

## **Appendix C**

---

*Hazards/Hazardous Materials Technical Supplement*





# Hazards/Hazardous Materials Technical Supplement Large Press Expansion Project

Prepared for:  
City of Long Beach  
Planning Department

**Weber Metals Facility**  
Long Beach and Paramount, California

February 2015

[www.erm.com](http://www.erm.com)



**TABLE OF CONTENTS**

*LIST OF TABLES* ..... *III*

*LIST OF ACRONYMS*..... *IV*

**1.0 INTRODUCTION**.....**1**

**2.0 HAZARDOUS MATERIALS/WASTES ASSOCIATED WITH CURRENT OPERATIONS**.....**2**

**2.1 HAZARDOUS MATERIALS USED DURING CURRENT OPERATIONS**.....**2**

**2.2 HAZARDOUS MATERIALS STORAGE** .....**3**

**2.3 WASTES GENERATED DURING FACILITY OPERATIONS** .....**3**

**2.4 OIL RECLAMATION SYSTEM**.....**4**

**3.0 FACILITY PROCEDURES TO MINIMIZE IMPACTS TO PUBLIC AND ENVIRONMENT**.....**6**

**4.0 PROJECT-RELATED CHANGES TO HAZARDOUS MATERIALS USE, STORAGE, AND GENERATION**.....**8**

**4.1 HAZARDOUS MATERIALS/WASTE ASSOCIATED WITH CONSTRUCTION PHASE** .....**8**

**4.2 HAZARDOUS MATERIALS/WASTE ASSOCIATED WITH OPERATIONAL PHASE** .....**10**

**5.0 PROCEDURES TO REDUCE IMPACTS FROM HAZARDOUS MATERIALS/WASTE DURING PROJECT IMPLEMENTATION**.....**12**

**6.0 REFERENCES**.....**14**

## **LIST OF TABLES**

*Tables follow the text*

***Table 1 Inventory of Oil-Filled Equipment Associated with Current Operations***

***Table 2 Inventory of Oil-Filled Tanks Associated with Oil Reclamation System***

***Table 3 Inventory of Other Oil-Filled Containers Associated with Current Operations***

***Table 4 Wastes Generated during Current Operations***

***Table 5 Comparison of Hazardous Materials Usage and Storage Requirements with and without Project***

## *LIST OF ACRONYMS*

CUPA	Certified Unified Program Agency
EDR	Environmental Data Resources
HAZWOPER	Hazardous Waste Operations and Emergency Response
HMBEP	Hazardous Materials Business Emergency Plan
REC	Recognized Environmental Condition
SARA	Superfund Amendments and Reauthorization Act of 1986
SMTP	Soil Management and Transportation Plan
SPCC Plan	Spill Prevention, Control, and Countermeasures Plan
SWPPP	Storm Water Pollution Prevention Plan
UST	Underground storage tank

1.0

**INTRODUCTION**

This report serves as a technical supplement to the Conceptual Site Review application submitted to the City of Long Beach for the proposed Large Press Expansion Project (Project) at the Weber Metals facility located in the cities of Long Beach and Paramount, California.

This technical report provides information that pertains to potential hazards/hazardous materials impacts of the proposed Project, specifically applying to the following California Environmental Quality Act (CEQA) study questions typically included in a CEQA analysis as suggested in the Guidelines (California Natural Resources Agency 2009):

Would the project:
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?

This technical report summarizes:

- Current hazardous materials usage and storage, and waste generation (Section 2);
- Facility procedures to reduce the potential for hazards to the public or the environment through upset and accident conditions (Section 3);
- Changes in hazardous materials usage and storage, and waste generation that would be associated with the project (Section 4); and
- Procedures that will be employed during project implementation to reduce impacts associated with hazardous materials/wastes (Section 5).

## 2.0 *HAZARDOUS MATERIALS/WASTES ASSOCIATED WITH CURRENT OPERATIONS*

This section summarizes hazardous materials usage and storage, and waste generation associated with current operations.

### 2.1 *HAZARDOUS MATERIALS USED DURING CURRENT OPERATIONS*

Hazardous materials used during current operations, as indicated in latest Hazardous Materials and Wastes Inventory Matrix Report (submitted 1 April 2014 to the California Environmental Reporting System [CERS]) are as follows:

- Oxylub 327 - a lubricant used for glazing of the titanium before forging; this helps with material flow and acts as a barrier to oxygen and hydrogen;
- Lubricant Castrol - A graphite/alcohol/water formulated lubricant used in die forging (impression dies) of aluminum parts; this lubricant is applied with a hand-held spray nozzle directly to the surface of the stock and dies immediately prior to the forging operation;
- Castrol FO4-328B "A-Paste" - A caustic lubricant is used in hand forging (open dies) of aluminum parts and occasionally in die forging; this lubricant is applied manually by swabbing the surface of the stock and dies immediately prior to the forging operation;
- Caustic soda and nitric acid solutions used to clean lubricants from forged items;
- Tarp BFX - A rust inhibitor applied to prevent rust or corrosion during storage;
- Sodium nitrate;
- Various petroleum products, including penetrant oil, industrial gear oil, super duty oil, transmission fluid, and hydraulic oil;
- Antifreeze;
- Cleaning solvent; and
- Gases, including acetylene, oxygen, argon, nitrogen, and propane.



## 2.2

### *HAZARDOUS MATERIALS STORAGE*

The following six areas at the facility have oil storage tanks/containers or oil-filled equipment with a capacity of 55 gallons or greater:

- **Oil Reclamation Area (see Section 2.4)** - The hydraulic oil reclamation operation consists of six, above-grade, double-walled vertical tanks located within a bermed area in the northeastern corner of the facility. Tote bins of new hydraulic oil are also stored within this bermed area.
- **Building G (Maintenance Building)** - Inside this building, 55-gallon drums of various petroleum base products are stored in an elevated rack equipped with an integral containment pan.
- **Building F (Laboratory/Quality Assurance Building)** - Inside this building, 55-gallon drums of penetrant oil are stored on an elevated platform equipped with an integral containment pan.
- **Buildings A/A1/B** - Eight hydraulic presses are located inside these inter-connected buildings. Two groups of three presses each (303, 304, and 307 and 201, 205, and 302) are each served by a common subterranean containment pit. Presses 203 and 313 each have their own dedicated subterranean concrete-lined containment pit. Several 55-gallon drums of rust inhibitor are also stored inside Building A. Three additional drums of rust inhibitor are stored outside Building A, within a containment pan.
- **Building C** - One hydraulic press (206) is located inside this building. This press has its own dedicated, subterranean concrete-lined containment pit.
- **Building O** - One new hydraulic press (208) is located inside this building. This press has its own dedicated, subterranean concrete-lined containment pit.

The total capacity of these oil-containing pieces of equipment, tanks, and other containers is approximately 94,300 gallons, as detailed in Tables 1 through 3.

## 2.3

### *WASTES GENERATED DURING FACILITY OPERATIONS*

During current operations, the Weber Metals facility generates approximately 300 tons of waste per month in addition to the waste oil that is reclaimed on site as discussed in Section 2.4. The majority of the waste is considered non-hazardous. Hazardous wastes (i.e., aluminum oxide waste and oily waste water from tank bottoms, considered



California non-restricted wastes) comprise approximately 25 percent of the total waste generated during a given month. The volumes of these wastes generated during 2014 can be summarized as follows:

- **California Waste Code 181.** Inorganic solid waste (aluminum oxide) – volumes ranged from approximately 29 to 63 tons for a given month, resulting in a total of approximately 560 tons for the year.
- **California Waste Code 241.** Tank bottom waste (oily waste water) – volumes ranged from approximately 14 to 21 tons for a given month, resulting in a total of approximately 220 tons for the year.

Table 4 summarizes the wastes generated during a typical month under current operations.

All wastes are handled in accordance with applicable laws and regulations, and are disposed of at a properly licensed facility.

## 2.4 OIL RECLAMATION SYSTEM

As part of the facility's waste minimization effort (California SB 14), Weber Metals reclaims and recycles spent or dirty hydraulic oil on site using a series of six, above-grade, double-walled, vertical tanks located within a bermed area in the northeastern corner of the facility.

Dirty oil is collected from the forging press pits (fugitive oil spills) or drained from a reservoir in a press hydraulic system, into portable 345-gallon plastic tote bins that are transported by fork lift to the oil reclamation area. The oil reclamation system includes the following primary steps:

- 1) The oil is transferred into one of two, 3,000-gallon settling/storage tanks.
- 2) When needed, a batch of oil (1,500 gallons) is pumped from a settling/storage tank through a reclamation unit to one of two batch processing tanks (1,500-gallon or 3,000-gallon). The reclamation unit utilizes multiple mesh filters and an electrically heated vacuum distillation column that strips any suspended water from the oil.
- 3) The in-process oil is continuously circulated between the batch processing tank and the reclamation unit until adequately cleaned; this process typically requires approximately 12 hours to complete.
- 4) When the oil has been adequately cleaned, the clean oil is pumped from the processing tank to a 5,400-gallon clean oil holding tank.

- 5) The oil is distributed as needed to the presses by an above-grade, hard-piped distribution system.

A 2,500-gallon tramp oil tank contains settleings and other dirty oil that will ultimately be sent to an off-site treatment facility.

### 3.0

#### *FACILITY PROCEDURES TO MINIMIZE IMPACTS TO PUBLIC AND ENVIRONMENT*

To reduce the potential for releases of hazardous materials/wastes, Weber Metals requires employee training for all employees handling hazardous materials/wastes in day-to-day or cleanup operations. Weber Metals has developed written procedures that are currently in place to minimize impacts to human health and the environment from releases of hazardous materials/wastes associated with facility operations. These procedures, which would also be employed after implementation of the project, are set forth in the following documents:

- A Spill Prevention, Control, and Countermeasures (SPCC) Plan - The Weber Metals facility currently operates under an SPCC Plan (current version dated 22 June 2012; Weber 2012a) that was prepared in accordance with the requirements of Title 40 of the Code of Federal Regulations Part 112 and California Health and Safety Code Chapter 6.67, Section 25270, and was certified by a licensed Professional Engineer. The purpose of this Plan is to identify procedures and controls that prevent the release of petroleum products and minimize impacts if a release occurs.
- A Hazardous Materials Business Emergency Plan (HMBEP) - In accordance with state and federal laws, any facility that handles a hazardous material at quantities above established thresholds is required to submit an HMBEP to the local Certified Unified Program Agency (CUPA) for approval. For the Weber Metals facility, the CUPAs are the Los Angeles County Fire Department and the Long Beach Fire Department. The purpose of the HMBEP is to prescribe standard procedures for the safe storage and use of the hazardous materials at the facility. The HMBEP sets reporting thresholds of 500 pounds or more of any solid hazardous materials, 55 gallons or more of any type of liquid hazardous materials, or 275 gallons aggregate quantity of lubricating oils.

Facilities like Weber Metals do not present a significant potential for a major failure that could release chemicals in harmful quantities, when properly operated and maintained. This is consistent with the general lack of historical releases.

Reporting of chemical releases is required in accordance with the SPCC Plan and HMBEP. The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires the reporting of hazardous materials

“stored in amounts greater than 10,000 lbs, and reporting of extremely hazardous substances in amounts of 500 lbs or Threshold Planning Quantity, whichever is less. In California, the chemical inventory reporting requirement of SARA/ Emergency Planning and Community Right-To-Know Act is addressed by the HMBEP. To satisfy SARA requirements, Weber Metals submits “Tier II” reports annually and Toxic Release Inventory reports to the CUPA.

No historical spills were reported by Weber, on file with regulatory agencies or identified in the Environmental Data Resources (EDR) report reviewed in the Phase I ESA (ERM February 2015). In addition, no spills were identified during ERM’s site inspection conducted as part of the ESA.

#### **4.0 PROJECT-RELATED CHANGES TO HAZARDOUS MATERIALS USE, STORAGE, AND GENERATION**

The Large Press Expansion Project would result in changes in the amount of hazardous materials used and stored on site, and the volume of hazardous waste generated. These changes are summarized below for the construction and operational phases.

#### **4.1 HAZARDOUS MATERIALS/WASTE ASSOCIATED WITH CONSTRUCTION PHASE**

The Project would involve the use of hazardous materials, including fuels and lubricants associated with construction equipment that would be brought on the site periodically in accordance with standard construction practices. Transportation of fuel and lubricants would conform to state and federal requirements for hazardous materials transportation. Additional hazardous materials include paint, caulk, sealants, waterproofing material, curing compound, hydraulic oil, grease, lubricants, grout compound, and diesel fuel (rigging). The quantities of these materials would be relatively minor.

Wastes associated with construction would include:

- Empty curing compound containers, paint cans and rags, brushes, and other applicators, and empty grease/sealant/lubricant containers;
- Construction debris, including asphalt and concrete to be removed from within the New Forge Press footprint;
- Soil that would be excavated from within the footprint of the New Forge Press facility (approximately 75,000 cubic yards of soil) or during construction of the new electrical substation; and
- Groundwater (approximately 22,000 gallons estimated) removed from the New Forge Press Facility footprint<sup>1</sup> during dewatering activities.

---

<sup>1</sup> Excavation activities at the new electrical substation area would be relatively shallow and are not anticipated to encounter groundwater.

The contract for the construction work requires that the construction contractor develop a waste management plan that establishes the procedures to be followed to ensure that all Project-related construction waste is properly managed, and that any hazardous wastes are separated, stored, and disposed of according to local regulations. All wastes will be sent to facilities that are appropriately licensed to accept them, in accordance with applicable laws and regulations.

The waste management plan will be designed to minimize the creation of construction and demolition waste, and divert a minimum of 60 percent of the waste materials for salvage, processing or recycling, as opposed to landfill and incineration.

The waste management approach is currently being developed, but it is envisioned that the following types of materials will be transported to a recycling facility:

- Plant materials from site clearing (excluding rocks and soil);
- Clean dimensional wood, pallet wood, plywood, OSB, and particleboard;
- Asphalt, concrete, brick and masonry;
- Ferrous and non-ferrous metals;
- Gypsum products, acoustical ceiling tile; and
- Cardboard, paper (including blueprints), paper-based packaging

The following additional categories of waste materials will also be recycled, if deemed appropriate:

- Paint;
- Glass (bottles and plate) porcelain;
- Plastics, plastic film, fiberglass (solid);
- Carpet and pad: 100% Reclamation;
- Non-asbestos roofing;
- Mechanical and electrical equipment;
- Batteries; and
- Doors, windows frames, relites, hardware, millwork

Project-related ground disturbance has the potential to encounter hazardous materials at any location where historical land uses have resulted in releases of hazardous materials. As discussed in the Phase I Environmental Site Assessment report (ERM February 2015), historical activities conducted in the Project area could have resulted in impacts to site soils and groundwater.

In 2009, WGR installed a test well in support of then-planned dewatering activities near Building O, which is adjacent to the New Press Facility footprint. The groundwater sample collected from this well was analyzed for total petroleum hydrocarbons, semivolatile organic compounds, volatile organic compounds, organochlorine pesticides, polychlorinated biphenyls, metals, and select general water quality parameters. Of these, no organic compounds were detected in the sample. Metals, which are naturally occurring constituents in groundwater, were detected in the sample; the extent to which these detections represent background conditions has not been established. Based on this limited sampling, no evidence of groundwater impacts has been observed.

#### 4.2 *HAZARDOUS MATERIALS/WASTE ASSOCIATED WITH OPERATIONAL PHASE*

The types of hazardous materials used during the operational phase of the Project would be the same as those listed above in Section 2.1. However, the volume of these materials would increase as follows:

- The inventory of oil-filled equipment would increase from the listing in Table 1 to include one additional press, containing four oil reservoirs: two main tanks (approximately 22,500 gallons each), and two prefill tanks (approximately 13,500 gallons each), for a total capacity of approximately 72,000 gallons. All equipment listed in Table 1 would remain active after project implementation.
- The inventory of oil-filled tanks associated with the oil reclamation system would remain as listed in Table 2, and the system would continue to operate as under current conditions.
- The inventory of other oil-filled containers would increase from the listing in Table 3, as summarized in Table 5.

In total, the on-site capacity of oil-filled equipment, tanks, and other containers would increase from approximately 94,300 gallons to 166,300 gallons.



The types of hazardous wastes generated during the operational phase of the project would be the same as those listed above in Section 2.3; the volume of wastes generated during project operation would increase by approximately 10 percent.

Hazardous materials/waste storage would generally take place in the same areas where it currently occurs; however, the storage space would increase as noted in Table 5.

## 5.0

### *PROCEDURES TO REDUCE IMPACTS FROM HAZARDOUS MATERIALS/WASTE DURING PROJECT IMPLEMENTATION*

The following protocols will be observed when using or handling hazardous materials during the construction phase:

- All labeling, storage, handling, and use of hazardous materials will be in accordance with Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements.
- Employees working with hazardous materials will be properly trained in the use and handling of hazardous materials.
- Each material will have a corresponding material safety data sheet maintained by the contractor with each work crew.
- Prior to any ground disturbance, Weber will conduct sampling and testing to determine if hazardous substances previously used at the site are present in soil. If hazardous substances are detected, Weber will ensure removal in accord with all applicable regulations, the Soil Management and Transportation Plan, and Groundwater Management Plan, as discussed below.
- All hazardous waste materials removed during construction will be handled and disposed of by a licensed waste disposal contractor and transported by a licensed hauler to an appropriately licensed and permitted disposal or recycling facility.
- Significant releases or threatened releases of hazardous materials will be reported to the appropriate agencies.

Adherence to these protocols will reduce the potential for adverse impacts associated with hazardous materials during construction.

A Soil Management and Transportation Plan (SMTP) will be created for the Project to assist construction workers in identifying potentially hazardous materials encountered during ground disturbance and guide the handling, storage, and transportation of those materials. The SMTP will detail the necessary actions to comply with applicable hazardous materials regulations, some of which include Health and Safety Code Section 25100 et seq. and Section 25163 et seq., Title 22 of the California Code of Regulations Section 66263.10 et seq., Title 13 of the California Code of Regulations Section 1160 et seq., California Vehicle Code Sections 12804.2 et seq. and 31303 et seq. This plan will establish criteria for reuse

of excavated materials or off-site transport for disposal at appropriate State-approved facilities. The SMTP will be reviewed and approved by the City prior to construction start.

A Groundwater Management Plan (GMP) will be created for the Project to guide the handling, storage, and transportation of groundwater extracted during the dewatering process or otherwise encountered during the course of Project implementation, including testing requirements. The GMP will detail the necessary actions to comply with applicable hazardous materials regulations, as noted above, and will establish criteria for disposal of the extracted groundwater.

As a standard permit condition, a Storm Water Pollution Prevention Plan (SWPPP) is being prepared, including best management practices to reduce impacts of construction activities on water quality (Siegfried Engineering, Inc. 2014). Preparation and implementation of this SWPPP would reduce the potential for surface water runoff into excavations as well as transportation of excavated materials by surface water runoff. The SWPPP will be reviewed and approved by the City prior to construction start.

In addition to the above procedures, during the operational phase, the facility will operate under an approved SPCC Plan and HMBEP as discussed in Section 3. As required by applicable regulations, these plans will be updated to reflect the changed facility conditions associated with the project.

## 6.0

### REFERENCES

- California Natural Resources Agency. 2009. Adopted text of the CEQA Guidelines Amendments (effective March 18, 2010) accessed online 31 January 2015 at [http://resources.ca.gov/ceqa/docs/Adopted\\_and\\_Transmitted\\_Text\\_of\\_SB97\\_CEQA\\_Guidelines\\_Amendments.pdf](http://resources.ca.gov/ceqa/docs/Adopted_and_Transmitted_Text_of_SB97_CEQA_Guidelines_Amendments.pdf)
- ERM-West, Inc (ERM). 2015. Phase I Environmental Site Assessment, Weber Metals Facility, Paramount and Long Beach, California. February.
- Siegfried Engineering, Inc. 2014. Draft Storm Water Pollution Prevention Plan for Weber Metals, Paramount, CA. December 17.
- Weber Metals, Inc. (Weber). 2012a. Spill Prevention Control and Countermeasure Plan. Revision B. June 22.
- Weber. 2012b. Storm Water Pollution Prevention Plan. Revision C. November 6.
- WGR Southwest, Inc. 2009. Letter report to Frize Corporation, Subject: Water Quality Analysis Aquifer Production Estimation, Weber Metals, 16706 Garfield Ave., Paramount, CA. February 19.

## *Tables*

**Table 1 - Inventory of Oil-Filled Equipment Associated with Current Operations**

Tank ID	Description	Contents	Capacity (Gallons)	Location	Construction	Secondary Containment
Press 201 (1,650-Ton Press)	Main Reservoir Pre-Fill Reservoir	Hydraulic Oil	4,000 1,100	Building A	Steel	Yes
Press 203 (5,000-Ton HPM Press)	Main Reservoir Pre-Fill Reservoir	Hydraulic Oil	2,000 2,700	Building A	Steel	Yes
Press 205 (1,200-Ton Press)	Main Reservoir	Hydraulic Oil	2,400	Building A	Steel	Yes
Press 206 (1,500-Ton Press)	Main Reservoir	Hydraulic Oil	1,000	Building C	Steel	Yes
Press 208 (3,300-Ton Press)	Main Reservoir Dump Reservoir Circulation Reservoir	Hydraulic Oil	10,567 1,849 600	Building O	Steel	Yes
Press 302 (3,600-Ton Press)	Main Reservoir Pre-Fill Reservoir	Hydraulic Oil	2,000 1,400	Building A	Steel	Yes
Press 303 (5,000-Ton Verson Press)	Main Reservoir Case-Drain Reservoir Pre-Fill Reservoir	Hydraulic Oil	6,000 280 2,400	Building A1	Steel	Yes
Press 304 (Mesta Press)	Main Reservoir	Hydraulic Oil	12,000	Building A1	Steel	Yes
Press 307 (12,000-Ton Press)	Main Reservoir Case-Drain Reservoir Pre-Fill Reservoir	Hydraulic Oil	7,000 990 2,000	Building A1	Steel	Yes
Press 313 (Hyd. Trim Press)	Main Reservoir	Hydraulic Oil	215	Building A	Steel	Yes

**Table 2 - Inventory of Oil-Filled Tanks Associated with Oil Reclamation System**

<b>Tank ID</b>	<b>Description</b>	<b>Contents</b>	<b>Capacity (Gallons)</b>	<b>Construction</b>	<b>Secondary Containment</b>
1	Clean Oil Tank	Reclaimed (clean) Hydraulic Oil	5,400	Fiberglass	Yes (Double- Walled)
2	Processing Tank	In-Process Hydraulic Oil	3,000	Fiberglass	Yes (Double- Walled)
3	Processing Tank	In-Process Hydraulic Oil	1,500	Fiberglass	Yes (Double- Walled)
4	Waste Oil Tank	Waste Hydraulic Oil	2,500	Plastic	Yes (Double- Walled)
5	Collection Tank	Dirty (Used) Hydraulic Oil	3,000	Plastic	Yes (Double- Walled)
6	Collection Tank	Dirty (Used) Hydraulic Oil	3,000	Fiberglass	Yes (Double- Walled)



**Table 3 - Inventory of Other Oil-Filled Containers Associated with Current Operations**

Description	Contents	Capacity (Gallons)	Location	Construction	Secondary Containment
Drums (2)	Rust Inhibitor	55 each 110	Inside Building A	Steel	Yes
Drums (3)	Rust Inhibitor	55 each 165	Outside Building A	Steel	Yes
Drums (4)	Penetrant Oil	55 each 220	Inside Building F	Steel	Yes
Portable Totes	Dirty Hydraulic Oil	345 each 12,000 Maximum	Inside Building A/ A1/B or Oil Reclamation Area	Plastic	Yes  (When in active use)
Totes (6)	New Hydraulic Oil	345 each 2070	Oil Reclamation	Plastic	Yes
Drums (2)	Gear Oil	55 each 110	Inside Building G	Steel	Yes
Drums (4)	Cleaning Solvent	55 each 220	Inside Building G	Steel	Yes
Drums (4)	Motor Oil	55 each 220	Inside Building G	Steel	Yes
Drums (5)	Transmission Fluid	55 each 275	Inside Building G	Steel	Yes

**Table 4 - Wastes Generated during Current Operations**

	Description	Volume (tons)	Total Volume (tons)	% of Total Waste
Hazardous Waste	Other Inorganic Waste - "Aluminum Oxide" (Category 181)	51.2	72.05	25%
	Tank Bottom Waste - "Oily Water Mix" (Category 241)	20.85		
Non-Hazardous Waste	Aerosol Cans	9	162.3	55%
	Liquid/Rinse Non-Haz Water	31.3		
	Empty Poly Drums	12		
	Empty Metal Drums	20		
	Fluorescent Lamps	10		
	Garnet	80		
Other Waste	Cardboard	15	48	16%
	Wood	18		
	Paper	15		
	E-Waste	0		
Trash	Trash		10.76	4%
<b>Total Waste</b>			<b>293.10</b>	

Source: Weber Metals waste disposal records for January 2014

**Table 5 – Comparison of Hazardous Materials Usage and Storage Requirements with and without Project**

**Current Facility**

Material	Container Type	Volume (gallons)	Foot Print		Supply			Storage Space Required				
			(inches)	(sq. inches)	(sq. foot)	Weekly	Weekly Buffer	Monthly	Sub-Total (sq.foot)	Stacked (Y/N)	Weekly Total (sq.foot)	Monthly Total (sq.foot)
Forging Lube	Tote	375	47 X 39	1833	12.72	8	4	48	152.65	Y	76.33	305.30
Hydraulic Oil	Steel/Plastic Drum	55	22.75 X 17.8	406	2.82	4	2	24	16.90	N	16.90	405.60
Rust Preventative	Steel/Plastic Drum	55	22.75 X 17.8	406	2.82	2	1	12	8.45	N	8.45	101.40

Total Area Required for Materials Storage <sup>2</sup> 101.68 812.30

**LP Expansion**

Material	Container Type	Volume (gallons)	Foot Print		Supply			Storage Space Required				
			(inches)	(sq. inches)	(sq. foot)	Weekly	Weekly Buffer	Monthly	Sub-Total (sq.foot)	Stacked (Y/N)	Weekly Total (sq.foot)	Monthly Total (sq.foot)
Forging Lube	Tote	375	47 X 39	1833	12.72	12	6	75	228.98	Y	114.49	457.96
Hydraulic Oil	Steel/Plastic Drum	55	22.75 X 17.8	406	2.82	6	3	36	25.35	N	25.35	912.60
Rust Preventative	Steel/Plastic Drum	55	22.75 X 17.8	406	2.82	4	2	24	16.90	N	16.90	405.60

Total Area Required for Materials Storage <sup>2</sup> 156.74 1776.16

**Notes:**

- <sup>1</sup> = Based on a 4 weeks/month calendar
- <sup>2</sup> = Based on an generation rate of 28 drums/notes monthly
- Excludes consideration for forklift access, spacing, etc
- Measured Values: Totes - 22in X 35in; Drums 22in X 35 in
- ft. = Foot
- sq. ft. = Square Foot
- # = periodic supply, not on regular delivery schedule or use