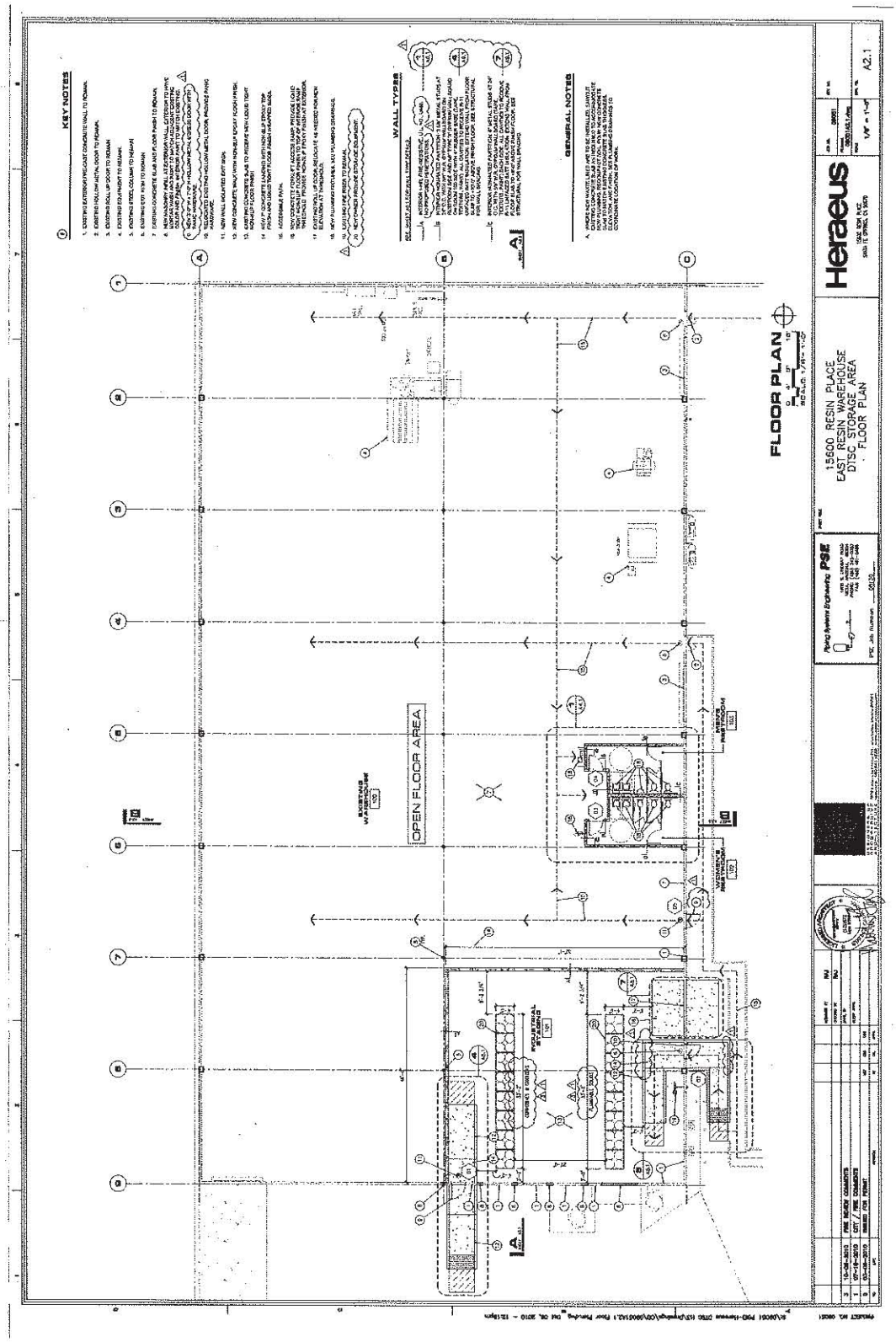

FIGURE 8. CONTAINER STORAGE AREA S-1B

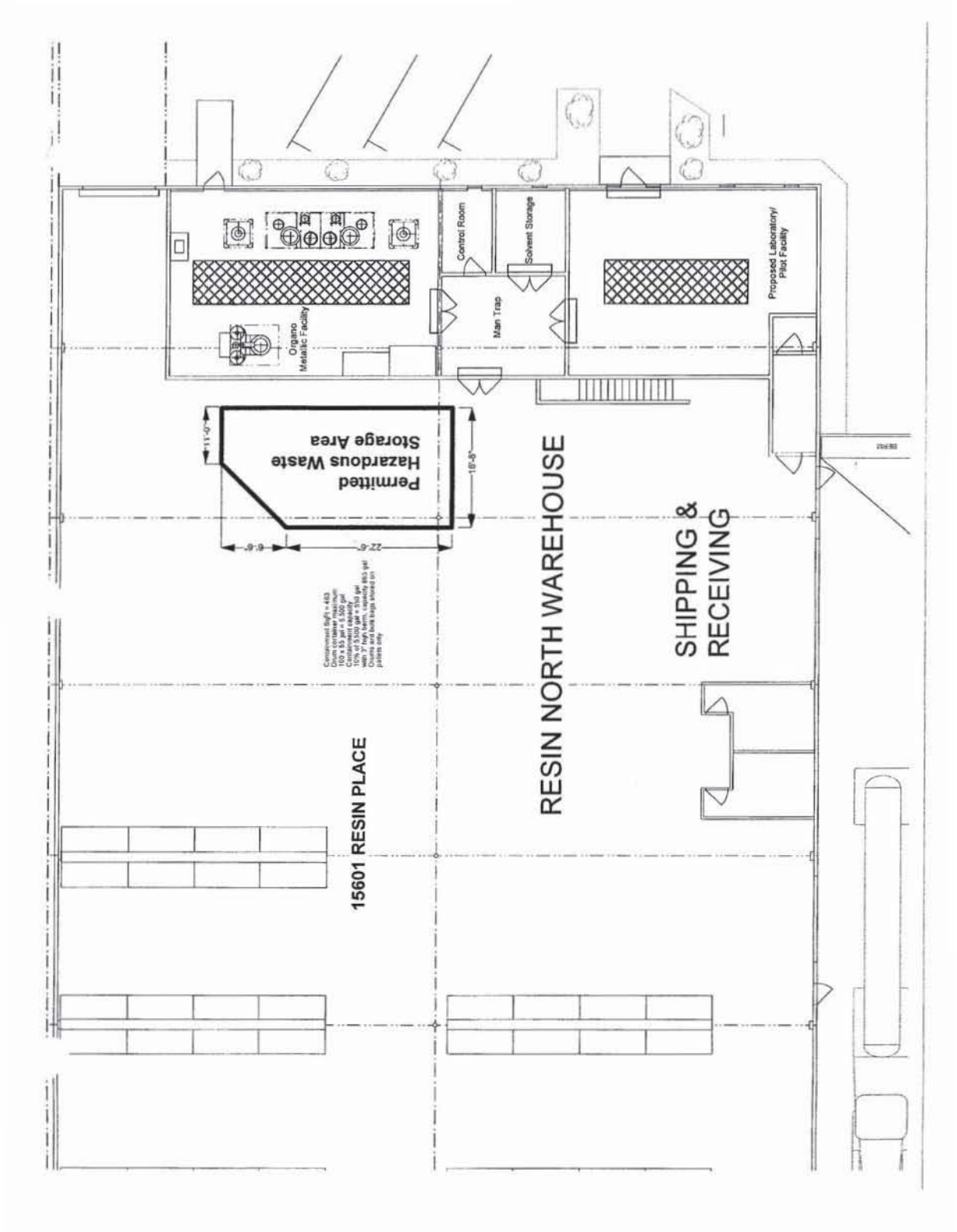

FIGURE 9. CONTAINER STORAGE AREA S-2

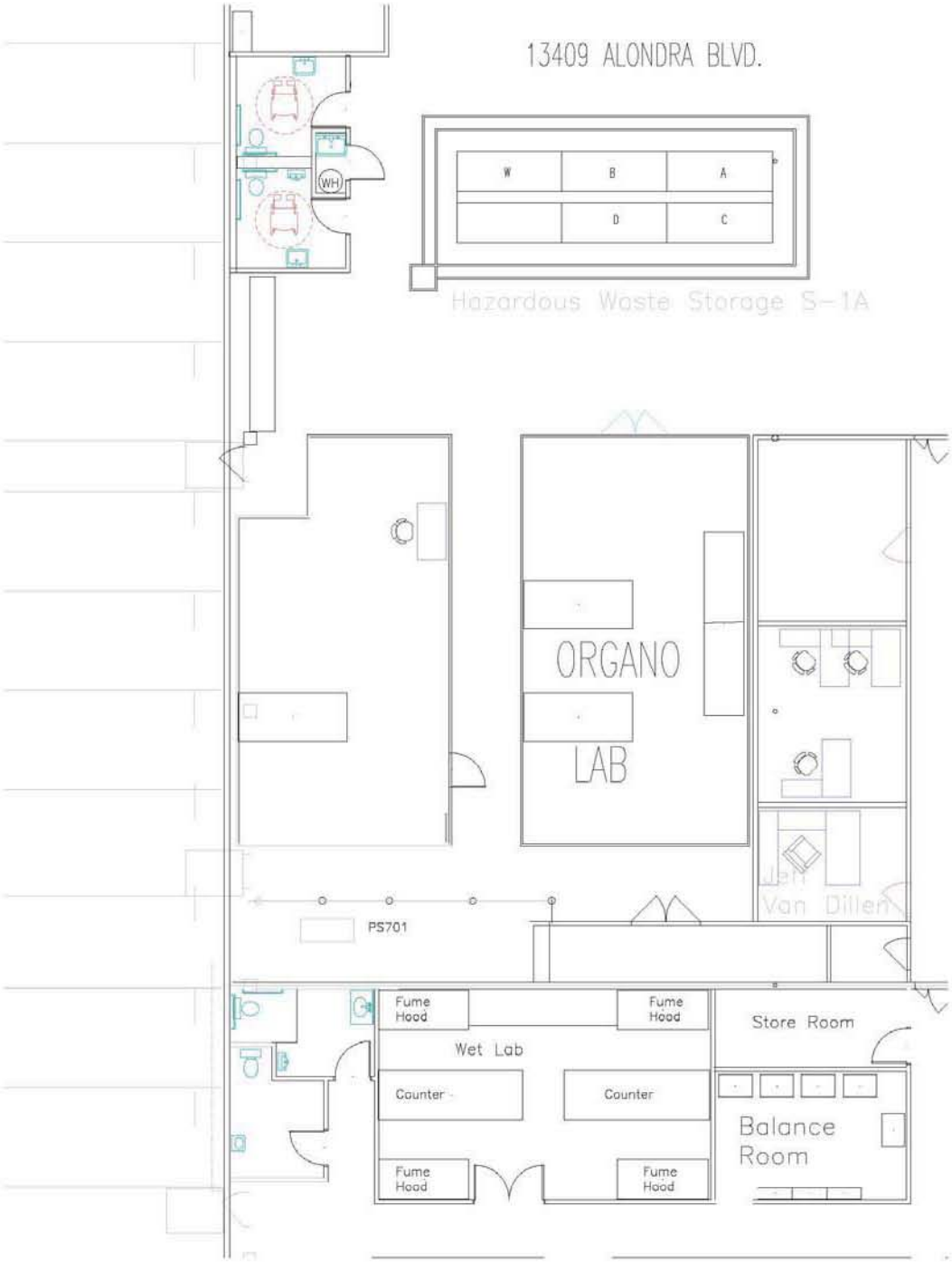

FIGURE 10. UNIT #14 PS701