

## Kruchell, Carrie L.

---

**From:** Stuart Stapleton <Stuart.Stapleton@usecology.com>  
**Sent:** Friday, December 18, 2015 3:22 PM  
**To:** Kruchell, Carrie L.; Knauss, Elizabeth  
**Cc:** Gene Cieply; Ken Dean; Ken Knibbs  
**Subject:** Permit Modification  
**Attachments:** EQFL Consolidated Permit Vol 1 of 3 - Revision 2 CLEAN DRAFT 12-17-15.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Attached is the permit modification and associated FDEP documents. The originals are being overnighted to Carrie. The modifications addresses the following;

1. Add K062 to the list of permitted treatment codes;
2. Add 5,000 gallons of storage in the Waste Processing Building;
3. Add 400 cubic yard of hazardous waste bulk container storage to the 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area;
4. Add 400 cubic yard of non-RCRA waste bulk container storage to the 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area;
5. Expand the capabilities/processes being conducted in SWMU #11; and
6. Remove the permitted, but never installed, oil-water separator (SWMU #19)

The modifications are extensive as we also used this opportunity to clean up and update the original application.

Several drawings are being updated and will be forwarded for inclusion in the modification application as soon as they received.

I look forward to working with you through this process.

**Stuart Stapleton**

EHS Manager

[stuart.stapleton@usecology.com](mailto:stuart.stapleton@usecology.com)

p: 813.319.3423 | c: 813.770.9954 | f: 813.626.7451

7202 East Eighth Ave. Tampa, FL 33619

*Emergency Response: 800.839.3975*

*Customer Service: 800.592.5489*

**VOLUME 1 OF 3**

**Permit Modification Application**

**FOR**

**Modification Application for Operation of a  
Hazardous Waste Treatment and Storage Facility**

**AT**

**2002 North Orient Road  
Tampa, FL 33619**

***Permit No.: 34875-HO-010***

**EQ Florida, Inc.  
7202 East 8<sup>th</sup> Avenue  
Tampa, FL 33619**



**Revision: 02  
December 2015**

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## 1.0 FDEP APPLICATION FORMS

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### APPLICATION FOR A HAZARDOUS WASTE PERMIT PART I – GENERAL TO BE COMPLETED BY ALL APPLICANTS

Please Type or Print

#### A. General Information

1. Type of Facility in accordance with Part 270.13(a)

☐ DISPOSAL

☐ Landfill ☐ Land Treatment ☐ Surface Impoundment

☐ Miscellaneous Units Type of Unit \_\_\_\_\_

☒ STORAGE

☒ Containers ☐ Tanks ☐ Piles

☐ Surface Impoundment ☐ Containment Building

☐ Miscellaneous Unit Type of Unit \_\_\_\_\_

☒ TREATMENT

☒ Tanks ☐ Piles ☐ Surface Impoundment

☐ Incineration ☐ Containment Building

☐ Boiler / Industrial Furnace Type of Unit \_\_\_\_\_

☐ Miscellaneous Unit Type of Unit \_\_\_\_\_

2. Type of application: *modification to:*

☐ Construction Permit

☐ Operation Permit

☒ Construction & Operation Permit

☐ Research, Development & Demonstration (RD&D) Permit

☐ Postclosure Permit

☐ Clean Closure Plan

☐ Subpart H Remedial Action Plan

☐ Equivalency Demonstration

3. Revision Number: \_\_\_\_\_

4. Date current operation began, or is expected to begin: 07 / 01 / 1990

5. Facility Name EQ Florida, Inc.

6. EPA/DEP I.D. No. FLD981932494

7. Facility location or street address 2002 North Orient Road

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DEP Form 62-730.900(2)(a), incorporated in Rule 62-730.220(2)(a), F.A.C., Effective Date 4-23-13

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8. Facility mailing address 7202 East 8th Avenue  
street or P.O. Box  
Tampa FL 33619  
city state zip
9. Contact person Stuart Stapleton Telephone ( 813 ) 319-3423  
Title EHS Manager  
Mailing address 7202 East 8th Avenue  
street or P.O. Box  
Tampa FL 33619  
city state zip  
E-mail address stuart.stapleton@usecology.com
10. Operator's name Gene Cieply Telephone ( 813 ) 319-3410  
Mailing address 7202 East 8th Avenue  
street or P.O. Box  
Tampa FL 33619  
city state zip  
E-mail address gene.cieply@usecology.com
11. Facility owner's name Gene Cieply Telephone ( 813 ) 319-3410  
Mailing address 7202 East 8th Avenue  
street or P.O. Box  
Tampa FL 33619  
city state zip  
E-mail address gene.cieply@usecology.com
12. Legal structure  
☒ Corporation ☐ Non-profit corporation ☐ Partnership ☐ Individual  
☐ Local government ☐ State government ☐ Federal government ☐ Other
13. If an individual, partnership, or business is operating under an assumed name, specify the county and state where the name is registered.  
County N/A State N/A
14. If the legal structure is a corporation, indicate the state of incorporation.  
State of incorporation Michigan
15. If the legal structure is an individual or partnership, list the owners.  
Name N/A  
Address N/A  
Street or P.O. Box city state zip  
Name N/A  
Address N/A  
Street or P.O. Box city state zip



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16. Site ownership status  
☒ Owned    ☐ To be purchased    ☐ To be leased \_\_\_\_\_ years  
☐ Presently leased; the expiration date of the lease is \_\_\_\_/\_\_\_\_/\_\_\_\_.  
 If leased, indicate land owner's name \_\_\_\_\_  
 Address \_\_\_\_\_  
                         Street or P.O. Box                                 city                                 state                                 zip  
 E-mail address \_\_\_\_\_

17. Name of engineer Daniel Wolf Registration No. \_\_\_\_\_  
 Address 1226 Tech Boulevard, Tampa, FL, 33619  
                         Street or P.O. Box                                 city                                 state                                 zip  
 Associated with NOVA Engineering and Environmental

18. Is the facility located on Tribal land?      ☐ Yes    ☒ No

19. Existing or pending environmental permits (attach a separate sheet if necessary)

NAME OF PERMIT	AGENCY	PERMIT NUMBER	DATE ISSUED	EXPIRATION DATE
Haz Waste Ops	FDEP	34875-HO-011	04/01/2014	04/01/2019
Solid Waste Ops	FDEP	34757-010/SO/30	04/01/2014	04/01/2019
Waste Trans	FDEP	FLD981932494	02/26/2015	06/30/2016
Used Oil	FDEP	FLD981932494	02/26/2015	06/30/2016

### B. Site Information

1. The facility is located in Hillsborough County.  
The nearest community to the facility is Tampa  
Latitude 27 Deg, 57 Min, 44.95 Sec N Longitude 82 Deg, 22 Min, 26.17 Sec W  
Method and datum Facility Center on Google Earth
2. The area of the facility site is 4.46 (MOL) acres.
3. Attach a scale drawing and photographs of the facility showing the location of all past, present, and future treatment, storage and disposal areas. Also show the hazardous wastes traffic pattern including estimated volume and control.

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4. Attach a topographic map which shows all the features indicated in the instructions for this part.
5. Is the facility located in a 100-year flood plain? ☐ Yes ☒ No
6. The facility complies with the wellhead protection requirements of Chapter 62-521, F.A.C.  
☒ Yes ☐ No

**C. Land Use Information**

1. The present zoning of the site is IH Industrial Heavy (See Figure 3).
2. If a zoning change is needed, what should the new zoning be? N/A.

**D. Operating Information**

1. Is waste generated on-site? ☒ Yes ☐ No
2. List the NAICS codes (5 to 6 digits) 56211  
\_\_\_\_\_  
\_\_\_\_\_
3. Use the codes and units provided in the instructions to complete the following table.  
Specify:
  - a. Each process used for treating, storing or disposing of hazardous waste (including design capacities) at the facility, and
  - b. The hazardous waste(s) listed or designated in 40 CFR Part 261, including the annual quantities, to be treated, stored, or disposed by each process at the facility.

PROCESS CODE	PROCESS DESIGN CAPACITY AND UNITS OF MEASURE	HAZARDOUS WASTE CODE	ANNUAL QUANTITY OF HAZARDOUS WASTE AND UNITS OF MEASURE
See Appendix B	in Application	Volume 2 of 3	

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**P. Information Regarding Potential Releases From Solid Waste Management Units**

Facility Name EQ Florida, Inc.  
EPA/DEP I.D. No. FLD981932494  
Facility location Tampa FL  
city state

1. Are there any of the following solid waste management units (existing or closed) at your facility? A solid waste management unit (SWMU) is a discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include all areas at a facility where solid wastes have been routinely and systematically released.

**DO NOT INCLUDE HAZARDOUS WASTE UNITS CURRENTLY SHOWN IN YOUR PART B APPLICATION.**

landfill	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
surface impoundment	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
land farm	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
waste pile	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
incinerator	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
storage tank	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
container storage area	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
injection wells	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
wastewater treatment units	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
transfer station	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
waste recycling operations	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
land treatment facility	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
boiler/industrial furnace	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
other (units not listed above)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

2. If there is a "yes" answer to any of the items in one (1.) above, on separate sheet(s) of paper, provide a description of the wastes that were stored, treated or disposed of in each unit. In particular, focus on whether or not the wastes would be considered hazardous wastes or hazardous constituents under RCRA. (Hazardous wastes are those identified in 40 CFR Part 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.) Include any available data on quantities or volumes of wastes disposed of and the dates of disposal. Provide a description of each unit and include capacity, dimensions, and location at the facility. Provide a site plan, if available, and the dates of operation of the unit [40 CFR 270.14(d)(1)].

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3. On separate sheet(s) of paper, describe all data available on all prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or may still be occurring, for each unit noted in one (1.) above and also for each hazardous waste unit in your Part B application [40 CFR 270.14(d)(2)].

Provide the following information for each SWMU:

- Date of release.
  - Specifications of all wastes managed at the unit, to the extent available.
  - Quantity or volume of waste released.
  - Describe the nature of the release (i.e., spill, overflow, ruptured pipe or tank, etc.)
  - Location of the unit on the topographic map provided under 40 CFR 270.14(b)(19).
  - Designate the type of unit.
  - General dimensions and structural description (supply any available drawings).
  - Dates of operation.
4. On separate sheet(s) of paper, provide for each unit all analytical data that may be available which would describe the nature and extent of the environmental contamination that exists as a result of the prior releases described in three (3.) above. Focus on the concentrations of hazardous wastes or constituents present in contaminated soil or groundwater [40 CFR 270.14(d)(3)].

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**APPLICATION FOR A HAZARDOUS WASTE FACILITY PERMIT  
CERTIFICATION  
TO BE COMPLETED BY ALL APPLICANTS**


**Signature and Certification**

Facility Name EQ Florida, Inc.  
EPA/DEP I.D. No. FLD981932494

The following certifications must be included with the submittal of an application for a hazardous waste authorization. The certifications must be signed by the owner of a sole proprietorship; or by a general partner of a partnership; or by a principal executive officer of at least the level of vice president of a corporation or business association, or by a duly authorized representative of that person. If the same person is a facility operator, facility owner, and real property owner, that person can cross out and initial the signature blocks under "1. Facility Operator" and "2. Facility Owner," and add the words "Facility Owner and Operator" at the line "Signature of the Land Owner or Authorized Representative."

**1. Facility Operator**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, I agree to comply with the provisions of Chapter 403, Florida Statutes, and all rules of the Department of Environmental Protection. It is understood that the permit is only transferable in accordance with Chapter 62-730, Florida Administrative Code (F.A.C.), and, if granted a permit, the Department of Environmental Protection will be notified prior to the sale or legal transfer of the permitted facility.

  
Signature of the Operator or Authorized Representative\*  
**Gene Cieply / General Manager**

Name and Title (Please type or print)

Date December 18, 2015 E-mail address gene.cieply@usecology.com


Telephone (813) 319-3410

- **Attach a letter of authorization**

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**2. Facility Owner**

This is to certify that I understand this application is submitted for the purpose of obtaining a permit to construct, operate, or conduct remedial activities at a hazardous waste management facility on the property as described. As owner of the facility, I understand fully that the facility operator and I are jointly responsible for compliance with the provisions of Chapter 403, Florida Statutes, and all rules of the Department of Environmental Protection.

  
Signature of the Facility Owner or Authorized Representative\*

Gene Cieply / General Manager

Name and Title (Please type or print)

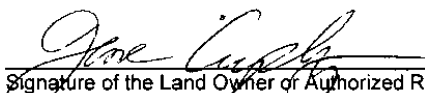
Date December 18, 2015 E-mail address gene.cieply@usecology.com

Telephone (813) 319-3410

\* Attach a letter of authorization

**3. Land Owner**

This is to certify that I, as land owner, understand that this application is submitted for the purpose of obtaining a permit for the construction, operation or postclosure of a hazardous waste management facility on the property as described. For hazardous waste facilities that close with waste in place, I further understand that I am responsible for providing the notice in the deed to the property required by 40 CFR 264.119 and 265.119, as adopted by reference in Chapter 62-730, F.A.C.

  
Signature of the Land Owner or Authorized Representative\*

Gene Cieply / General Manager

Name and Title (Please type or print)

Date December 18, 2015 E-mail address gene.cieply@usecology.com

Telephone (813) 319-3410

\* Attach a letter of authorization

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**4. Professional Engineer Registered in Florida**

Complete this certification when required to do so by Chapter 471, F.S., or when not exempted by Rule 62-730.220(9), F.A.C.

This is to certify that the modifications to the engineering features of this hazardous waste management facility have been designed or examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgement, this facility, when properly constructed, maintained and operated, or closed, will comply with all applicable statutes of the State of Florida and rules of the Department of Environmental Protection.

for Modification Only

Signature

Daniel E. Wolf, PE

Name (please type)

Florida Registration Number 46774

Mailing Address 1226 Tech Boulevard

street or P.O. Box

Tampa

city

Florida

state

33619

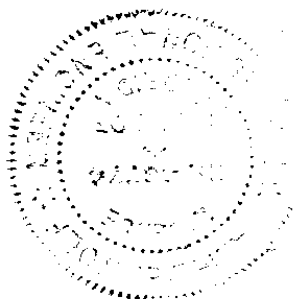
zip

Date 12/18/2015

E-mail address dwolf@usanova.com

Telephone (813) 623-3100

**(PLEASE AFFIX SEAL)**



Revision Number
Date December 18, 2015
Page 4 of 4

**5. Professional Geologist Registered in Florida**

Complete this certification when required to do so by Chapter 492, F.S., or when not exempted by Rule 62-730.220(10), F.A.C.

This is to certify that the interpretations of geology at this hazardous waste management facility have been examined by me, and the interpretations conform to sound geological principles. In my professional judgement, this facility, when properly constructed, maintained and operated, or closed, will comply with all applicable statutes of the State of Florida and the rules of the Department of Environmental Protection.

Signature \_\_\_\_\_

**NOT APPLICABLE**

Name (please type) \_\_\_\_\_

Florida Registration Number \_\_\_\_\_

Mailing Address \_\_\_\_\_  
street or P.O. Box

\_\_\_\_\_ city state zip

Date \_\_\_\_\_ E-mail address \_\_\_\_\_

Telephone (\_\_\_\_) \_\_\_\_\_

**(PLEASE AFFIX SEAL)**





251 E. Front St., Suite 400, Boise, ID. 83702  
P: 800.590.5220 • 208.331.7900

March 16, 2015

**Subject: Delegation of Signing Authority**

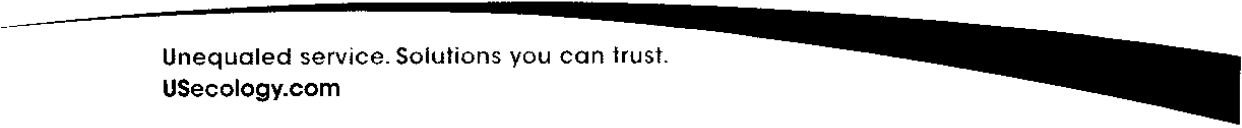
To whom it may concern:

As a Responsible Corporate Officer of EQ Florida, Inc., I due hereby delegate to the Director of Operations, General Manager or Facility Manager with day-to-day operational authority of the respective company's facility, the authority of signing letters, reports, applications and forms or other required documents requested or required by governmental agencies on behalf of EQ Florida, Inc.

Sincerely,

A handwritten signature in black ink that reads 'S Bell'.

Simon Bell  
Executive Vice President  
Operations and Environmental Services

A thick, black, wavy line that spans the width of the page, starting from the left margin and ending at the right margin, positioned above the footer text.

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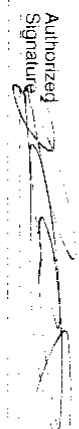
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**PAY TO THE ORDER OF**

FLORIDA DEPT OF ENV PROTECTION

00070/29205 000957069

**REMITTER**

Authorized Signature  **MP**

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## **2.0 GENERAL FACILITY INFORMATION**

### **2.1 Introduction**

This submittal is intended to modify the existing solid and hazardous waste operating permits for the EQ Florida, Inc. (EQFL) facility (Figure 1) located at 7202 East 8th Avenue and 2002 North Orient Road, Tampa, Hillsborough County, FL 33619.

With this modification application, EQFL is requesting an increase in permitted storage capacity and the ability to treat an additional waste code in the permitted treatment tank.

The EQ Florida, Inc. facility formerly known as US Liquids Inc., is a hazardous waste container storage and treatment facility. EQFL is a division of EQ Holding Company, a Michigan Corporation.

ID No.: FLD 981 932 494  
County: Hillsborough  
Address: EQ Florida Inc.  
2002 North Orient Road  
Tampa, Florida 33619  
(813) 623-5302

The facility is a 4.46 acre site more or less, (MOL) consisting of an office building with a small laboratory; a 5,866 square foot, totally enclosed building utilized for the container storage of hazardous waste (the Container Storage Building), a 1,786 square foot, improved secondary containment area located on the loading dock side of Bay 2 utilized for container storage of hazardous waste, a covered vehicle loading/unloading area, and an 8,050 square foot covered waste processing building that houses the on-ground solid waste solidification tank; shredder; on-ground hazardous waste treatment tank and a reactivities magazine.

This application proposes the following changes to the current permit:

1. Add waste code K062 to the hazardous wastes codes (D002 and D004 thru D011) permitted for hazardous waste treatment.
2. Add 5,000 gallons of hazardous waste (waste codes D002, D004 thru D011, and K062) storage in the Waste Processing Building. The additional storage will include containers of solids, liquids, and sludges. The storage will be used for containers of hazardous waste prior to treatment in the hazardous waste treatment tank. The entire Waste Processing Building is surrounded by a concrete curb and provides sufficient containment capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.
3. Add 400 cubic yards of hazardous waste (waste codes D004 thru D011, and K062) storage to the existing 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area (SWMU #11). The material placed in this area will be a solid material (passes the paint filter test) contained in bulk containers. The proposed storage area meets the 40 CFR 264.175(c) containment system requirements and is sloped in a manner that drains precipitation away from the storage area and stored bulk containers. The bottom of the bulk containers are elevated 6 -8 inches above the ground which protects the bottom of the container from contact with accumulated liquids.
4. Add 400 cubic yards of non-RCRA waste bulk container storage to the 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area (SWMU #11). The material placed in storage will be solid material (passes the paint filter test) contained in bulk containers.

The proposed storage area meets the 40 CFR 264.175(c) containment system requirements and is sloped in a manner that drains precipitation away from the storage area and stored bulk containers. The bottom of the bulk containers are elevated 6 -8 inches above the ground which protects the bottom of the container from contact with accumulated liquids.

5. Market conditions have changed since the permit was issued on April 1, 2013 and the installation of the permitted 6,000-gallon oil-water separator was never initiated or completed. Since it no longer required, it is being removed from the application as a permitted solid waste management unit (SWMU #19).
6. Expand the processes conducted in SWMU #11 to include the currently permitted 10-Day Transfer Facility and Inbound/Outbound Staging area and also add permitted bulk container storage in the area (see items #3 and #4 above). The description of SWMU #11 has been expanded in section 8.2.

The facility General Information, Inspection Plan, Contingency Plan, Procedures, Training Program, Waste Analysis Plan, Container Management, Closure Plan, and other information have been updated and revised to reflect regulatory changes and more detailed and accurate conditions. Further, the Preparedness and Prevention Plan (PPP) and the Contingency/Emergency Response Plan (CP) have been combined into one standalone document for ease of distribution, updating and locating in the event a situation occurs requiring implementation of certain aspects of either of these plans. The combined PPP and CP are contained in Appendix M of Volume 2 of 3.

EQFL is a registered hazardous waste transporter with a state registered (on site) transfer facility. EQFL far exceeds the minimum regulatory requirements often typical of solid waste and transporter facilities. Examples of this include HSWA SWMU requirements, on-site trained personnel and equipment to handle virtually any emergency, ~~and more~~. Management of non-RCRA regulated waste does not interfere with the management or treatment of RCRA regulated hazardous waste.

A Solid Waste Management Unit (SWMU) RCRA Facility Assessment (RFA) of the EQFL facility was initiated on February 15, 1993. There have been no releases to the environment of hazardous waste or hazardous waste constituents for any EQFL SWMU. Refer to Figure 17 and Appendix G (Volume 2 of 3) for further information regarding the SWMUs at this facility.

This permit modification application includes a section addressing air-permitting requirements, including an exposure section on the significance of the proposed capacity increase as it relates to the need for a substantial permit modification requiring the preparation of an RMP (Risk Management Plan). Calculations using conservative "worst case" data show the EQFL facility is far below applicable air permitting requirements and, based on "in-bound" records of waste shipments received, will operate the facility in such a fashion that will result in no increase in overall risk from site activities.

## **2.2 Facility Layout and Operations**

The EQFL facility is a permitted hazardous waste storage and treatment facility. No on-site disposal occurs at the EQFL facility. EQFL manages non-RCRA regulated waste, household hazardous waste, used oil and filters, mercury containing lamps and devices, TSCA exempt and limited quantity exempt PCB and asbestos wastes, recyclable materials, and other similar substances, materials, and wastes. The primary waste management operations are storage, consolidation and transfer of hazardous wastes and treatment of hazardous wastes (D002, D004-D011, and K062).

The facility consists of the 4.46-acre MOL site which includes the Container Storage Building, a 5,866 square foot building and a 1,786 square foot improved secondary containment area, which was

specifically designed for hazardous waste management, and an 8,050 square foot covered Waste Processing Building that houses the solid waste solidification tank; shredder; on-ground hazardous waste treatment tank; a reactivities magazine; and, a proposed container storage area. The facility remains essentially a transfer facility with container storage and no on-site disposal.

### **Container Storage Building**

The container storage building is composed of three separate bays. The bays are separated by an eight-inch wide concrete block wall and fire doors. The wall extends from the floor to the roof and has been designed with a minimum fire resistance of four hours. The improved secondary containment area is located in the loading/unloading area on the west-side of the building and has two concrete containment walls that provide improved secondary containment.

The EQFL Container Storage Building has a hazardous waste capacity of 50,000 gallons; a maximum of 20,000 gallons each in Bays 1 and 3, and a maximum of 10,000 gallons in Bay 2. An improved secondary containment area is provided on the loading dock side of Bay 2 with a capacity of 10,000 gallons. The capacity of the improved secondary containment is included in the total permitted Container Storage Building capacity of 50,000 gallons. The capacity is consistent with the physical limitations of the Container Storage Building and is used throughout this application to determine containment, closure cost, financial assurances, and aisle space requirements. Actual day to day volume is usually less than 25,000 gallons. EQFL will utilize the container arrangement shown on Figure 14. The containers will normally be stored in a "single-stacked" arrangement. "Single-stacked" indicates that no forklift is necessary to load, unload, or move any container. Although the storage is referred to as "single stacked," small containers (such as 5-gallon pails) may be manually stacked on top of the "single stacked" containers.

EQFL will occasionally utilize a double-stack container arrangement. The same storage arrangement (Figure 14) shown for single-stacking will be utilized for double-stacking with the exception that adjacent storage rows will not be utilized for container storage so that each row of double-stacked containers has access to an eight-foot aisle (if needed). The eight-foot aisle will allow turning radius access for a forklift to stack and unstack containers. Forklifts will not be utilized in the ignitable/reactive bay (Bay 2) unless they are Class I rated, explosion proof, or equivalent.

The sectioning between single and double stacked storage utilization will be by a containment sump basis. Specifically, the stacking requirements will apply to all containers utilizing the same containment sump. This would make it permissible to have the containers in Bay 1A double stacked and the containers in Bay 1B single stacked since Bay 1A utilizes different containment sumps from Bay 1B. If any containers are double stacked (other than small containers manually stacked on top of single-stacked containers) in the area contained by a common containment sump, then all containers in that area would have to meet the double stacked requirements. Small containers may be manually stacked on top of single stacked containers.

The single and double stacked container arrangements are summarized below:

#### **SINGLE STACKED**

- No forklift required.
- Two-foot (minimum) aisle space.
- All bays and the improved secondary containment area.

#### **DOUBLE STACKED**

- Forklift utilized.
- Eight-foot (minimum) aisle access for each row.
- Bays 1A, 1B, 3A, 3B, and the improved secondary containment area only (not Bay 2).

- Small containers manually stacked on top of single-stacked containers.
- Small containers manually stacked on top of single-stacked containers.
- Drums made from Lab packs.

The sump grids utilized in the EQFL facility warehouse are 2 inch by 3/16 inch bar grating. The gratings are ten square feet in area (each section) and cover a span of three feet. The uniform load capacity of each section of bar grating (of these specifications) is 18,330 pounds. This far exceeds the maximum expected load of 2,400 pounds for the stacking forklift plus 2,400 pounds for a pallet of four heavy 55-gallon drums (4,800 pounds total).

Double stacking of containers and pallets of containers is a common practice throughout the chemical processing and commercial hazardous waste storage and treatment industries. These facilities are able to inspect containers, respond to and manage leaks, and move the containers. Double stacking of containers (or pallets of containers) actually makes waste management easier in many instances. Emergency movement of hazardous waste containers can be done four containers at a time rather than manually one at a time. Leaks and damaged containers are more easily detected when double stacked since they are usually at eye level during inspections.

### **Waste Processing Building**

The 8,050 square foot covered waste processing building has a proposed storage capacity of 5,000 gallons. The capacity is consistent with the physical limitations of the Waste Processing Building and is used throughout this application to determine containment, closure cost, financial assurances, and aisle space requirements. Containers placed in storage are primarily 55-gal drums, although waste may also be received in 250-gal, 275-gal, and 330-gal totes. EQFL will normally store containers in a "single-stacked" arrangement but may occasionally utilize a double-stack container arrangement. Rows of containers will be separated by a 2-foot aisle space which will allow for container inspection, response to and management of leaks, and the movement of containers.

### **The 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Off Storage Area**

The 10-Day Transfer Facility is used for waste shipments and do not include shipments to EQFL (designated facility) or from EQFL (generator). Vehicles/trailers parked in this area are marked as a 10-Day vehicle/trailer to avoid being confused with other vehicles/trailers that may also be located in the same vicinity. Transfer facility waste shipments are noted in a separate Transfer Log (operating record).

The Inbound & Outbound Staging is only used for inbound loads waiting for unloading and receipt and outbound loads waiting for completed transportation paperwork. Vehicles/trailers in this area are marked as either an inbound load or an outbound load to avoid being confused with other vehicles/trailers that may also be located in the same vicinity.

The Bulk Container Storage is for hazardous waste that has been treated in the hazardous waste treatment tank, sampled for confirmatory analysis, is a solid (passes the paint filter test), and has been removed from the treatment tank. Until confirmatory analysis is received from a certified off-site laboratory, the waste will be considered hazardous waste. When the treated waste's confirmatory analysis is received, and the analytical results indicate that the waste has been successfully treated and meets all de-characterization and LDR treatment standards, the waste will be considered non-RCRA waste. The bulk container storage area is sloped and drains precipitation away from the storage area and the stored bulk

containers. The bottom of the bulk containers are elevated 6 -8 inches above the ground, and are protected from contact with any liquids that may accumulate.

A boundary survey drawing is ~~in~~ provided as Figure 6 and a facility layout plan is provided as Figure 7. The land was previously undeveloped and no solid waste management units (SWMUs) were located on the site. The SWMUs currently identified on site are described in the SWMU section. The surrounding land uses are heavy industrial. These include two National Priority List (NPL) (Superfund) sites, metals recyclers, a construction debris transfer facility, steel cleaning and coating, fishery, gas manufacturing, pesticide formulator, and bail bonds businesses.

The surrounding land use is shown on Figure 8. The facility is located in the city of Tampa in a heavy industrial zoned area known as Orient Park. The area zoning is shown on Figure 3. The City of Tampa classifies this area as suitable for hazardous waste facilities. The West Florida Regional Planning Council (WFRPC) in 1985 performed in-depth evaluations to locate a suitable area for a hazardous waste storage and treatment facility. This area was among those chosen.

An aerial photograph of the site is included as Figure 2, and a topographic map at a scale of 1 inch to 2,000 feet is included as Figure 4. Facility and hazardous waste management building as-built record drawings are included in Appendix D (of Volume 2 of 3). The facility is located outside the 100-year flood plain. A Federal Emergency Management Agency (FEMA) map indicating this fact is included as Figure 5.

### **2.3 Operations Description**

The hazardous waste operations at the EQFL facility consist of the proposed treatment of the listed waste code K062 and selected characteristically hazardous wastes (Waste Codes D002, D004 thru D011) and storage of hazardous waste in containers, primarily 55-gal drums, although waste may be also be received in 250-gal, 275-gal, and 330-gal totes. A minimum of 10 percent of each hazardous waste stream entering the facility is sampled. Some waste is re-containerized or consolidated in other containers. Re-containerization operations may also include use of the following equipment: paint can crusher, drum crusher, and rag compactor. Wastes not treated on site are shipped out of the.

Hazardous wastes treated in the on-ground treatment tank that meet the LDRs, contain no free liquids (as determined by EPA SW-846 Method 9095B [i.e., Paint Filter Test (PFT)]) and no longer exhibit hazardous waste characteristics (i.e., have been de-characterized) based on TCLP test results will be loaded into roll off boxes or dump trailers for subsequent off-site disposal at an approved disposal facility. Because solid waste and de-characterized hazardous waste meeting the PFT and LDRs may be stored either in the 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area (SWMU #11) as proposed, or in the Waste Processing Building in bulk containers, proper paper work will be completed and associated with each load in the event a facility inspection is performed.

As currently permitted, some drummed (up to 80x55-gal drums) characteristically hazardous waste may be staged in the treatment building for up to 24 hours prior to treatment. The proposed additional 5,000 gallons of storage would change the temporary staging to storage (less than 365 days) with only a modest increase in the amount of material placed in the building. The area where this storage would occur is shown on Figure 15A. In order to separate the hazardous waste operations from the solid waste operations, a 12-in wide bright yellow line will be painted between the two access ramps on the east and west sides of the treatment building and separating the north from the south sides. A similar bright line will be painted around the reactives magazine.

### **2.3.1 Waste Received**

Waste may be received at the facility in any size container up to 330-gallon totes. Waste is also received in other D.O.T. approved containers including bulk shipments. Drums and other ~~man~~ portable containers are off-loaded into the warehouse. Bulk shipments are stored in the improved 10,000 gallon containment area located on the loading dock in front of Bay 2. Received containers are moved, categorized and stored according to waste type. The following waste type categories are handled at the facility:

1. Non-RCRA regulated waste
2. Flammables (D001)
3. Poison/Toxic (40CFR Part, 261.24, Table 1)
4. Acid (D002)
5. Alkaline (D002)
6. Hazardous Organic Compounds (HOC)
7. Oxidizers (D001)
8. Reactive (D003)
9. Otherwise Regulated Material (ORM or Class 9)

No forbidden explosives as defined in 40 CFR 261.23(a)(8), regulated radioactive, or regulated biohazardous waste will be managed at the EQFL facility.

Waste types include liquids, solids, sludges, and a variety of lab packs (waste which is packaged in its original container).

The following operations are fully described in the Processes, Procedures, Structures, and Equipment section (Section 11.0) of this permit renewal. Equipment specifications are included in Appendix I.

### **2.3.2 Re-containerization**

Some of the waste received will be re-containerized or over packed from one container to another. In general, re-containerization includes consolidation of like waste into similar sized or larger containers. Wastes are transferred between containers by pumping (using a portable pump) or pouring directly from one container to another. All container transfer operations take place either within the Container Storage Building or the Waste Processing Building, except paint can crushing. As noted in the Exposure Information Section 14.0, even if re-containerized, there will be no increase in the largest container size for any of the waste categories and therefore no increase in overall risk at the facility.

Other re-containerization operations will include paint can crushing, drum crushing and rag compacting, loading to roll-offs, and loading to tanker truck. All waste transfer and re-containerization is conducted utilizing best management practices. Hazardous wastes have already been profiled and approved as described in the EQFL Waste Analysis Plan. Each hazardous waste stream has been sampled and quality control verified as described in the EQFL Waste Analysis Plan. Only compatible wastes are transferred or re-containerized in each batch operation. The same waste management practices for inspections, contingency, preparedness and prevention, training, precautions for ignitable, reactive, and incompatible wastes, waste analysis, record keeping, and container management that apply for treatment and storage will also apply



for waste transfer and re-containerization. Waste processing areas, to include re-containerization operations and paint can crushing locations, are identified on Figure 16.

EQFL refers to the re-containerization and compatibility testing as “Consolidated Confirmatory Compatibility Testing” and the text in subsequent sections has been modified to reflect this clarification. The SOP that EQFL has prepared for assuring compatibility during re-containerization is referred to as “Liquids Bulking” and is summarized in Appendix J (in Volume 2 of 3) with other applicable EQ SOPs pertinent to this hazardous waste renewal application.

### ***2.3.3 Paint Can Crushing***

The facility receives water-based latex and solvent-based paint in containers up to 5-gallons for re-containerization and disposal. The majority of the paint received is from household waste. This operation will include opening the container, crushing the paint can, collecting the paint waste, collecting the empty containers and containerizing the paint for transport off-site. This operation will take place within the permitted processing areas identified on Figure 16.

### ***2.3.4 Drum Crushing and Rag Compacting***

The drum crusher and rag compactor consists of a closed cabinet unit located on the ramp outside Bay 3. A drum is placed inside the unit and a ram is used to crush the drum. The unit contains a grate and collection pan at the bottom to catch any liquid or solid residue material from the crushed drum. The material is drummed as waste.

The rag compactor works in a similar manner in that a drum of waste rags is placed inside the unit. A ram, which is slightly smaller than the drum opening, is used to compact the rags inside the drum.

### ***2.3.5 Treatment of Characteristic and Listed (K062) Hazardous Wastes***

The hazardous waste treatment tank is a custom manufactured piece of equipment, essentially meeting the 40 CFR, Part 264.10 definition of an on-ground tank. The unit is constructed of steel plates that have been welded into the shape of a box. The box is 20-ft. wide by 20-ft. long and is 4-ft. 7-in tall. The floor of the tank is 3/4-in steel plate and the side walls of the tank are 1/2-in steel plate. The top of the box is open. The connections between the plates are joined together with full penetration welded joints so that the box is liquid-tight and will not allow waste to escape. The treatment tank will also be anchored to the floor on the north, west and south sides. The design and installation of the on ground treatment tank complies with all the requirements specified in 40 CFR, Subpart J, and the design drawings and specifications for the treatment tank as well as the engineering certification of the design are provided in Appendix I (Volume 2 of 3).

The primary reagents used for treatment of the waste include hydrated lime/lime kiln dust, ferrous sulfate, sodium sulfide/sulfide flakes, and hypochlorite. The amount of reagent varies based on the waste stream but is generally a 5:1 ratio when absorbing liquids and 10:1 for solids (i.e., 1 ton of waste to 200 pounds of lime).

Waste is deposited directly into the top of the box, the pH adjusted, and then a solidification agent is introduced. The process consists of raising the pH into the 9 to 13 range which is the optimal range for metals treatment. The materials are mixed using a backhoe, portable mixer, or similar piece of equipment. Additional solidification agent is added until no free liquids are present.

When the treatment process is complete, and no free liquids are present, a grab sample is collected from the treatment tank for verification analysis by a NELAP accredited laboratory. The material is then removed from the treatment tank and placed into a lined, sealed, bulk container and placed in the proposed Bulk Container Storage area pending analysis.

The grab sample is subjected to a TCLP test to assure compliance with the land disposal restrictions (LDRs) as well as running a Paint Filter Test (PFT) by Method 9095B to assure the absence of free liquids. Treated materials that are de-characterized, meet the LDRs and contain no free liquids are sent for disposal at an approved disposal facility (Subtitle D landfill). If the treated material fails the initial TCLP screening and is still characteristically hazardous or fails to meet LDRs or PFT, it will be re-treated until a TCLP, LDR and PFT tests have confirmed the material no longer retains the hazardous characteristics for the waste being treated. It should also be pointed out that the disposal facility accepting the treated material may require additional testing above and beyond a TCLP test before they will accept the waste. EQFL will determine testing requirements for the proposed disposal facility and have the samples analyzed accordingly.

### **2.3.6 Loading to Roll-Offs**

Re-containerization operations will include loading material to roll-off boxes and/or dump trailers for transport off-site. Roll-offs or dump trailers will be loaded in the loading/unloading area located outside the Container Storage Building. Loaded roll-offs or dump trailers will be manifested and shipped off-site for ultimate treatment and disposal.

Treated hazardous wastes that no longer exhibit hazardous waste characteristics, contain no free liquids, and meet the LDRs based on the TCLP grab sample test results, will be loaded into bulk containers. They will be subsequently manifested off-site for disposal at an approved disposal facility. Because solid waste and de-characterized hazardous waste containing no free liquids and meeting the LDRs may be stored in the Waste Processing Building in bulk containers, proper paper work will be completed and associated with each load in the event a facility inspection is performed.

Typically, only solid material is loaded into the roll-off containers and/or dump trailers, although some sludge material may also be off-loaded. However, free-flowing liquids are not typically contained in the roll-offs or dump trailers. The roll-offs and dump trailers will be kept closed except when loading.

Roll-off containers or dump trailers approved for storing or transporting liquids will be utilized if the hazardous waste being transported or stored contains free liquids. These containers may include "sludge boxes" or sealed roll-offs with liners.

### **2.3.7 Reactives Magazine**

The reactives magazine consists of a custom Type 2 Class ABC, Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) specification indoor magazine manufactured by Armag Corporation. The exterior of the magazine is ~~will be~~ constructed of ¼-inch ASTM A-36 prime steel and the interior is lined with 2-inch hardwood to meet bullet resistant requirements. It has a front opening door (cabinet type), casters, shelving, a double lock system with ¼-inch steel lock covers, two ATF approved padlocks, one 12-inch by 24-inch magnetic sign reading "DANGER-EXPLOSIVES," top lifting D-rings, and a red exterior finish. The dimensions of the magazine

are 6 feet long by 6 feet wide by 7 feet tall, and the approximate weight of the unit is 6,000 pounds empty. Information on the reactives magazine is contained in Appendix I (Volume 2 of 3).

The reactives magazine will be used for the temporary storage and pass-through of road flares, DOT 1.4 material, marine aerial and signal flares, small arms munitions, black powder, residential fireworks and other permitted explosives. No forbidden explosives will be transported to the site and/or stored in the magazine. No treatment or processing of explosive materials will be completed onsite.

There will be no staging of material in the reactives magazine area. Once moved to the reactives area, the material will immediately be placed in the unit. There should be no exposure to the elements because of the short duration of time between movement to the reactives magazine and placement in the unit. It will be kept secure by being locked except for those instances where material is added to or removed from the unit.

#### ***2.3.8 Tanker Loading***

Liquid wastes will be loaded to a tanker truck for transport off-site. Wastes will be pumped from a container directly to the tanker. Tankers will be kept closed except when loading.

### **3.0 GENERAL FACILITY STANDARDS**

#### **3.1 Location Standards**

In regard to seismic location standards, the EQFL facility is not located within 200 feet of a fault which has had displacement in Holocene time. Political jurisdictions requiring demonstration of the seismic location standard are listed in Appendix VI to 40 CFR, Part 264. There are no such locations in the state of Florida and therefore the facility is assumed to be in compliance with the seismic location standard.

The EQFL facility is not located in a 100-year floodplain. This is shown on the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA) 100-year floodplain map included on Figure 5. The only water body within a one-mile radius of the EQFL facility is the Tampa Bypass Canal which is located approximately 3/4 mile east.

No on-site disposal occurs at the EQFL facility. Wastes will not be placed in any salt dome formation, salt bed formation, underground mine, or cave. There are no surface impoundments, waste piles, or landfills.

The Southwest Florida Water Management WMIS (Water Management Information System) database was consulted to determine the presence of injection and withdrawal wells, both on site and off site, within 1000-ft around the hazardous waste management area. Information on these wells are contained in Appendix E of Volume 2 of 3. It should be noted that not every well permitted within this area was summarized in the table. The rule calls for injection and withdrawal wells within 1000-ft. The WMIS database is currently limited in its ability to sort wells in this fashion and professional judgment was used to screen out wells used for monitoring or recovery purposes considering the general heavy industrial use of the area surrounding the EQFL facility. In addition, because of the way the wells are loaded into the database, most are given similar latitudes and longitudes due to poor information by the applicant or driller. This results in tens of wells plotting in the same place on the location map.

#### **3.2 Facility Security**

A seven-foot high security fence surrounds the entire EQFL facility. The fence includes six foot of chain link fabric and a one-foot barbed wire parapet. Entry is controlled at all times through closed locked gates. The control gates consist of lockable pedestrian gates and a lockable vehicle gates located in various locations along the fencelines. The vehicle gates may remain open for no longer than one (1) hour during normal operations. A sign with the legend "Danger - Unauthorized Personnel Keep Out" is posted at each gate entrance. A second vehicular entrance is located at the southwest corner of the facility. This entrance facilitates improved traffic flow by allowing vehicles to enter at the southeast gate and exit at the southwest gate. This minimizes vehicles turning around and two-way traffic. The second gate remains closed and locked when not in use. It is also constructed of chain link with barbed wire parapet similar to the existing vehicle gate. Signs are also posted on the north, south, east, and west portions of the fence surrounding the facility. The legend is written in English and Spanish and is legible from a distance of at least 25 feet. The Container Storage Building is fully enclosed and all doors are locked during non-working hours. The Container Storage Building is also monitored by an automatic alarm system for fire. The fire alarm automatically notifies the City of Tampa Fire Department.

All site security features including fencing, gates, and signs are shown on Figure 10.

### 3.3 Traffic Information

The EQFL facility is located in an area of Tampa zoned heavy industrial. The location is within easy access of major roads I-4, I-75, I-275, US 301, Highway 60, Highway 41 and the Crosstown Expressway. Vehicles may use these roads and others to access Orient Road. Vehicles heading south on Orient Road will turn right onto 9th Avenue then turn right into the entrance of the facility. Vehicles heading north on Orient Road will turn left onto 9th Avenue then turn right into the entrance of the facility. Exiting vehicles will turn left onto 9th Avenue from the exit of the facility. The vehicles will then be able to turn either left (north) or right (south) onto Orient Road to proceed to their destination. The ~~two~~ vehicle gates allow vehicles to enter one gate and exit another while minimizing turnarounds and two-way traffic. Traffic flow is shown on Figure 9.

Traffic volume usually consists of two 24-foot semi-truck van loads per day and three truck loads (tractor trailer, roll-off, or tanker) per week. The semi-truck vans are utilized primarily for inbound waste shipments and tractor trailers are utilized primarily for outbound shipments. Inbound vehicles are utilized for outbound shipments when possible. Access roadways (9th Avenue) are constructed of 8-inch lime rock base primed and compacted to 98% maximum density and 2 inches of type S-1 asphaltic concrete. The design load bearing capacity is 2,500 psi at 95% of Standard Proctor. The roadways are maintained by the City of Tampa

### 3.4 Ignitable, Reactive, or Incompatible Wastes

EQFL has taken precautions to prevent accidental ignition or reaction of ignitable or reactive waste. Ignitable and reactive wastes are separated from other wastes. Ignitable and reactive wastes are stored in Bay 2 of the Container Storage Building. All cyanide bearing waste will be stored in the northwest corner of Bay 2, the area identified as 2A in Figure 14. Bay 2 has been specifically designed and built for the storage of ignitable and reactive hazardous wastes. All four walls of Bay 2 are constructed of eight-inch wide concrete block, extending from the floor to the roof. The walls are designed for a minimum fire resistance of four hours. The floor is five inches of 4,000 psi concrete placed monolithically and coated with three layers of chemical resistant coatings and sealants. The roof is also constructed of concrete.

Lighting and other fixtures in Bay 2 are intrinsically safe (explosion proof). Bay 2 has smoke, flame and lower explosive limit (LEL) monitors. There are two LEL meters. One is mounted in the spill containment sump to detect vapors more dense than air. The second is mounted near the roof to detect vapors less dense than air. The LELs are set to automatically activate two blowers at 10% LEL and to automatically close magnetically released doors to the bay, activate the high expansion foam fire suppression system, the fire alarm, and automatically dispatches the Tampa Fire Department. ABC and Halon (or equivalent) fire extinguishers are located in Bay 2.

There is a single 1,001-gallon spill containment sump in Bay 2. The floor of the bay is sloped at 1/8 inch per foot so that all leaks and spills will be directed to the containment sump located in the center of the bay. The location of safety and fire control equipment located (or available) in Bay 2 is indicated on the building as-built record drawings included in Appendix D (in Volume 2 of 3) and facility evacuation routes are shown on Figure 11. Supplemental emergency and safety equipment not shown on the as built in Appendix D (Volume 2 of 3), or described in the PPP/CP (Appendix M of Volume 2 of 3) are also listed in Appendix H (Volume 2 of 3).

Transfer of ignitable liquids is by pouring, manual repack, manually operated pump, or air operated pump. Grounding cables are utilized when transferring ignitable liquids. Intrinsically safe, explosion proof, and non-sparking equipment is used in the ignitable/reactive storage bay (Bay 2). "No Smoking"

signs are located prominently throughout the facility. Smoking is only permitted in the designated smoking area located outside the north office entrance and west of the office in the undeveloped (inactive) portion of the facility. These designated areas are over 100 feet away from all ignitable, reactive, or any other hazardous waste area. Operational controls are in place to insure that no open flames are allowed within 50 feet of any ignitable or reactive waste. All ignitable and reactive waste is stored at least fifty feet from all property lines. All areas of Bay 2 (including the east wall and loading dock and 10,000-gallon improved secondary containment area) are at least 50 feet from the property line. This permit application is structured to provide detailed information on the precautions EQFL has taken to prevent reactions which may:

1. Generate extreme heat, pressure, fire, explosion, or violent reaction;
2. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantity to threaten human health or the environment;
3. Produce uncontrolled flammable fumes or gases in sufficient quantities to threaten human health or the environment;
4. Damage the structural integrity of the device or facility; and,
5. Through other similar means which threaten human health or the environment.

These precautions begin before any waste is transported or received by the facility.

All prospective waste materials are thoroughly reviewed by EQFL technical services staff prior to approval for transportation to or receipt by EQFL. The waste generator prepares a profile of the prospective waste for EQFL Technical Services Staff on EQFL Waste Profile form (included in Appendix J in Volume 2 of 3). The form fully characterizes the waste including any applicable analytical results. A sample of the waste is included with the Waste Profile if necessary. This waste approval process is thoroughly described in the EQFL Waste Analysis Plan.

Waste characterization forms for the most commonly received wastes at EQFL are contained in Appendix K (Volume 2 of 3) along with a summary of the inbound waste shipments received in 2012. These forms also include the characteristically hazardous wastes that EQFL intends to treat in the treatment tank and which formed the basis of the exposure evaluation described in Section 14.0.

All waste containers meet DOT specifications. The transporter inspects each container for proper DOT approved containers, container condition and integrity, proper closure, labels, and manifesting prior to receipt by EQFL. EQFL personnel double-check each of these items upon receipt at the facility. Representative samples of each waste are taken to verify the container contents are the materials approved on the EQFL Waste Profile form. Selected samples are analyzed in the EQFL laboratory (or subcontractor lab) to verify this information. These procedures are fully detailed in the EQFL Waste Analysis Plan.

Waste containers are placed in the proper storage location based on the Waste Profile or laboratory quality control information. The storage of ignitable and reactive wastes in Bay 2 was previously discussed in this section. Bays 1 and 3 are further subdivided into two different containment areas each. Bay 1 has two different 1,001-gallon containment sumps to further segregate incompatible wastes within this bay. The north half of Bay 1 is sloped to one containment sump and the south half of Bay 1 is sloped to another containment sump. Bay 3 is subdivided into two different containment areas in the same manner. Incompatible wastes such as acids and alkalines are in either separate containment sections or bays. Three major incompatibility groups (acids/alkalines, oxidizers/ignitable organic solvents, and acids/cyanides) are stored in separate bays with floor to roof walls and separate 1,001-gallon containment sumps separating them.

There is no mixing of incompatible wastes at the facility. Waste compatibility is determined by test methods from "SW-846: Test Methods for Evaluating Solid Waste - Physical/Chemical Methods"; or equivalent accepted methods. No material will be transferred into an empty container or unit that previously contained an incompatible waste, unless the container or unit has been properly cleaned or decontaminated. All pumps and hoses will be properly cleaned or decontaminated to eliminate cross contamination with incompatible wastes. Processing or treatment is by batch mode. Only compatible wastes will be processed by any unit or treated in any batch. All units will be cleaned or decontaminated at the end of processing or between batches of incompatible wastes. All cleaning and decontamination fluids and residues collected will be analyzed and managed in accordance with all applicable local, state, and federal regulations.

### **3.5 Hazardous Debris**

#### ***3.5.1 Debris Categories Stored or Treated***

The EQFL facility will manage hazardous debris. Hazardous debris will be managed in the same manner and in the same locations as other non-debris hazardous waste. The only difference is that the land disposal restrictions of some hazardous debris may vary from those of non-debris hazardous waste. EQFL will comply with land disposal restrictions specified in 40 CFR Part 268 for all hazardous waste whether it is debris or non-debris. The debris will include solid materials exceeding a 60 mm particle size that is a manufactured object, plant matter, animal matter, or natural geologic material. Mixtures comprised primarily of debris, by volume, based on visual inspection will be managed as debris.

EQFL will treat allowable waste codes of hazardous debris in the hazardous waste treatment tank in instances where the contaminated debris comprises less than 50% of a batch subject to treatment. The method of treatment for the debris will be microencapsulation. Sampling of the treated material will use the most appropriate sampling device depending on the nature of the contaminated debris. This is a decision that will need to be made based on the debris being treated and the process for collecting the most representative sample.

Debris will include non-friable, inorganic solids that may require cutting or crushing and grinding in mechanical sizing equipment prior to treatment. These materials include:

- Metal Slags
- Glassified Slags
- Glass
- Concrete
- Bricks
- Metal Containers
- Industrial Equipment (pumps, pipes, valves, etc.)
- Scrap Metal

#### ***3.5.2 Contaminant Categories Stored or Treated***

Hazardous debris contaminants include debris that contains a hazardous waste listed in Subpart D of Part 261 of 40 CFR or that exhibits a characteristic of hazardous waste identified in Subpart C of Part 261 of 40 CFR.

Hazardous debris will be managed in the same manner as the hazardous waste contaminants that cause it to be hazardous. All applicable land disposal restrictions for hazardous debris will be met. The land disposal restrictions specified in Part 268.45 of 40 CFR (Treatment Standards for Hazardous Debris) will be utilized for the management of hazardous debris.

### **3.6 Considerations under Federal Law**

No other federal environmental laws apply to the EQFL facility.



## **4.0 WASTE ANALYSIS PLAN**

### **4.1 Introduction**

In accordance with the regulatory requirements set forth in 40 CFR 264.13 (b) and 40 CFR 268.7, EQFL has developed this Waste Analysis Plan (WAP). The procedures set forth in this plan ensure that this facility will be in compliance with all the requirements of 40 CFR 264.13 and 268.7. A copy of the current plan will be available at the facility.

The purpose of this Waste Analysis Plan (WAP) is to identify and document the necessary sampling methods, analytical techniques and overall procedures that are undertaken for hazardous wastes that enter this facility for treatment or storage. As appropriate, the EQFL facility will utilize as guidance the following EPA January 2013 draft document entitled: “Waste Analysis at Facilities That Generate, Treat, Store and Dispose of Hazardous Wastes: A Guidance Manual.” In addition, EQ has a number of SOPs used internally and these are included in Appendix J (of Volume 2 of 3).

The EQFL WAP describes the following:

1. Pre-Acceptance Procedures—Used to determine the acceptability of a particular waste stream pursuant to facility permit conditions and operating capabilities prior to shipment of that waste to the facility.
2. Incoming Waste Shipment Procedures—Used to identify that the delivered waste shipment matches the accompanying manifest, as well as the pre-acceptance description (the profile), and the conditions of the facility permit.
3. Sampling Methods—Used to ensure that adequate quality control (QC) waste identification samples are properly obtained.
4. Analytical Techniques—Used to verify that the waste received at the facility conforms to the properties and characterization approved on the waste profile form so that the appropriate treatment or storage techniques can be utilized.
5. Operational Procedures—Used to maintain safe and appropriate methods of storage, treatment and ultimate outbound shipment of wastes.

All RCRA-regulated wastes treated or stored at the facility will be handled in accordance with the Waste Analysis Plan procedures. Non-RCRA regulated waste is, by definition, not regulated by RCRA. Non-RCRA regulated waste will be managed at the facility. This will not interfere with the management of hazardous waste at the facility. It is EQFL's policy to screen non-RCRA regulated waste for hazardous characteristics utilizing the EQFL WAP. This is to ensure that the facility will be in compliance with all applicable permits and regulations to properly, safely manage all waste.

All forms shown within this WAP are typical forms currently used by the facility. These forms may change or be updated to equivalent forms as regulations, customer needs, operations or company policy dictates. Updated copies of all forms outlined in this plan will be provided to the FDEP as these are put into use by the facility.

### **4.2 Pre-Acceptance Procedures**

EQFL has developed procedures to determine the acceptability of specific wastes for management at the facility in accordance with safe storage, treatment and all prohibitions on Land Disposal (40 CFR Part 268). The pre-acceptance procedures dictate what information a potential customer will provide to enable EQFL to determine the acceptability of the waste for treatment, storage and ultimate off-site disposal. The

Pre-Acceptance Procedure is the mechanism for deciding to reject or accept a particular type of waste, prior to its shipment to the facility, based upon the conditions or limitations of existing permits, applicable land disposal restrictions and its compatibility with other wastes being treated and stored, at the facility. EQFL operations, technical, and field personnel are trained annually in completing waste profiles, DOT regulations (hazard classes, shipping names, and more) manifesting, and Land Disposal Restrictions (LDR).

The procedures listed below are utilized to review information and approve or reject waste prior to delivery to the facility.

1. The generator will provide EQFL with a completed Waste Profile form. A copy of the current EQFL Waste Profile is included in Appendix J. The completed profile provides the following information:
  - General Information
  - Physical Characteristics
  - Chemical/Physical Composition
  - Characteristic Constituents
  - Reactivity & Other Hazards
  - Hazardous Characterization
  - Shipping Information
  - Certification

At a minimum, the generator supplies all the information needed to treat, store, or dispose of the waste as required by 40 CFR Part 264.13(a)(1).

2. The generator will provide EQFL with a representative sample, if requested. A copy of the current EQFL Sample Chain of Custody form is included in Appendix J (Volume 2 of 3).
3. The generator will provide EQFL with other supporting documentation, which may include Material Safety Data Sheets (MSDS), laboratory analysis, and any information concerning Land Disposal Restrictions (LDR) of 40 CFR Part 268. A completed Land Disposal Restriction (LDR) form will describe the LDRs that apply to the waste. A copy of the current Land Disposal Restrictions form is included in Appendix J (Volume 2 of 3). This form was recently updated to include the new Phase IV LDR regulations.
4. EQFL will review information presented on the Profile, Toxicity Characteristic (TC) Certification, analytical data supplied by the generator, MSDSs, SDSs and other applicable documentation as supplied by the generator for:
  - Completeness
  - Process producing waste
  - Chemical constituents of waste
  - Analytical results (minimum TC certification)
  - Land Disposal Restrictions requirements
5. EQFL will determine the acceptability of the waste based on:
  - The permit conditions for the facility
  - Facility operational requirements
  - The compatibility of the waste being consolidated or treated
  - The status of waste under current Land Disposal Restrictions
  - The available on-site treatment capabilities
  - The available off-site recycling, reclamation, treatment or disposal options

6. The pre-acceptance evaluation will be recertified biennially at a minimum. Recertification or pre-acceptance evaluations will be done when any of the following occur:
  - Biennially (every two years)
  - Waste Generation Process Changes
  - Waste Analyses or Screening Changes
  - Regulatory Changes Related to Waste Analysis
7. EQFL may perform necessary annual analysis, dependent on the particular waste stream characteristics, from a representative sample of the waste received to ensure that the initial analysis is accurate and up-to-date.
8. Samples may be requested when the situation is warranted, such as for waste requiring treatment by solidification in order to perform solidification evaluation testing.

**Note:** Laboratory Packaged (Lab Pack) wastes are the exception to the above procedures. Lab pack procedures are discussed in the lab pack section of the WAP.

### **4.3 EQFL Technical Services**

Approval chemists (or equivalent) are responsible for the pre-acceptance evaluation decision (i.e., whether to accept for storage, treatment, and off-site disposal or reject the waste). The approval chemist or coordinator reviews the profiles for general information, physical characteristics, chemical/physical composition, characteristic constituents, reactivity/other hazards, hazardous characterization, shipping information, and certifications. The chemist or coordinator also reviews the process producing the waste, waste description, EPA waste code identifications, and chemical constituents to determine the facility's ability to safely and properly manage the waste for storage, treatment, and ultimate disposal.

Problems with the profile sheet form encountered during the evaluation process, such as EPA waste codes that do not correspond with the process producing waste statement, chemical constituents that do not correspond with analytical data supplied, or analytical data that does not confirm treatment standards have been met for land disposal restricted waste (when applicable), are noted by approval personnel. An attempt to resolve discrepancies will be made by contacting the generator for additional information, documentation or analytical data. Discrepancies that cannot be resolved will result in the rejection of the waste profile. A Technical Services Manager or equivalent is available to review approval and rejection decisions if necessary.

The pre-acceptance evaluation is concluded with the final decision regarding the acceptability of the waste. Storage, treatment and disposal decisions are based on (but not limited to):

- Conditions or limitations of existing permits and regulations
- Capability to safely manage the waste
- Regulatory requirements
- Results of compatibility evaluation or treatability tests (as appropriate)
- Management decision

#### **4.3.1 Waste Characterization**

Indicated below are the waste characterizations of the various waste streams managed at the treatment/storage and transfer facilities. Actual waste analysis information (if available), waste profile information, supporting lab analytical, QC lab reports, manifests, land ban forms, and the EQFL computer data base information will be retained as part of the facility operating record.

### **Flammable Liquids**

Physical State: Liquid  
Flash Point: <140 F  
Chemical Composition: Solvents, paints, thinners, alcohols, fuels, oils, etc.  
Disposal: Disposal is off-site via fuel blending and/or incineration.  
Other Data: Facility warehouse storage is in an explosion-proof designed area.  
Vehicles are placarded and meet all DOT requirements.

### **Oxidizers/Reactives/Flammable Solids**

Physical State: Liquid/Solid/Semi-Solid  
Chemical Composition: Oxidizers: permanganates, nitrates, nitrites, perchlorates, etc.  
Reactives: cyanides, sulfides, and water-reactive metals  
Flammable Solids: water-reactive metals, phosphorous, paint sludges, and solid residues.  
Disposal: Disposal is off-site via deactivation or incineration.  
Other Data: Cyanides and sulfides must be kept separate from acids.  
Oxidizers must be kept separate from organics.  
Flammable solid/water reactives must be kept dry and usually immersed in kerosene.

### **Poisons**

Physical State: Liquid/Solid  
Chemical Composition: Arsenics, carbamates, endrin, lindane, toxaphene, methoxychlor, etc.  
Disposal: Disposal is off-site via incineration.  
Other Data: May be an inhalation hazard.

### **Corrosives**

Physical State: Aqueous  
pH: Acids: 2.0  
Caustics: 12.5  
Chemical Composition: Acids: Hydrochloric, nitric, chromic, phosphoric, sulfuric, etc.  
Caustics: Sodium hydroxide, potassium hydroxide, etc.  
Disposal: Disposal is off site via neutralization. Alternately, some, or all, of the acceptable materials may be treated in the to-be-constructed treatment tank in the waste processing building and disposed of at a subtitle D landfill once decharacterized, meets LDRs and passes the PFT.  
Other Data: Keep acids and caustics separated from each other and do not add water to acids or caustics.

### **Characteristic and Others**

Physical State: Liquid/Solid/Sludge  
Chemical Composition: Listed plating sludges, toxic metals (chrome, lead, etc.), D018-43 TC wastes.  
Disposal: Disposal is off site via stabilization, incineration, or landfill.

Alternately, allowable waste codes may be treated in the-to-be constructed treatment tank and disposed of at a Subtitle D facility once decharacterized, meets LDRs and passes the PFT.

#### **4.4 Sampling Methods**

Sampling is performed at the facility by EQFL personnel trained to sample incoming materials. The training includes personal protective equipment, sampling requirements, sampling equipment, and sampling techniques. All sampling personnel are HAZWOPER trained and are expected to follow appropriate health and safety procedures during all sampling and analysis activities. Based on generator knowledge of the waste to be sampled, health and safety procedures will be implemented to assure worker safety. These measures include wearing appropriate safety glasses, gloves and protective clothing or apron when collecting or handling samples

Specific sampling procedures are dependent on both the nature of the material and the type of container. This section presents sampling methods to be utilized by EQFL personnel. The generator provides EQFL with information concerning the concentration, as well as the nature of the waste components on the profile sheet form. The analysis to be performed is a conformance check. Sampling protocols will follow approved sampling methods.

The sampling equipment and procedures described in this Waste Analysis Plan represents the facility's recommended sampling protocol for general types of waste materials and containers. Certain waste materials or containers may require different sampling procedures or equipment. Procedures and equipment may be updated and revised as new equipment or procedures become available. In general, the methods utilized for sampling correspond to those referenced in 40 CFR 261, Appendix I. The general sampling methods and the equipment utilized for waste materials are presented in the Sampling Methods and Equipment Table which follows.

In addition to ASTM, FDEP and EPA sampling procedures, EQFL has instituted specific methods for ensuring that samples taken from various types of containers are representative. The types of containers to be sampled at the facility vary, but usually are 55-gallon steel drums. Containers may consist of pails, drums, overpacks, totes, tankers, roll-off boxes, the hazardous waste treatment tank, or other DOT approved containers. The sampling devices are selected, depending on the size and type of containers and on the specific material involved.

Access to a container (e.g., barrel bungs) influence the location within the container from which samples can be taken. Every effort to achieve representative samples will be taken. Sampling of small containers (e.g., drums and pails) varies with the nature of the waste material. For flowable materials, the sampling device of choice is a Coliwas unit, tubing or sample rods, to draw a full vertical section. For non-flowable wastes, tubing or a trier is normally used to obtain a sample. Table 4-1 shows sampling methods and equipment. As appropriate, the FDEPs SOPs (SOP) FS 5000 will be used to supplement the methods and equipment specified in Table 4-1.

**Table 4-1**  
**SAMPLING METHODS AND EQUIPMENT**

<u><b>Material</b></u>	<u><b>Method</b></u>	<u><b>Equipment</b></u>	<u><b>Sample Container</b></u>
Extremely viscous	ASTM D140-70, E300 (a)	Tubing (b) or thief	Plastic/Glass jar w/screw top
Crushed or powdered material	ASTM D364-75, E300 (a)	Tubing (b), trier, scoop, or shovel	Plastic/Glass jar w/screw top
Soil material	ASTM D420-69, E300 (a)	Tubing (b), trier, auger, scoop, or shovel	Plastic/Glass jar w/screw top
Soil-like material	ASTM D1462.65, E300 (a)	Tubing (b), trier, auger, scoop, or shovel	Plastic/Glass jar w/screw top
Fly ash-like material	ASTM D2234-76 (a)	Tubing (b), trier, auger, scoop, or shovel	Plastic/Glass jar w/screw top
Containerized Liquids	SW-846 (c) ASTM E300 (a)	Coli-wasa or tubing (b) or sampling rod	Plastic/Glass jar w/screw top
NOTES:			
(a) ASTM International. Annual Book of ASTM Standards. Philadelphia, PA. 1982 or most recent edition.			
(b) Personal Protection and Safety Training Manual (Cincinnati, OH: USEPA National Training and Operational Technology Center 1981), pp. 3-1 and 3-4.			
(c) U.S. Environmental Protection Agency. SW-846-Test Methods for Evaluating Solid Waste. Office of Solid Waste and Emergency Response, Washington, D.C., Third Edition 2009 or most recent edition.			

Liquids in large containers are sampled with a Coli-wasa, tubing, or sample rod to obtain a vertical section. A composite sample is obtained by taking equal volumes from each applicable port and mixing in a common container. Light, dry powders, granules and heavier solids are sampled by trier or shovel, or by coring with heavy tubing or an auger.

Sampling equipment will be decontaminated by scrubbing with a solution of Alquinox or similar material followed by a distilled water rinse. The sampling equipment will then be allowed to air dry and any further manufacturer recommended maintenance will be performed. The rinsate collected during decontamination will be containerized and will be added to the next batch of like material to be treated. Because the material will have been decharacterized and meets LDRs, it will no longer be hazardous and accumulation start dates are not applicable. A further option would be to decant the liquids and dispose of those as wastewater and to treat the accumulated sediments as solid waste in the solid waste treatment unit.

Sampling strategy and techniques are described in more detail in the Treatment Tank Section 12.0. The integrity of samples collected for internal EQFL analyses will be documented on the internal chain of custody form contained in Appendix J (Volume 2 of 3). Samples intended for confirmatory analyses by

an independent off site laboratory will be packed and shipped in laboratory provided containers along with proper chain of custodies provided by the laboratory.

#### **4.5 Analytical Rationale**

Analyses are performed on selected incoming wastes by EQFL to verify conformance with the approved profile. Analytical methods are classified as "Fingerprint Analyses," "Additional Analyses" and "Supplemental Analyses." This arrangement allows a progressive decision approach to waste identification enabling EQFL to analyze and to adequately identify the waste and to provide operational controls for the various treatment processes as well as compatibility determinations. In addition, a minimum of 10 percent (considered an industry norm) of all waste received will be Quality Assurance (QA) checked for accuracy of classification. Any sample failing the 10% QC screen will be further analyzed in detail for the particular parameter(s).

All incoming waste shipments are subjected to the "Fingerprint Analyses." "Fingerprint Analyses" are sufficient to properly verify that the waste received is the same as the waste that was characterized and identified on the pre-acceptance evaluation (waste profile). This is not designed to characterize the waste. EQFL may perform other "Additional Analyses" or "Supplemental Analyses" to provide further verification of waste characterization. "Additional Analyses" and/or "Supplemental Analyses" are performed at the direction of the Facility Management to further identify a waste or to make certain proper handling and treatment can be achieved. EQFL management may select these additional and/or supplemental analyses to perform the annual analysis, when fingerprint analyses indicate non-conformance or to provide additional operational control and compatibility determinations. A summary of the analytical parameters within each category and their use is provided below:

##### ***4.5.1 Fingerprint Analyses***

The "Fingerprint Analyses" include six screening procedures that may be performed to provide a general identification of the waste received. These analyses provide the basis for the conformance check against the profile and manifest in confirming the identity of the waste. Based on a review of the Waste Characterization Report and a visual examination of the waste, the following fingerprint analyses may be performed based on the observations. The parameters and associated rationale of the six "Fingerprint Analyses" are as follows:

1. Physical Description (i.e. appearance, physical state, layers, etc.) is used to determine the general physical properties of the waste. This facilitates subjective comparison of the sampled waste with prior waste descriptions or samples. It is used to identify obvious differences in waste type. It is also used to identify the presence or absence of free liquid.
2. The pH Screen is undertaken to indicate the pH and, in general, the corrosive nature of the waste. The pH Screen will also aid in the compatibility determinations. pH may not apply to certain waste types (e.g., organic solvent waste, oil waste, or insoluble solid waste).
3. Water Mix is used to determine whether the waste has a potential to vigorously react with water to form gases or other products and to indicate whether it generates extreme heat when mixed with water. This test does not apply to wastes that are already in contact with excess water, or for which sufficient analytical data exist that indicate no potential reactivity with water.
4. Flammability Potential Screen is used to indicate the ignitability potential of the waste. It is also used to identify obvious differences in waste type, such as waste solvent



- substituted for a waste acid. This test can be applied to all waste liquids, semi-solids, or solids.
5. Organic Halogen Screen is used to indicate whether or not halogenated organics are present in the waste and the need for further analysis. It is also used to identify obvious differences in waste type such as waste solvent substituted for a waste acid. This test can be applied to all waste liquids, semi-solids, or solids. The Organic Halogen Screen will be used for wastes where halogen information is necessary. For example, hazardous wastes carrying halogen waste codes would not require this screen since it would not provide any useful information.
  6. Oxidizer Screen is used to indicate whether or not the waste is a potential oxidizer. No EPA test method exists for identifying oxidizers. 40 CFR 261.21(a)(4) identifies oxidizers as defined in 49 CFR 173.151 by DOT. The DOT test involves igniting the material and a known oxidizer for comparison testing. The EQFL Oxidizer Screen will not involve igniting oxidizers. The EQFL Oxidizer Screen will be utilized to screen potential oxidizers. For example, obvious organic wastes would not require this screen since they cannot be oxidizers.

#### **4.5.2 Additional Analyses**

The applicability of these analyses as described below, are based on procedures and protocol formulated by EQFL (when determined necessary for proper classification):

1. Solidification Evaluation Test is run to determine whether the waste is amenable to solidification and to determine the ratio of solidification reagent-to-waste required to effect solidification.
2. Land Disposal Restriction (LDR) Stabilization Evaluation Test is run to demonstrate whether or not a Land Disposal Restricted Waste can be stabilized to meet the appropriate treatment standard.
3. Oxidizer Screen is used to determine the presence of organic peroxides or inorganic oxidizers. It is not required if the waste is not suspected of being an oxidizer.
4. Cyanide Screen is used to indicate whether the waste has the potential to produce hydrogen cyanide upon acidification. It is not required if the pH of the waste is less than 6.0 or if the waste is not suspected of containing cyanides.
5. Sulfide Screen is used to indicate whether the waste has the potential to produce hydrogen sulfide upon acidification. It is not required if the pH of the waste is less than 6.0 or if the waste is not suspected of containing sulfides.
6. Peroxide Screen is used to indicate the presence of peroxides. It is not required if the waste is not suspected of containing peroxides.
7. BTU Screen is used on organic material to determine if BTU's are greater or less than 5,000 BTU/lb. for energy recovery by fuels substitution. It is not required for wastes not applicable to fuels substitution. It is also not required for fuels known to have greater than 5,000 BTU/lb.
8. Nitric Acid Screen is used to determine if material contains nitric acid. It is not required if the waste is not acidic or not suspected of containing nitric acid.
9. Radiation Screen is used to screen wastes for radioactivity above background. EQFL is not permitted to accept radioactive or low-level mixed waste and does not routinely screen for radioactivity. This is an additional test EQFL can perform using the Geiger Mueller counter if management had reason to suspect that an incoming waste contained radioactive material. It's uncertain what particular instance or set of circumstances would trigger the request, or need, for radiation screening.

10. GC Scan is used to identify separate organic compounds. A GC Scan may be requested by management if they believe it is needed.
11. Metals scan is used to identify metals constituents. A metals scan may be requested by management if they believe it is needed.
12. Consolidated Confirmatory Compatibility Testing. The SOP for this test procedure is contained in Appendix J (Volume 2 of 3) "Liquids Bulking." Compatibility Testing is performed to determine if materials are compatible prior to consolidation or treatment.

#### ***4.5.3 Supplemental Analyses Using Standard Techniques***

These test methods are adopted from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Office of Solid Waste SW-846, Updates and Appended Materials) and other EPA approved methods. Other methods may be added as required.

#### **4.6 Incoming Waste Shipment Procedures**

Each hazardous waste shipment, upon arrival at the facility, will be inspected, sampled and analyzed as defined herein. All RCRA-regulated waste shipments will be sampled and analyzed according to this WAP. This includes bulk shipments manifested to EQFL even though it may be re-manifested out immediately without entering or not stored at the facility. All shipments received on manifest will be entered into the EQ electronic waste tracking system (WTS). This serves two purposes. First, it compares the actual waste shipment identity with that identified in the pre-acceptance phase and that listed on the waste manifest. Second, it ensures the proper management of the waste through final disposal off site.

The Quality Control (QC) sheets or WTS container tracking system tracks the waste through the facility from point of arrival at the receiving area to its final disposal. The current EQFL QC sheet is included in Appendix J (Volume 2 of 3). The identity, quantity, and types of waste from each generator's incoming shipment are tracked and documented by the WTS tracking system and QC sheets. Fingerprint Analysis results are also tracked and documented by this method.

Incoming waste shipment identification verification begins upon arrival of the waste at the facility. The sampling and analysis of the incoming waste will be performed in accordance with the methods described in this WAP. The shipping papers for the waste are checked and compared to the approved profile. The waste will be accepted (pending quality control verification) if the shipping documents are correct. Shipping document discrepancies are resolved with the generator prior to acceptance (pending quality control verification) of any waste material. Hazardous waste shipments will be sampled and analyzed for at least the mandatory waste fingerprint analyses. This occurs every time a shipment is received. A flow chart of the EQFL Waste Screening process is included in Appendix J (Volume 2 of 3).

A minimum of 10 percent of the containers per each waste stream will be selected for sampling of non-lab pack waste. Example: For a shipment of one waste stream of 80 containers, a minimum of 8 samples will be taken. Container samples that are related to one generator and one process may be composited prior to analysis, providing the individual samples are similar in physical appearance. If discrepancies are noted in samples taken from 10 percent of the containers, such as the material approved is a solid and liquids are found, all remaining containers will be opened and inspected (at minimum).

Certain types of waste are not sampled or analyzed. These are lab packs from facilities such as households, laboratories and schools, and "empty" containers. A visual inspection of at least 10 percent of the "empty" containers will be performed to ensure the containers are empty as per 40 CFR 261.7(b)(1). Lab pack procedures are described in the Lab Pack section of this WAP. Wastes such as light bulbs, lamps and batteries are also not sampled.

The general logic utilized by the facility personnel in deciding whether to accept or reject a particular waste load is based on "Fingerprint Analyses." Other major decisions regarding waste acceptance is the need for additional analyses, the actual waste identification, and an evaluation of whether a waste found to be off-specification can still be accepted.

The EQFL chemist or facility manager decides whether additional analyses are required for a particular waste based on the following:

- Results of "Fingerprint Analyses"
- Knowledge of generator and/or waste-generating process
- Results of pre-acceptance evaluation.

Further testing will be required if the results indicate unexpected presence or absence of screen parameters with respect to pre-acceptance analytical results or if there is reason to suspect that the waste composition has changed. The effectiveness of the waste identification step is dependent on the following components:

- Inspection
- Sampling
- Analytical Results
- Waste Profile
- Any additional documentation supplied by the generator
- Land Disposal Restrictions of 40 CFR Part 268
- Waste Manifest
- Pre-Acceptance Analytical Results
- Management Decision

Laboratory personnel must classify the waste as being "off-specification" if it is significantly different in waste type from the information shown in the profile, the pre-acceptance evaluation or on the manifest. Wastes found to be in non-conformance may be rejected. They may be re-evaluated for possible acceptance by the facility despite the non-conformance or they may be shipped to an alternate TSD facility if the proper treatment method is available. The re-evaluation may be based on the following criteria:

- Permit Authorization
- Discussions with the Generator
- Facility Conditions
- Facility Manager's or Designee's Judgment

Pursuant to 40 CFR Part 265.72, the facility personnel must discuss and attempt to resolve with the generator any discrepancies between the actual waste and that shown on the manifest.

EQFL does not accept the materials listed below:

1. Regulated Biomedical Waste. If incidental biomedical waste is discovered in the shipment and it is identified by the material being placed in a "red bag" or is clearly labeled as such, the material will be rejected back to the generator. If non-hazardous material, which is not regulated by chapter 64E-16 F.A.C. is discovered, the material will be handled as solid waste.
2. Regulated Radioactive Materials

#### **4.7 Operational Procedures**

Each movement of a waste within the facility during which any change in its type or overall properties occur may make it subject to additional inspection, sampling and analysis to determine appropriate handling and management of the waste. Many of the analyses needed for the treatment, storage, and disposal functions are performed during incoming shipment identification. These are not repeated unless it is known or believed that the waste identity may have changed during storage or processing.

#### **4.8 Analysis of Treated Hazardous Wastes**

Waste that is treated such that it no longer exhibits the hazardous waste characteristic(s) for which it was listed is no longer considered hazardous and can be disposed of at a non-RCRA regulated facility assuming a grab sample is also tested, meets LDRs and contains no free liquids. In the case of the material EQFL intends to treat, the objective would be to assure through analytical testing of representative, composite samples that the waste no longer meets the characteristics (can be decharacterized) and meets LDRs as summarized in Table 12-1 and further, that the treated material contains no free liquids as determined by the Paint Filter Test (Method 9095B).

Waste is to be deposited directly into the top of the box, the pH adjusted, and then a solidification agent is introduced. The process will consist of raising the pH for metals treatment into the 9 to 13 range which appears to be the optimal range based on similar treatment processes at other EQ facilities. The materials are mixed using a backhoe, portable mixer, or similar piece of equipment. Additional solidification agent is added until no free liquids are present. Frequent bench testing will be required and samples will be collected at suspected endpoints of treatment and analyzed for a short duration (30-90 min) TCLP test or possibly, because the material will be a solid, a total metals analysis for the D004-D011 waste codes. EQ has found at other facilities that if a sample does not pass a TCLP test after 90 minutes, it's not likely to pass a full, 24-hr TCLP. Treated materials that "pass" the short duration TCLP test will be followed by a representative, composite sampling of the waste which will be sent off site for TCLP analysis by a NELAP accredited laboratory. Further, a grab sample will be randomly collected to assure the treated waste meets LDRs and can be disposed of at a non-hazardous, Subtitle D landfill.

Treated materials that pass the TCLP test, meet the LDRs and contain no free liquids will be loaded into roll off boxes and/or dump trailers for subsequent disposal at an approved disposal facility (Subtitle D landfill). If the treated material fails the initial TCLP screening and is still characteristically hazardous, it will continue to be treated until a TCLP test has confirmed the material no longer retains the hazardous characteristics (can be decharacterized) for the waste being treated. Further, a grab sample of the treated material will also be tested to assure it meets LDRs. It should also be pointed out that the disposal facility accepting the treated material may require additional testing before they will accept the waste. EQFL will determine testing requirements for the proposed disposal facility and have the samples analyzed accordingly.

#### **4.9 Quality Control Policy**

EQFL intends to follow all sampling and testing criteria set forth in accordance with applicable SW-846 methods. For methods not addressed in SW-846, ASTM or comparably standardized laboratory methods will be used. It is EQFL's understanding that this will be acceptable since our sampling and analysis at the facility are primarily for "Fingerprint Screening" of incoming wastes to assure that they meet profiled parameters. If a NELAP accredited laboratory has provided sufficient results then waste codes may be removed from the sampled containers.

EQFL has developed a program of quality control practices and procedures to ensure that precision and accuracy are maintained throughout its laboratory. Contract laboratories employed by the company must be NELAP accredited. Data produced for use by DEP will use applicable DEP SOPs per the DEP Quality Assurance Rule, 62-160.210, .240, .300 & .320, F.A.C.

The EQFL QC Sampling and Analysis Procedures are utilized to verify waste characterization and not to quantitatively analyze the waste. This section does not provide specific performance standards of quality control procedures for individual sampling and analysis techniques. Such specifics can be found in the

facility Laboratory SOP manual. The specific performance standards are dynamic and are revised as warranted to reflect technological advances in sampling and analytical techniques.

## **4.10 Analytical Procedures**

### ***4.10.1 Fingerprint Analyses***

These are analytical procedures designated to identify or screen waste. They have been developed by EQFL based upon its operating experience as rapid but effective means for establishing key decision parameters pertinent to proper waste management.

1. **Physical Description.** Samples are inspected and the physical appearance of the waste is recorded Physical State (solid, semi-solid, liquid, etc.)
2. **pH Screen.** Full-range pH paper or a pH meter is used directly on liquid samples and on the free liquid portion of liquid/solid samples.
3. **Water Mix Test.** Approximately equal volumes of waste and water are mixed. Water should be added to the waste rather than addition of wastes to water. The following characteristics are noted:
  - Gross Solubility in H<sub>2</sub>O
  - Gross Specific Gravity (heavier or lighter than water)If water reactivity is noted (generation of gases, heat, turbulence or sudden physical changes such as solidification, thickening or emulsification) record the results.
4. **Flammability Potential Screen.** A small amount of a liquid waste sample or a solid waste sample is placed into an aluminum-weighing tray (or similar laboratory container). A flame is very briefly applied to the sample. If the sample does not ignite, the result is recorded as a negative flammability potential (e.g., negative). If the sample ignites with the application of a flame, then the result is recorded as positive and may require further investigation. Liquids with a negative flammability potential may be quantified using an approved flash point tester.

Solids may be further investigated (e.g., via review of the Generator's Waste Material Profile Sheet or other supporting documentation) to determine flammability and BTU value for possible fuel blending disposal off site. The investigation will also examine the waste's potential to cause fire through friction, absorption of moisture, or spontaneous chemical changes.

**Note:** Halogenated solvents typically give off vapors that burn with a yellow (or greenish) smokey (sooty) flame in the presence of an external flame. Wastes with this type of non-sustaining flame are reported as having a negative flammability potential.

### ***4.10.2 Additional Waste Analyses***

1. **Specific Gravity.** This test is performed to aid in determining if an acid or base may be concentrated or to determine the weight of the material.
2. **Cyanide Screen.** This screening test is performed using Cyantessmo (or equivalent) test paper according to the laboratory operating procedure.
3. **Sulfide Screen.** This screening test is performed using lead acetate test paper (or equivalent) according to the laboratory operating procedure.
4. **Radiation Screen.** The sample is placed in a position below the Geiger-Mueller probe (or equivalent) for a period of at least five (5) seconds. An audible alarm and meter reading above the background reading will indicate radioactivity.

5. Oxidizer Screen. This screening test is performed using potassium-iodide starch test paper (or equivalent) according to the laboratory operating procedure. All positive oxidizer screen results will be verified with an ORP test (or equivalent).
6. Consolidated Confirmatory Compatibility Testing. The SOP for this test procedure is contained in Attachment J in Volume 2 of 3 "Liquids Bulking."

#### **4.11 Acceptance of Packaged Laboratory Wastes (Lab Packs)**

Laboratory chemicals from many different sources are accepted at the facility. The majority of the "laboratory chemicals" (lab packs) received by the facility are household exempt wastes. The household waste lab packs consist primarily of paints and paint related materials. Other household wastes include cleaners, pool chemicals, pesticides, and lawn chemicals. Lab packs from industrial generators consist of virtually any type of chemical acceptable by the EQFL permit. Lab packs may be EQFL packed or be "customer" (generator) packed. Lab packs that are EQFL packed have been packed by EQFL personnel (chemist or equivalent). The container contents have been reviewed, packed, documented, approved, and verified by an EQFL chemist or equivalent. Generator packed lab packs have been packed by generator personnel. The generator submits a container contents sheet to EQFL for review and approval. A copy of the current EQFL lab pack container contents sheet is included in Appendix J (Volume 2 of 3).

The following is a partial example of lab pack guidelines and procedures that are used for lab pack wastes. Complete EQFL lab pack guidelines are available on site at the EQFL facility.

##### ***4.11.1 Guidelines for Acceptable Lab Packs***

###### **Group 1: Alkali (with pH greater than 12.5)**

- A. Inorganic alkaline chemicals (e.g. sodium hydroxide, calcium hydroxide including alkaline salts,  $\text{Na}_3\text{PO}_4$ , sodium borate).
- B. Organic bases (e.g. triethanolamine)

###### **Group 2: Acids (with pH less than 2)**

- A. Inorganic acids (e.g. hydrochloric acid, sulfuric acid) as solids or as liquids.
- B. Organic acids, (e.g. stearic acid, citric acids, acetic acid)

###### **Group 3: Non-Hazardous - (e.g., plastics, oils)**

- A. No container larger than 5 gallons to be packed in drum.
- B. No more than 50#/containers of solids to be packed without special permission.
- C. Maximum quantities per lab pack container are as follows:
  - a) 20 gallons per 55-gallon drum
  - b) 11 gallons per 30-gallon drum
  - c) 2 gallons per 5-gallon drum
  - d) For solids, use spacing rule (e.g. 2-3 inches between drum walls and materials)
  - e) Sealed liquid containers should be overpacked in drum with enough compatible absorbent to absorb all liquid if broken.

The above list is not all-inclusive but should be regarded as an example of a basic packing guideline for lab packs.

##### ***4.11.2 Unacceptable Lab Packs***

- A. Regulated Bio-Hazardous
- B. Regulated Radioactive Materials

#### **4.12 Procedure for Waste Acceptance**

Before containers are shipped to EQFL, a waste profile form or electronic version must be submitted to EQFL, including a complete set of container contents sheets describing the contents of each drum in terms of explicit chemical identification, quantities, concentrations, pH, etc., as applicable. EQFL Technical Services (chemist or equivalent) will review the profile and the container contents sheets and inform the generator of any materials that are not acceptable, the packing of incompatible materials that are not acceptable, or the packing of incompatible materials within the same drum. When the necessary corrections have been made by the generator, corrected container contents (changes indicated, initialed, and dated) should be sent to EQFL. After review of the corrections, the generator will be notified that the waste is approved for shipment. When the hazardous waste arrives at EQFL, a chemist or equivalent will quality control check the lab packs. A minimum of 10% of EQFL packed hazardous waste lab packs will be opened and inspected. Each generator packed hazardous waste lab pack (100%) will be opened and inspected. See the Waste Screening Flow Chart in Appendix J (Volume 2 of 3) for further information.

#### **4.13 Site Generated Waste**

Site-generated wastes include the following:

- Containment sump liquids and residues
- Spent fluorescent lamps
- Spent batteries
- Lab trash
- Lab wastes and rinses
- Samples (when hold time is complete)
- Personal protective equipment
- Chemical rags

Site-generated wastes are characterized and managed according to all applicable requirements and regulations.



## **5.0 INSPECTION PLAN**

### **5.1 General**

The EQFL facility is regularly inspected for malfunctions and deterioration, operator errors, and discharges, which may cause (or lead to) release of hazardous waste constituents to the environment or a threat to human health. These inspections are intended to identify problems in time to correct them before a release of hazardous waste or constituents occur. A facility inspection log is maintained to document the results of these inspections.

### **5.2 Schedule**

All monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment, including the on ground treatment tank, that are important to preventing, detecting, or responding to human health or environmental hazards will be inspected daily (each operating day). The inspections will be performed by trained EQFL operations personnel. All inspections will be reviewed and approved by a senior EQFL employee (manager, supervisor, or chemist).

The inspector will look for the items listed on the EQFL Facility Inspection Log. All areas subject to spills, such as the loading/unloading, container storage areas, hazardous waste treatment tank, and oil-water separator are inspected daily (each operating day). All containers are inspected for container condition, closure, labeling, and aisle space. Housekeeping and proper storage in the storage building are also inspected daily. The vehicle loading and unloading areas and transfer facility vehicles and wastes are inspected daily to identify problems. External areas such as the area for storage of empty containers and the stormwater systems (trenches, filter, and retention pond) are inspected daily to identify problems. Safety and emergency equipment is inspected daily for condition, availability, and operations capability. The safety and emergency equipment inspected includes fire control equipment, communication devices, safety showers and eye washes, spill kits, exits, safety supply lockers, fire suppression and alarm systems, and LEL meter and sensors. The contents of the safety supply lockers will be inspected and inventoried monthly. The date of inspection and inventory will also be noted on the Facility Inspection Log. The contents of the safety supply lockers are to be used only in the event of an emergency. The date of re-inspection and re-inventory will be noted on the Facility Inspection Log. The waste inventory for each hazard class and bay, to include transfer facility waste, is noted daily on the inspection log.

### **5.3 Remedial Actions**

Every unsatisfactory condition noted during the inspection will be immediately corrected if possible. Items not immediately corrected will be noted on the inspection log. Unsatisfactory conditions noted on the inspection log will be corrected within fourteen (14) days. EQFL will submit a written schedule to correct the deficiency to the FDEP should any deficiency not be corrected within fourteen (14) days. Where a hazard is imminent or has already occurred, remedial action will be taken immediately. The EQFL Contingency Plan will be implemented if a fire, explosion, or unplanned release of hazardous waste or hazardous waste constituents occurs to the air, soil, groundwater, or surface water, which could threaten human health or the environment. All remedial actions completed will be noted on the inspection log.

### **5.4 Inspection Log**

A copy of the EQFL Inspection Log is included as the following page. Inspections will be recorded on the inspection log. These records will be kept for a minimum of three (3) years from the date of the

inspection. The inspection log records include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or remedial actions.

**EQ Florida, Inc.**  
**Container Storage Building Inspection Log**

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

Inspector: \_\_\_\_\_  
Approved By: \_\_\_\_\_

	SATISFACTORY	UNSATISFACTORY
1. Containers		
1.1 Condition, Closure, Compatibility & Leaks	_____	_____
1.2 Proper Labeling	_____	_____
1.3 Over 1 Year Accumulation Start Date	_____	_____
1.4 Proper Storage Location	_____	_____
1.5 Aisle Space, Exits & Housekeeping	_____	_____
1.6 Blind Sumps	_____	_____
2. Safety Equipment		
2.1 Fire Extinguishers	_____	_____
2.2 Telephones & Air Horns	_____	_____
2.3 Safety Show er & Eye Wash	_____	_____
2.4 Acid, Caustic, Solvent & Mercury Spill Kits	_____	_____
2.5 Emergency Exits	_____	_____
2.6 Safety Supply Lockers	_____	_____
2.7 Fire Suppression System, LEL Meter & Sensors	_____	_____
2.8 Signage	_____	_____
3. Vehicle Unloading Area		
3.1 Structural Integrity (cracks, damage, etc.)	_____	_____
3.2 Leaks, Spills & Standing Water	_____	_____
3.3 Trench Sumps (cracks, leaks, etc.)	_____	_____
4. Improved Secondary Containment Area		
4.1 Structural Integrity (cracks, damage, etc.)	_____	_____
4.2 Leaks, Spills & Standing Water	_____	_____
4.3 Trench Sumps (cracks, leaks, etc.)	_____	_____
5. Stormw ater System		
5.1 Trenches	_____	_____
5.2 Sump & Filter System	_____	_____
5.3 Lock Out Box Installed	_____	_____
5.4 Retention Pond	_____	_____
5.5 Outfall No. #1	_____	_____

Waste Inventory		Total
Bay 1	Class 9	0
Bay 1	Acids	0
Bay 2	Flam Liquids	0
Bay 2	Flam Solids	0
Bay 2	Reactives	0
Bay 2	Aerosols	0
ISC	Flam Liquids	0
ISC	Aerosols	0
ISC	Flam Solids	0
Bay 3	Oxidizers	0
Bay 3	Alkalines	0
Bay 3	Poisons	0
Bay 3	Non-Regs	0
Outbound Staging		0
Inbound Staging		0
10-Day Transfer Facility		0
TOTAL HAZARDOUS WASTE IN STORAGE		
0		GALLONS

6. Additional Comments & Information: \_\_\_\_\_  
\_\_\_\_\_

7. Remedial actions necessary for unsatisfactory items: \_\_\_\_\_  
\_\_\_\_\_

8. Remedial actions corrected and completed on: \_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name Signature

**EQ Florida, Inc.**  
**Waste Processing Building Inspection Log**  
**10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area**

Date: \_\_\_\_\_  
Time: \_\_\_\_\_

Inspector: \_\_\_\_\_  
Approved By: \_\_\_\_\_

	SATISFACTORY	UNSATISFACTORY
1. Stormwater System		
1.1 Building Drains and Piping	_____	_____
1.2 Retention Ponds & Overflows	_____	_____
1.3 Inlet Pipe	_____	_____
1.4 Outlet Pipe, Housing & Snorkel	_____	_____
1.5 Outfall No. 2	_____	_____
2. 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area		
2.1 No Leaks	_____	_____
2.2 Secondary Containment Integrity	_____	_____
2.3 Labeling/Placarding/Identification Tags	_____	_____
2.4 Roll-Off Box Condition (Tarps & Boxes)	_____	_____
2.5 Asphalt Parking Lot (Cracks & Gaps)	_____	_____
3. Vehicle Unloading Ramps		
3.1 Structural Integrity (cracks, damage, etc.)	_____	_____
3.2 Leaks, Spills, Standing Water	_____	_____
3.3 Trench Sumps	_____	_____
4. Containers		
4.1 Condition, Closure, Compatibility, Leaks	_____	_____
4.2 Proper Labeling	_____	_____
4.3 Aisle Space & Housekeeping	_____	_____
4.4 Proper Storage/Staging Location	_____	_____
4.5 Over 1 Year Accumulation Start Date	_____	_____
5. Waste Processing Building Containment		
5.1 Berm Structural Integrity (cracks, leaks, etc.)	_____	_____
5.2 Leaks, Spills & Standing Water	_____	_____
6. Hazardous Waste Treatment Tank		
6.1 Structural Integrity (cracks, leaks, etc.)	_____	_____
6.2 Interstitial Inspection Ports	_____	_____
7. Non-Hazardous Waste Solidification Tank		
7.1 Structural Integrity (cracks, leaks, etc.)	_____	_____
8. Safety Equipment		
8.1 Fire Extinguishers	_____	_____
8.2 Air Horns	_____	_____
8.3 Safety Shower & Eye Wash	_____	_____
8.4 Spill Kit	_____	_____
8.5 Fire Suppression System (Shredder)	_____	_____
8.6 Signage	_____	_____
9. Reactives Magazine		
9.1 Structural Integrity	_____	_____
9.2 Locked	_____	_____

Waste Inventory	Total
Non-Hazardous	0
Class 9	0
Acids	0
Reactives	0
Alkalines	0
Hazardous Waste Bulk Containers	0
Non-RCRA Bulk Containers	0
Non-Haz Waste Bulk Containers	0
Inbound Bulk Container Staging	0
TOTAL HAZARDOUS WASTE IN STORAGE	
0	GALLONS
TOTAL NON-RCRA WASTE IN STORAGE	
0	GALLONS
TOTAL NON-HAZ WASTE IN STORAGE	
0	GALLONS
TOTAL WASTE IN STORAGE	
0	GALLONS

10. Additional Comments & Information: \_\_\_\_\_

11. Remedial actions necessary for unsatisfactory items: \_\_\_\_\_

12. Remedial actions corrected and completed on: \_\_\_\_\_

Date

Print Name

Signature

## **6.0 TRAINING PROGRAMS**

### **6.1 General**

All EQFL operations personnel involved in any hazardous waste handling, transportation, emergency response, storage or treatment will successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a safe manner that ensures the facility compliance with the requirements of 40 CFR Part 264.16. Contingency Plan training for EQFL employees is documented in the Employee Training record. EQFL personnel who do not typically visit the facility more than once per year, do not have to have a training record. These employees will be treated as visitors. They will be given a safety briefing and be accompanied by an employee with Contingency Plan training if they visit the facility. Training includes a combination of continuing education courses, university or community college courses, seminars, off-site courses, classroom instruction, video films, computerized courses, on-the-job training, readings, or safety meeting briefings. The training given to each employee will be documented on the Employee Training Record according to job description.

### **6.2 Training Director**

The EQFL Training Program is directed by personnel trained in hazardous waste management procedures. The Training Program is under the direction of the EQFL Compliance Manager. Training and management of the Training Program is conducted by the EQFL Technical Staff consisting of a senior chemist, technical manager, and facility manager. Training is also conducted by outside professional training organizations and consultants. Trainer qualifications will include a combination of degrees, training, certifications, or experience in the field that is taught. Qualifications of all EQFL trainers and personnel are included in the Employee Training Record. These records are filed in the Compliance Managers Office.

### **6.3 Contingency Plan (Emergency) Training**

All EQFL employees have reviewed and are familiar with the EQFL Contingency Plan. "Hands on" operations personnel involved in hazardous waste handling, transportation, emergency response, storage, or treatment have successfully completed a program of classroom instruction or on-the-job training that teaches Contingency Plan implementation. The course outline for the EQFL Contingency Plan training is included in the Training Program. The Contingency Plan training includes an on-site emergency response drill and post-drill evaluation.

### **6.4 Training Schedule**

EQFL facility operations personnel will successfully complete the EQFL training program within six months of their assignment to hazardous waste operations or to a new position in hazardous waste operations. EQFL operations personnel training will be updated and reviewed at least annually.

### **6.5 Annual Training Review**

Facility operations personnel will take part in an annual review of the initial training. The annual review will, at minimum, include Contingency Plan training review and update as well as the OSHA required 8-hour HAZWOPER training review and update. The Contingency Plan training review and update may be included within the 8-hour HAZWOPER training review and update.

## **6.6 Training Records**

The following documents and records are maintained for full-time EQFL employees:

1. Job title for each position at the facility related to hazardous waste management.
2. The name of the employee filling each job.
3. A written job description for each position at the facility related to hazardous waste management.
4. The required skills, education, qualifications, and duties of employees assigned to these positions.
5. A written description of the type and amount of introductory and continuing training given to each person filling these positions.
6. Records or certificates that document the training or job experience required, given to, and completed by facility operations personnel.



## **COURSE OUTLINE**

### **EQFL 24- (or 40-) Hour OSHA HAZWOPER Training** *(As Required by 29 CFR 1910.120)*

- ✓ Regulatory Review 29 CFR 1910.120
- ✓ Toxicology
- ✓ Principles of Hazardous Materials
- ✓ Right-To-Know (HAZ-COM)
- ✓ Personnel Protective Equipment (PPE)
- ✓ Respiratory Protection
- ✓ Contingency Plan Implementation
- ✓ Spill Clean-up Drill
- ✓ Decontamination
- ✓ Manifests, Profiles, Labels, & Land Bans
- ✓ DOT Labeling, Placarding, & Shipping
- ✓ On-The-Job Training
- ✓ Site Control/Site Safety & Health Plan
- ✓ Emergency Response
- ✓ Hazardous Waste Operations
- ✓ Firefighting Procedures
- ✓ Emergency First Aid/CPR



## **COURSE OUTLINE**

### **EQFL 8-Hour OSHA HAZWOPER Refresher** *(As Required by 29 CFR 1910.120)*

- ✓ Contingency Plan Implementation
- ✓ Mock Chemical Spill Drill
- ✓ SCBA and Air Line
- ✓ Cartridge Respirator
- ✓ Respirator Fit Test
- ✓ PPE (Vendors)
- ✓ Florida Right-To-Know
- ✓ Manifests, Profiles, Labels, & Land Bans
- ✓ DOT Labeling, Placarding, & Shipping
- ✓ On-The-Job Training
- ✓ Safety Meetings
- ✓ Emergency Response
- ✓ Hazardous Waste Operations
- ✓ Firefighting Procedures
- ✓ Emergency First Aid/CPR

## **COURSE OUTLINE**

### **EQFL Hazardous Waste Management Procedures & Contingency Plan Implementation**

- ✓ Emergency Response
- ✓ Emergency Procedures
- ✓ Emergency Equipment
- ✓ Emergency Systems
- ✓ Communications and Alarms
- ✓ Response to Fires and Explosions
- ✓ Response to Groundwater Incidents
- ✓ Shutdown of Operations
- ✓ Response Drill
- ✓ Response Drill Evaluation

## **COURSE OUTLINE**

### **EQFL Hazardous Waste Management Operations**

- ✓ Introduction to Hazardous Waste Management Operations
- ✓ Waste Management Procedures
- ✓ Waste Management Documentation
- ✓ Safety and Emergency Procedures
- ✓ Transportation Procedures and Documentation

## **COURSE OUTLINE**

### **EQFL Personal Protective Equipment (PPE) Training** *(Protection Required by Hazard Level)*

#### **A. LEVEL A**

- a) Recognition of Level A Hazards
- b) Description of PPE Required

#### **B. LEVEL B**

- a) Recognition of Level B Hazards
- b) Description of PPE Required

#### **C. LEVEL C**

- a) Recognition of Level C Hazards
- b) Description of PPE Required

#### **D. LEVEL D**

- a) Recognition of Level D Hazards
- b) Description of PPE Required

## **JOB DESCRIPTION**

### **GENERAL MANAGER**

**Job Title:** General Manager

**Job Description:** The General Manager has the overall responsibility for administrative, profitability, environmental, health, and safety operations and maintenance of the company.

**Reports To:** Vice President.

**Qualifications:** Minimum four-year degree in chemistry, engineering or related physical science and seven years' experience in waste management or similar field. Equivalent years of education and/or experience may be substituted.

Applicants must pass pre-employment physical and drug screening.

**Responsibilities:** Plan, direct and monitor facility operations.

Ensure environmental, health and safety regulatory compliance of all company operations.

Plan, direct and monitor administrative operations and profitability.

Represent EQFL in community, regulatory, and public relation activities.

Carry out corporate policy and standards regarding facility, equipment, operations and maintenance.

## **JOB DESCRIPTION**

### **MANAGER**

**Job Title:** Operations Manager  
Industrial Services Manager  
Project Manager  
Transportation Manager

**Job Description:** Managers have the overall responsibility for facility/field operations and maintenance.

**Reports To:** General Manager

**Qualifications:** Minimum four-year degree in chemistry or equivalent experience, engineering or related physical science and five years' experience in waste management or similar field. Equivalent years of education and/or experience may be substituted.

Applicants must pass pre-employment physical and drug screening.

**Responsibilities:** Plan, direct and monitor waste operations.

Train waste handlers.

Carry out corporate policy and standards regarding facility, equipment, operations and maintenance.

Ensure the regular inspection of the facility and equipment and the implementation of any necessary repairs or remedial actions.

Coordinate with Technical Service Department and implement necessary actions or plans for training programs, environmental, safety and health regulatory compliance.

Act as the primary emergency response coordinator.

Manage EQFL laboratory operations.

## **JOB DESCRIPTION**

### **COMPLIANCE MANAGER**

- Job Title:** Environmental, Health & Safety
- Job Description:** The Compliance Manager has responsibility for the development and implementation of programs and procedures required for training, environmental, safety, and health regulatory compliance related to waste operations.
- Reports To:** General Manager
- Qualifications:** Minimum four-year degree in chemistry or equivalent experience, engineering or related physical science and five years' experience in waste management or similar field. Equivalent years of education and/or experience may be substituted.
- Applicants must pass pre-employment physical and drug screening.
- Responsibilities:** Plan, direct and monitor training, environmental, safety, and health compliance activities.
- Evaluate and approve in-bound waste streams.
- Develop outbound waste approvals.
- Represent EQFL in local community affairs and public relation activities.
- Carry out corporate policy and standards regarding facility, equipment, operations and maintenance.
- Evaluate laboratory data.
- Evaluate incoming waste for acceptability.
- Manage EQFL training program

## **JOB DESCRIPTION**

### **SUPERVISOR**

**Job Title:** Operations Supervisor  
Lead Coordinator

**Job Description:** The Supervisors have the responsibility, under general supervision, for waste handling activities such as sampling, identifying, packaging, storing and loading of waste materials in the field or at the facility.

**Reports To:** Operations Manager  
Project Manager

**Qualifications:** Graduation from high school or equivalent (GED) and three years' experience in waste handling operations.

Applicants must pass pre-employment physical and drug screening. Drivers must possess CDL license and pass DOT physical and drug screening.

**Responsibilities:** Supervise and conduct waste stream sampling.

Supervise and conduct labeling of waste containers.

Supervise and conduct loading and unloading waste materials.

Supervise and conduct transfer, storage, or treatment of hazardous and non-hazardous wastes.

Supervise and conduct facility and equipment maintenance as directed.

Transportation of waste materials.

Transportation documentation.



## **JOB DESCRIPTION**

### **WASTE TECHNICIAN**

**Job Title:** Hazardous Waste Technician  
Driver

**Job Description:** The Waste Technician has the responsibility, under direct supervision, for sampling, packaging, storing, loading and transferring of waste materials.

**Reports To:** Operations Supervisor  
Lead Coordinator  
Industrial Services Manager  
Transportation Manager

**Qualifications:** Graduation from high school or equivalent (GED).  
  
Applicants must pass pre-employment physical and drug screening.

**Responsibilities:** Sampling waste streams.  
  
Labeling waste containers.  
  
Loading waste materials onto trucks.  
  
Transfer of hazardous and non-hazardous wastes.  
  
Facility and equipment maintenance as directed.

## **JOB DESCRIPTION**

### **TRANSPORTATION COORDINATOR**

**Job Title:** Transportation Coordinator

**Job Description:** The Transportation Coordinator has the direct responsibility for activities involving transportation of waste materials.

**Reports To:** Transportation Manager.

**Qualifications:** Minimum four-year degree in chemistry, engineering or related physical science and two years' experience in waste management transportation. Equivalent years of education and/or experience may be substituted.

Applicants must pass pre-employment physical and drug screening.

**Responsibilities:** Plan, direct and monitor waste transportation operations.

Maintain transportation records.

Carry out corporate policy and standards regarding waste transportation.

Coordinate with Technical Service Department and implement necessary actions or plans for regulatory compliance.

Documentation of waste shipments.

## **JOB DESCRIPTION**

### **CHEMIST**

**Job Title:** Facility Chemist  
Field Chemist  
QA/QC Chemist

**Job Description:** The Chemists have the responsibility, under general supervision, for facility operations.

**Reports To:** Operations Manager  
Project Manager

**Qualifications:** Minimum four-year degree in chemistry, engineering or related physical science and two years' experience in waste management or similar field. Equivalent years of education and/or experience may be substituted.

Applicants must pass pre-employment physical and drug screening.

**Responsibilities:** Plan, direct, conduct, and monitor facility operations.

Plan, direct, conduct, and monitor field service operations.

Analyze and evaluate incoming waste streams for acceptability.

Direct appropriate waste management actions.

Carry out corporate policy and standards regarding facility, equipment, operations and maintenance.

Prepare shipments for outbound disposal.

Ensure the regular inspection of the facility and equipment and the implementation of any necessary repairs or remedial action.

Documentation of waste management activities.

Quality control analysis of waste samples.

## **JOB DESCRIPTION**

### **ADMINISTRATIVE**

**Job Title:** Project Coordinator  
Retail Coordinator  
Approvals Coordinator  
Receiving Coordinator

**Job Description:** Administrative personnel have the responsibility, under general and/or direct supervision, for administrative duties related to the efficient operation of the facility, such as, maintaining written record of all waste-handling activities.

**Reports To:** Operations Manager  
Project Manager

**Qualifications:** Graduation from high school or equivalent (GED) and one year's clerical experience.  
  
Applicants must pass pre-employment physical and drug screening.

**Responsibilities:** Answering phones and directing calls.  
  
Operate gate.  
  
Recordkeeping (preparation, distribution, and retention).  
  
Maintain clerical supplies.  
  
Computer data entry.  
  
Administrative equipment maintenance (fax and copy machine).

## **6.7 Training Records Retention**

Training records on current personnel will be kept until closure of the facility. Training records on inactive former employees will be kept at least three years from the date the employee last worked at the facility. Inactive files will be kept in storage in archive files.

## **7.0 MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING**

### **7.1 Required Notices**

Generators will be notified in writing that EQFL has the appropriate permit for, and will accept, the waste the generator is shipping. Copies of this written notice are kept as part of the operating record. Copies of the EQFL permit are available for review. EQFL does not receive hazardous waste directly from a foreign source. The FDEP will be notified in writing at least 2 (two) weeks in advance of the date the waste is expected to arrive at the facility if EQFL arranges to receive hazardous waste from a foreign source.

The EQFL owner or operator will notify any new owner or operator in writing of the required notices of 40 CFR Parts 264.12 and 270 before transferring ownership or operation of the EQFL facility during its operating life. There are currently no plans to transfer ownership or operation of the EQFL facility.

### **7.2 Manifest System Use**

All hazardous wastes entering and leaving the EQFL facility will be accompanied by a Uniform Hazardous Waste Manifest. All manifested hazardous waste shipments will be accompanied by Land Disposal Restrictions certifications.

For inbound (receiving) waste shipments, the EQFL facility owner, operator, or agent will:

1. Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest is received;
2. Significant discrepancies in the manifest [as defined in 40 CFR 264.72(a)] will be noted on each copy of the manifest; *[Note: The EQFL facility waste analysis may not be complete prior to signing the manifest and giving it to the transporter. Unreconciled discrepancies discovered during later analysis will be reported as per 40 CFR 264.72 (b).]*
3. The transporter will be given one copy of the signed manifest;
4. A copy of the signed manifest will be sent to the generator within 30 days after the delivery; and,
5. EQFL will retain a copy of each manifest at the facility for at least three years from the date of delivery.

For outbound (exiting) waste shipments, the EQFL facility owner, operator, or agent will:

1. Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest is properly shipped;
2. Have the designated transporter sign acknowledging receipt of the waste shipment;
3. Retain a copy of the manifest (generator copy) and submit the other copies (complete with Land Disposal Restriction notifications) to the designated transporter;
4. Significant discrepancies in the manifest [as defined in 40 CFR 264.72 (a)] will be noted on the manifest;
5. The returned copy of the manifest (signed by designated Facility) will be filed with the original manifest copy retained; and,
6. EQFL will retain a copy of each manifest at the facility for at least three years from the date of delivery.

The EQFL facility does not have rail or water access in order to receive hazardous waste directly from a rail or water transporter. Shipments of hazardous waste initiated from the EQFL facility will comply with the requirements of 40 CFR 262.

### **7.3 Manifest Discrepancies**

Upon discovering a significant manifest discrepancy, the EQFL owner, operator, or agent will attempt to reconcile the discrepancy with the waste generator, transporter or designated facility. Manifest discrepancies are differences in quantity or type of hazardous waste designated on the manifest, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are:

1. Variations greater than 10 percent in weight for bulk waste, and
2. Any variation in piece count (quantity of containers in a truckload for containerized wastes).

Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or hazardous waste constituents not reported on the manifest. Discrepancies not resolved within 15 days after receiving the waste, will require notification to the FDEP. The EQFL owner, operator, or agent will submit to the FDEP a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest at issue.

### **7.4 Operating Record**

A written operating record will be kept at the EQFL facility. The following information will be recorded and maintained in the operating record until closure of the facility:

1. A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its storage, shipment or treatment at the facility.
2. A description of the common name and EPA hazardous waste number which applies to the waste.
3. The physical form of the waste.
4. The process generating the waste (for hazardous waste not listed in 40 CFR, 261, Subpart D).
5. The manifest-reported weight or volume and density; and
6. The methods (by handling codes) and dates of storage or treatment.
7. The location of each hazardous waste within the facility and quantity at each location.
8. Records and results of waste analyses performed.
9. Reports and details of all incidents that require implementing the contingency plan.
10. Records and results of inspections (these data need be kept only three years).
11. Monitoring, testing or analytical data, and corrective action where required by 40 CFR 264, Subpart F (Solid Waste Management Units), Miscellaneous Units, and Air Emission Standards for Equipment Leaks.
12. Notices to generators.
13. All closure cost estimates.
14. A certification no less often than annually, that a program is in place to reduce the volume and toxicity of hazardous waste that is generated to the degree determined to be economically practicable; and the method of treatment or storage is that practicable method currently available which minimizes the present and future threat to human health and the environment.
15. A copy of the Land Disposal Restriction notice, and the certification and demonstration, if applicable, required by the generator or owner or operator.

Most of the operating record information will be entered and stored on the EQFL computer management information system.

## **7.5 Records Retention**

All records, including plans, will be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of the FDEP who is duly designated by the Administrator.

The retention period for all records required under this part will be extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the Administrator or FDEP.

A copy of records of waste disposal locations and quantities will be submitted to the FDEP and local land authority upon closure of the facility.

## **7.6 Biennial Report**

EQFL will prepare and submit a biennial report to the FDEP by March 1 of each even numbered year. The report will cover facility activities during the previous calendar year and will include:

1. The EPA identification number, name, and address of the facility.
2. The calendar year covered by the report.
3. The EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report will give the name and address of the foreign generator;
4. A description and the quantity of each hazardous waste the facility received, treated, and shipped during the year. This information will be listed by EPA identification number of each generator;
5. The method of treatment, storage, or shipment for each hazardous waste;
6. The most recent closure cost estimate;
7. A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;
8. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years; and
9. The certification signed by the owner or operator of the facility or his authorized representative.

## **7.7 Unmanifested Waste Report**

If the facility accepts for treatment or storage, any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper, and if the waste is not excluded from the manifest required by 40 CFR, 261.5, EQFL will prepare and submit a report to the FDEP within fifteen days after receiving the waste. The report will be designated "Unmanifested Waste Report" and include the following information:

1. The EPA identification number, name, and address of the facility;
2. The date the facility received the waste;
3. The EPA identification number, name, and address of the generator and the transporter, if available;
4. A description and the quantity of each unmanifested hazardous waste and facility received;
5. The method of treatment or storage for each hazardous waste
6. The certification signed by the EQFL owner or operator or authorized representative.
7. A brief explanation of why the waste was unmanifested, if known; *[Note: Conditionally exempt small quantities of hazardous waste are excluded from regulation under this part and do not require a manifest.]*



## **7.8 Waste Minimization**

EQFL certifies that a program is in place to reduce the volume and toxicity of waste generated to the degree determined to be economically practicable and that selected practicable methods of storage or treatment minimize the present and future threat to human health and the environment.

## **7.9 Additional Reports**

EQFL will also report to the FDEP:

1. Releases, fires, and explosions requiring implementation of the Contingency Plan;
2. Facility closure; and
3. As otherwise required

## **8.0 SOLID WASTE MANAGEMENT UNITS**

### **8.1 Facility Setting**

The EQFL facility is located in a heavily industrialized area (Orient Park) in Tampa, Florida. The previous use of the EQFL property was residential (one residence) and vacant land. There is significant documented groundwater contamination in the Orient Park area. Two NPL (Superfund) sites adjacent to the EQFL facility are being investigated and remediated under the direction of the EPA. There are also several other sites or former sites potentially contributing to the documented Orient Park groundwater contamination.

The requirements of 40 CFR 264 Subpart F (releases from Solid Waste Management Units (SWMU) do not apply to the EQFL facility. There have been no releases from any SWMU at the EQFL facility. EQFL will comply with the EPA and FDEP requirements of the Final RFA Report.

### **8.2 SWMU Discussion**

A SWMU RCRA Facility Assessment (RFA) of the EQ Florida, Inc. facility was initiated on February 15, 1993. The RFA was based on a preliminary review (PR) of US EPA Region IV and Florida Department of Environmental Protection (FDEP) files and a visual site inspection (VSI) of the EQFL facility. The PR was performed during the week of February 15-19, 1993. The VSI was conducted on February 25, 1993. A RFA report was issued by FDEP and EPA Region IV.

The purpose of the RFA was to identify SWMUs and other potential sources of environmental contamination not necessarily involving hazardous wastes. The SWMUs were evaluated for their potential of release of hazardous wastes or hazardous waste constituents to the air, surface water, soil, and groundwater.

An RFA of the EQFL facility was also conducted by the EPA on August 18, 1988. The EQFL facility was a new facility planned for construction at the time of the 1988 RFA. It was determined that there was no evidence of solid waste management activities at the site. It was also determined that there was no evidence of a prior or continuing release of hazardous waste or hazardous waste constituents at the site. Therefore, at the time of 1988 RFA, Section 3004 (u) of the Hazardous and Solid Waste Amendments (HSWA) of 1984 did not apply. The summary letter from the EPA concerning the 1988 RFA and a RFA Addendum prepared by the FDEP, dated May 13, 2011, are included in Appendix G.

The 1993 draft RFA (PR and VSI) resulted in the identification of six (6) SWMUs. The units identified are the container storage building and five sumps (SWMU #1), the entire loading/unloading dock area (SWMU #2), the stormwater retention pond (SWMU #3), the filter press (SWMU #4 no longer in use), the municipal waste dumpster (SWMU #5) and the sand and carbon stormwater filtration system (SWMU #6). All SWMUs identified at the EQFL facility were determined to have no evidence of release prior to or at the time of the draft 1993 RFA. The EQFL SWMUs previously and currently have not had any release of hazardous waste or hazardous waste constituents. The EQFL SWMUs are identified on Figure 17.

The SWMUs at the facility are listed in Appendix G (Volume 2 of 3) and the following information describes the waste generation and activity at each identified SWMU:

#### **SWMU #1 (Concrete Container Storage Building and Five (5) Sumps)**

The concrete Container Storage Building is used to store containers (primarily 55- gallon drums) of permitted hazardous and non-hazardous wastes. The Container Storage Building is composed

of three (3) separate containment bays having a total of five (5) collection sumps. Each collection sump has a capacity of 1,000 gallons. The collection sumps are seamless and made of pre-cast concrete coated with sealant. The floor is sloped at a grade of 1/8 inch per foot on all four sides to the collection sump. A similar floor design and collection sump exists in the flammable/combustible storage area. The maximum storage area and sump volumes capacities are 50,000 gallons and 5,000 gallons respectfully. The interior storage areas and sumps are visually inspected daily.

**SWMU #2 (Loading/Unloading Dock)**

The loading/unloading dock is a concrete surface to load and unload permitted hazardous and non-hazardous wastes. The loading area is covered by a roof and sloped towards the containment trench. The area also contains an epoxy coated improved containment area in front of Bay 2.

**SWMU #3 (Retention Pond)**

The retention pond has dimensions of 126 ft. by 35 ft. with an average volume of 0.1355 acre-feet and a slope of 3:1. The pond is used to retain stormwater runoff.

**SWMU #4 (Filter Press-Certified Closed)**

The filter press was decontaminated prior to submittal of the revised hazardous waste application and a closure certification report was submitted to the FDEP under separate cover. The former unit was certified closed on October 31, 2013.

**SWMU #5 (Municipal Waste Dumpster)**

The steel municipal waste dumpster is located on the concrete loading/unloading area. The dumpster has an approximate capacity of 2.5 cubic yards and is used for municipal solid wastes until disposal pick-up.

**SWMU #6 (Stormwater Pre-Treatment Unit)**

Stormwater from the truck loading/unloading area drains to a concrete trench drain which flows from north to south along the loading area. The trench drain flows to a 640-gallon concrete holding sump, which is equipped with a sump pump with a capacity of approximately 30 to 40 gallons per minute. The sump pump pumps the stormwater from the holding tank through sand and carbon filters and then to the stormwater retention pond. The pump is set to keep the sump level to below 300 gallons. The carbon filter utilizes activated carbon to remove contaminants and has specifications which include 24 inch by 36 inch dimensions (diameter/height), 200 pounds of carbon, and a flow rate of twenty gallons per minute (gpm) at 2 ½ minute contact time. The sand filter has a flow rate of 20 gpm per square foot, and a 3.1 square foot filter area.

**SWMU #7 (Waste Processing Building)**

The Waste Processing Building is used for the receiving, processing, and associated storage, loading, unloading, and transfer of solid and hazardous waste. The building consists of a concrete pad and a steel roof structure. The north and south sides of the structure are solid walls and the east and west sides are open in the southern two-thirds of the building to allow for the movement of waste and equipment in and out of the structure. The east and west walls of the building are closed in its northern third. The solid and hazardous waste processes completed in this structure include segregation, decanting, filtration, solidification, treatment and shredding. The non-hazardous ESU is located in this building along with the high volume industrial waste shredder. An approach ramp and a 4-foot high platform are located on the southeast side of the structure that allow waste to be emptied from trucks and containers directly into the non-hazardous ESU.

The hazardous waste treatment tank is installed adjacent to a ramp on the southeast corner of the building. A non-hazardous waste ESU and associated 24-inch high approach ramp is located in the building approximately 30 feet to the north of the hazardous waste treatment tank.

The solid waste side of the operations is kept separate from the hazardous waste operations in the waste processing building by demarcating the areas with a bright yellow painted on the floor, between the two existing ramps located near the center of the building on the east and west sides. A similar line will also be placed around the reactives magazine along with the addition of protective bollards.

**SWMU #8 (Universal Waste Battery Storage Area)**

Universal Waste Battery Storage Area is located in the loading/unload dock 3C. This area is covered by a roof and sloped towards the containment trench.

**SWMU #9 (Paint Can Crushing Area)**

Solvent-based paints are received in one-gallon cans for re-containerization and disposal. The operation takes place in the permitted hazardous waste processing areas. The operation includes manually placing the paint can in the enclosed unit and crushing the can. The paint drains into a 55-gallon drum for off-site transport. The empty crushed paint cans are handled as solid waste. EQ uses best management practices such as using plastic sheeting to contain any drippage. Each waste stream is characterized to determine appropriate management.

**SWMU #10 (Roll-off Storage Area)**

The Roll-off Storage Area is located on the 8<sup>th</sup> Avenue property and is used for the storage of roll-off boxes that are full of the solidified material created in the Solid Waste Processing Facility. The roll-off boxes are staged in this area and are waiting for outbound transportation. The area consists of a 2,288 square foot covered concrete pad and has a capacity of 20,200 gallons. Since no liquids are stored in this area, there is a leachate collection system for secondary purposes.

**SWMU #11 (10-Day Transfer Facility/Inbound & Out Bound Staging/Bulk Container Storage Area)**

The 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area is located on the 8<sup>th</sup> Avenue property. 10-Day Transfer Facility waste shipments do not include shipments to EQFL (designated facility) or from EQFL (generator). Vehicles/trailers parked in this area are marked as a 10-Day vehicle/trailer to avoid being confused with other vehicles/trailers that may also be located in the same vicinity. Transfer facility waste shipments are noted in a separate Transfer Log (operating record). Vehicles/trailers located in this area are parked on a man-made impervious surface. Secondary containment is provided if vehicles/trailers are going to be parked in this area for more than 24-hours.

The Inbound & Outbound Staging is used only for inbound loads waiting for unloading and receipt, and full outbound loads waiting for transportation and completed paperwork. Vehicles/trailers in this area are marked as either an inbound load or an outbound load to avoid being confused with other vehicles/trailers that may also be located in the same vicinity. Inbound waste shipments are noted in a separate Inbound Log (operating record). Outbound waste shipments are noted in a separate Outbound Log (operating record). Vehicles/trailers located in this area are parked on a man-made impervious surface. Secondary containment is provided if vehicles/trailers are going to be parked in this area for more than 24-hours.

The Bulk Container Storage Area is used for the storage of bulk containers that contain solid (passes the paint filter test) material that has been treated in the hazardous waste treatment tank. The material has been sampled and is waiting on confirmatory analytical results from the off-site laboratory. Bulk Containers pending analytical are marked as Hazardous Waste to avoid being confused with other bulk containers that may also be located in the same vicinity. The bulk containers are noted in a separate Bulk Container (operating record). The Bulk Container Storage Area is also used for the storage of bulk containers that contain solid (passes the paint filter test) material that has been removed from the treatment tank and has received analytical results that confirms that the waste has been successfully treated and meets all de-characterization and LDR treatment standards. Bulk Containers that have received confirmatory analysis and meet all de-characterization and LDR treatment standards are marked as Treated Hazardous Waste to avoid being confused with other bulk containers boxes that may also be located in the same vicinity.

The Bulk Container Storage Area is sloped and drains precipitation away from the storage area and the bulk containers. The bulk containers also have metal rollers for wheels, which elevate the bottom of the container 6 -8 inches above the ground, and protect it from contact with accumulated liquids.

**SWMU #12 (Used Oil Facility)**

The Used Oil Facility is located in, and part of, the Container Storage Building Area (SWMU#1) and is discussed above.

**SWMU #13 (Satellite Accumulation Area)**

The Satellite Accumulation Area is located in the Laboratory on the 8<sup>th</sup> Avenue property. The material collected in the satellite accumulation area includes various types of debris associated with container sampling and the containerization of collected samples. Accumulated material is transferred to the Orient Road property for further processing and disposal.

**SWMU #14 (Parts Washer)**

The parts washer is located in the maintenance area on the 8<sup>th</sup> Avenue property. The washer consists of a metal sink fixed to a 30-gallon drum of part cleaning solution. The solution is pumped from the drum into the sink where the parts are washed and cleaned. The solution is drained back into the drum when the cleaning is completed. The solution is reused until it is no longer useful and at that point it is sent off-site for recycling.

**SWMU #15 (Additional Retention Pond)**

The additional Retention Pond is located on the 8<sup>th</sup> Avenue property and collects storm water from the roof of the Waste Processing Building. The retention pond was sized for both the permanent pool volume required and the 1" runoff storage (temporary pool). This SWMU was previously investigated and the results have been submitted to the FDEP in a report entitled: "Sediment Sampling Report 8<sup>th</sup> Avenue Property Stormwater Retention Pond" dated February 29, 2012.

**SWMU #16 (Universal Waste Lamp Storage Area)**

The Universal Waste Lamp Storage Area is located on the Orient Road property. The material is stored in a box van with a storage capacity of 1,104 cubic feet.

**SWMU #17 (Aerosol Can Crushing)**

The aerosol can recycler was scrapped and removed from the site approximately 2 years ago (circa 2010) and has not been replaced. EQFL has no immediate plans to re-enter the aerosol can recycling business and this SWMU no longer exists.

**SWMU #18 (Drum Crushing)**

The crushing unit is a Drumbeaters of America crusher, model # DC5000-10. Additional details of the compactor are located in Appendix I. The drum crusher consists of a closed cabinet unit located at the top of the ramp leading into Bay 3. A drum is placed inside the container and a ram is used to crush the drum. The unit contains a grate and collection pan at the bottom to catch any liquid or solid residues from the crushed drum. The residue is managed as a waste. The unit is used to crush drums and other various RCRA empty metal containers. Crushed drums are sent off-site to a metal recycler.

**SWMU #19 (Oil-Water Separator System)**

The Oil-Waste Separator was not installed and is being removed from the application.

## 9.0 CLOSURE PLAN

### 9.1 General/Applicability

This section outlines closure requirements for both the permitted EQFL facility (storage and treatment) and the EQFL on-site 10-day Transfer Facility (transporter). The EQFL financial assurances will cover the permitted TSD operations as required by 40 CFR 264 Subpart H and the 10-day Transfer Facility. This closure plan has been adopted in accordance with the Code of Federal Regulations, Part 264, Subpart G for the EQFL facility:

Facility Name:	EQ Florida, Inc.
EPA ID Number:	FLD 981 932 494
Facility Address:	2002 North Orient Road Tampa, Florida 33619
Facility Telephone:	(813) 623-5302
Facility Contact:	Gene Cieply
Mailing Address:	7202 East Eighth Avenue Tampa, Florida 33619

Storage at the facility occurs in containers only. The maximum storage inventory is as indicated below:

Maximum Storage Inventory Summary

Storage Location	Storage Capacity
Container Storage Building	50,000 Gallons
10-Day Transfer Facility	20,000 Gallons or 100 Cubic Yards
Waste Processing Building	5,000 Gallons
Bulk Container Storage Area	800 Cubic yards

No other RCRA regulated units are located on site.

#### 9.1.1 Waste Characterization

Indicated below is the waste characterization of the various waste streams managed at the treatment/storage and transfer facilities. Actual waste analysis information on the waste materials will be retained on waste profile, supporting lab analytical, QC lab reports, manifests, land ban forms, and the EQFL computer database.

##### Flammable Liquids

Physical State:	Liquid
Flash Point:	<140 F
Chemical Composition:	Solvents, paints, thinners, alcohols, fuels, oils, etc.
Other Data:	Facility warehouse storage is in an explosion-proof designed area. Vehicles are placarded and meet all DOT requirements. Disposal is off-site via fuel blending and/or incineration.

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**Oxidizers/Reactives/Flammable Solids**

Physical State: Liquid/Solid/Semi-Solid  
Chemical Composition: Oxidizers – permanganates, nitrates, nitrites, perchlorates, etc.  
Reactives – cyanides, sulfides, and water-reactive metals  
Flammable Solids – water-reactive metals, phosphorous, paint sludges, and solid residues.  
Other Data: Cyanides and sulfides must be kept separate from acids.  
Oxidizers must be kept separate from organics.  
Flammable solid/water reactives must be kept dry and usually immersed in kerosene.  
Disposal is off-site via deactivation or incineration.

**Poisons**

Physical State: Liquid/Solid  
Chemical Composition: Arsenics, carbamates, endrin, lindane, toxaphene, methoxychlor, etc.  
Other Data: May be an inhalation hazard.  
Disposal is off-site via incineration.

**Corrosives**

Physical State: Liquid/Semi-Solid  
PH: Acids – 2.0  
Caustics – 12.5  
Chemical Composition: Acid – hydrochloric, nitric, chromic, phosphoric, sulfuric, etc.  
Alkaline – sodium hydroxide, potassium hydroxide, etc.  
Other Data: Keep acids and caustics separated from each other and do not add water to acids or caustics.  
Disposal is off-site via neutralization. Alternately, some, or all, of the acceptable materials may be treated in the ~~to-be-constructed~~ treatment tank in the waste processing building and disposed of at a subtitle D landfill once de-characterized, meets LDRs and passes the PFT.

**Characteristic and Others**

Physical State: Liquid/Solid/Sludge  
Chemical Composition: Listed plating sludges, toxic metals (chrome, lead), D018-43 TC wastes  
Other Data: Disposal is off-site via stabilization and landfill. Alternately, allowable waste codes may be treated in the ~~to-be-constructed~~ treatment tank and disposed of at a subtitle D landfill once de-characterized, meets LDRs and passes the PFT.

## 9.2 Closure Performance Standards

EQFL plans to continue operating the EQFL permitted facility as long as it is a viable business activity, both economically and environmentally. There are currently no plans to stop waste management activities or close the facility. This Closure Plan is submitted to plan, prepare, and secure financial assurances so that closure can be completed when necessary.

Closure of the EQFL facility will be done in a manner that minimizes the need for further care. All hazardous waste and hazardous waste constituents will be properly managed at closure so that post closure care and post closure potential for releases of hazardous waste or hazardous waste constituents are eliminated. The EQFL Closure Plan complies with the requirements of 40 CFR 264 Subpart G. It is the



intent of this plan to protect human health and the environment from any release of hazardous materials or constituents.

Closure and the closure cost estimate are based upon a third party completely managing and conducting all closure activities.

### 9.3 Final Closure Activities

Final closure activities will include the removal of all hazardous waste and hazardous waste constituents from the facility for shipment to permitted treatment and disposal facilities. Final closure also includes the decontamination of all equipment, the floors inside of the Container Storage Building, the containment sumps, the inside walls of the building (three feet up), and the loading/unloading areas (the paved area from the building to five feet out and the outside of the warehouse dock wall from the ground up to the floor level).

The facility land, office, and decontaminated Container Storage Building will require no post closure care. The facility will then be available for commercial use.

### 9.4 Maximum Waste Inventory

A maximum total of 50,000 gallons of hazardous waste from the Container Storage Building, 20,000 gallons or 100 cubic yards of hazardous waste from 10-day Transfer Facility, 5,000 gallons of hazardous waste from the Waste Processing Building, and 800 cubic yards of waste (400 CY of hazardous waste and 400 CY of non-RCRA waste) will require shipment off-site to treatment or disposal facilities at closure. These quantities are summarized below:

MAXIMUM WASTE INVENTORY

Waste Materials	Container Storage Building Maximum Capacity	10-Day Transfer Maximum Capacity	Waste Processing Building Maximum Capacity	Bulk Container Storage Area Maximum Capacity	Total Combined Maximum Capacity
Flammable Liquids	7,810 Gallons	3,225 Gallons	0 Gallons	0 Gallons	11,035 Gallons
Oxidizers	6,655 Gallons	825 Gallons	0 Gallons	0 Gallons	7,480 Gallons
Reactives & Flammable Solids	2,370 Gallons	825 Gallons	0 Gallons	0 Gallons	3,195 Gallons
Poisons	6,765 Gallons	2,640 Gallons	0 Gallons	0 Gallons	9,405 Gallons
Corrosives - Alkaline	6,765 Gallons	1,210 Gallons	490 Gallons	0 Gallons	8,465 Gallons
Corrosives - Acid	6,765 Gallons	1,540 Gallons	3,520 Gallons	0 Gallons	11,825 Gallons
Other Hazardous Waste (Liquids)	6,765 Gallons	5,005 Gallons	990 Gallons	0 Gallons	12,760 Gallons
Other Hazardous Waste (Solids)	6,105 Gallons	4,730 Gallons	0 Gallons	0 Gallons	10,835 Gallons
Other Hazardous Waste (Bulk Container)	0 Cubic Yards	0 Cubic Yards	0 Cubic Yards	400 Cubic Yards	400 Cubic Yards
Non-RCRA Waste (Bulk Container)	0 Cubic Yards	0 Cubic Yards	0 Cubic Yards	400 Cubic Yards	400 Cubic Yards
<b>Inventory Totals (Gallons)</b>	<b>50,000 Gallons</b>	<b>20,000 Gallons</b>	<b>5,000 Gallons</b>	<b>0 Gallons</b>	<b>75,000 Gallons</b>
<b>Inventory Totals (Cubic Yards)</b>	<b>0 Cubic Yards</b>	<b>0 Cubic Yards</b>	<b>0 Cubic Yards</b>	<b>800 Cubic Yards</b>	<b>800 Cubic Yards</b>

### 9.5 Closure Items

The facility hazardous waste inventory may be consolidated as much as possible based upon waste hazard class, compatibility, and treatability. Compatible hazardous waste liquids may be pumped to tankers for outbound shipment to ultimate treatment and disposal facilities. Compatible hazardous waste solids may be consolidated to bulk containers for outbound shipment to ultimate treatment and disposal facilities.

#### 9.5.1 Waste Inventory

##### Flammable Liquids

All flammable liquids on hand at the time of closure will be removed and transported to a permitted fuel blending facility (or equivalent). A maximum total (from TSDF and transfer operations combined) of 11,035 gallons of waste flammable liquids would be on hand at closure.

The 11,035 gallons would be transported by a permitted hazardous waste transporter. Removal would take a maximum of twenty (20) days.

#### **Oxidizers**

All oxidizers on hand at the time of closure will be removed and transported to a permitted ~~sent~~ hazardous waste treatment and disposal facility. A maximum total (from TSDF and transfer operations combined) of 7,480 gallons of oxidizers would be on hand at closure. The 7,480 gallons of oxidizers would be transported by a permitted hazardous waste transporter. Removal would take a maximum of twenty (20) days.

#### **Flammable Solids/Reactives**

All flammable solids and reactive wastes on hand at the time of closure will be removed and transported to a permitted hazardous waste treatment facility or incinerator (or equivalent) for disposal. A maximum total (from TSDF and transfer operations combined) of 3,195 gallons would be on hand at closure. The 3,195 gallons would be transported by a permitted hazardous waste transporter. Removal would take a maximum of ten (10) days.

#### **Poisons**

All poisonous hazardous waste on hand at the time of closure will be removed and transported to a permitted incinerator (or equivalent). A maximum total (from TSDF and transfer operations combined) of 9,405 gallons of poisons would be on hand at closure. The 9,405 gallons would be transported by a permitted hazardous waste transporter. Removal would take a maximum of twenty (20) days.

#### **Corrosives**

All corrosive hazardous waste on hand at the time of closure will be removed and transported to a permitted treatment facility (or equivalent) for treatment and disposal. A maximum total (from TSDF and transfer operations combined) of 20,290 gallons of corrosives would be on hand at closure. The 20,290 gallons of corrosives would be sent to a designated treatment facility. The shipment would be transported by a permitted hazardous waste transporter. Removal would take a maximum of forty (40) days.

#### **Other Hazardous Waste**

All other hazardous wastes on hand at the time of closure (such as listed plating sludges, toxic metals, and characteristic D002, D004-011, and D018-043 TC wastes) would be removed and transported to a permitted hazardous waste treatment/disposal facility (or equivalent) for treatment or incineration (or equivalent) and disposal. A maximum total (from TSDF and transfer operations combined) of 23,595 gallons and 400 cubic yards of characteristic waste would be on hand at closure. The 23,595 gallons of characteristic wastes would be sent to the designated treatment/disposal facility. The 400 cubic yards of characteristic wastes would be sent to the designated treatment/disposal facility. The shipments would be transported by permitted hazardous waste transporters. Removal would take a maximum of ten (10).

#### **9.5.2 Other Items**

##### **Empty Containers**

All empty containers resulting from the bulking of material will be sent to a drum recycling facility or metal reclamation facility. These facilities will pick up the empties at the EQFL site at no charge.

These empty containers will not meet the criteria for classification as an acutely toxic waste and therefore will not require triple rinsing.

Any empty containers from acutely toxic waste will be managed as hazardous waste or triple rinsed with resulting rinses managed as hazardous waste.

There will be no additional cost to EQFL for the recycling of non-acutely toxic empty containers and therefore no change in the closure cost estimate.

### **Equipment**

Most of the equipment necessary for decontamination and closure will already be owned by EQFL. Equipment which may require decontamination includes a forklift, a compactor, a paint can processor, and an industrial shredder.

## **9.6 Decontamination**

The EQFL Container Storage Building is ~~storage/treatment and transfer facilities are~~ totally enclosed. The facility construction is concrete and concrete block with containment. The transfer loading and unloading area is concrete and paved with sloped and diked containment. Loading and unloading of waste is direct from trailer to warehouse and direct from warehouse to trailer.

Soil sampling will be performed at locations around the site. One soil sample will be taken from the stormwater retention pond (SWMU 3). Unless there is direct knowledge or evidence that a release occurred from the container storage area into SWMU#3, then such contamination, if reported as present, could be from other on-site sources. If this is the case, any contamination that is discovered would be done under HSWA corrective actions rather than under closure of the container storage area. Further, any assessment and clean up would follow the requirements of Chapter 62-780, F.A.C.

In the unlikely event that releases of hazardous waste or hazardous waste constituents were to occur by the facility, the most likely path of migration would be the stormwater system. The inclusion of two additional soil samples allows an up gradient sample from the northeast corner of the facility and a downgradient sample from the southeast corner of the facility to be investigated beyond the stormwater retention area. A soil sample from under the building will also be taken. Additional soil samples will be taken in any area with visual evidence of contamination. Soil samples will also be taken under buildings or in sumps if there are visible cracks or indications that contamination could have migrated into soils and/or groundwater.

All process equipment will be cleaned with water, solvent or both and the resultant liquid sent to a permitted hazardous waste treatment/disposal facility. The floors and sumps will then be decontaminated by steam cleaning. The facility warehouse inner walls will be decontaminated three feet up from the floor. The loading/unloading area will be decontaminated. The loading/unloading area to be decontaminated includes the dock exterior wall from the ground up to the warehouse floor level and the paved ground from the building to out five feet. This liquid will be analyzed for organic solvents and TCLP constituents to determine its acceptability for disposal.

All decontamination will be done and certified by outside contractors. Samples of rinse waters will be taken and analyzed to confirm all washed areas as sufficiently decontaminated.

It is estimated that no more than four weeks will be required to fully decontaminate all equipment and the storage facility itself.

Additional details regarding closure and decontamination activities at the waste processing building are provided in Volume 3 of 3.

Equipment decontamination will be performed on the paint can processor, compactor and forklift. All other equipment is small enough that it could be drummed up and managed as hazardous waste (worst case) if necessary.

Three shallow, surface soil samples will be obtained and analyzed. The main sample will be from the retention pond. The FDEP (HSWA permit) has confirmed that confirmatory sampling and analysis of only the retention pond is sufficient from a SWMU and HSWA permit standpoint. Up gradient, downgradient and quality control samples will be taken and analyzed also for a total of four samples.

Analysis includes full TCLP, 624, 8240, and 8260. This covers all characteristic waste as well as many solvents.

Additional transportation was considered in the closure cost calculations to keep incompatible hazard class loads separate as follows:

**TRANSPORTATION**

Waste Materials	Disposal Volume	Units	Loads	Cost	Total Cost
Flammable Liquids	201	Drum	3	\$2,400	\$6,030
Oxidizers	136	Drum	2	\$2,400	\$4,080
Reactives & Flammable Solids	59	Drum	1	\$2,400	\$1,770
Poisons	171	Drum	2	\$2,400	\$5,130
Corrosives - Alkaline	154	Drum	2	\$2,700	\$5,198
Corrosive - Acid	215	Drum	3	\$2,700	\$7,256
Other Hazardous Waste (Liquids)	232	Drum	3	\$2,700	\$7,830
Other Hazardous Waste (Solids)	197	Drum	2	\$2,700	\$6,649
Other Hazardous Waste (Bulk Container)	400	Cubic Yards	20	\$5,000	\$100,000
Non-RCRA Waste (Bulk Container)	400	Cubic Yards	20	\$300	\$6,000
<b>Subtotal for Transportation =</b>					<b>\$149,943</b>

### 9.6.1 Closure Certification

Closure certification (as well as all other closure activities) will be conducted by an independent third party.

An independent registered professional engineer licensed in the State of Florida will certify closure of the EQFL hazardous waste facility. It is anticipated that three on-site inspections by the registered professional engineer will occur during the closure period. Those inspections are indicated below:

- First Inspection: Final date of waste acceptance
- Second Inspection: Upon completion of all removal for off-site disposal
- Third Inspection: Upon completion of all decontamination and FDEP inspection.

It is the intent of these inspections to ensure that all materials are being handled in accordance with our Closure Plan. Upon completion of the final inspection by the registered professional engineer, a certification that closure has been completed will be submitted to the Regional Administrator and Florida DEP. This certification will be sent within 60 days of completion of closure by registered mail.

## 9.7 Closure Cost Estimate (Container Storage Building)

Indicated below is the most recent closure cost estimate for the TSDF operation based upon the maximum quantities indicated in the Closure Plan and the methods indicated for treatment and/or disposal.

CONTAINER STORAGE BUILDING CLOSURE COST

Waste Materials	Disposal Volume	Units	Disposal Cost	Units	Cost Estimate
Flammable Liquids	142	Drum	\$107	Drum	\$15,194
Oxidizers	121	Drum	\$261	Drum	\$31,581
Reactives & Flammable Solids	44	Drum	\$407	Drum	\$17,908
Poisons	123	Drum	\$315	Drum	\$38,745
Corrosives - Alkaline	123	Drum	\$151	Drum	\$18,573
Corrosive - Acid	123	Drum	\$161	Drum	\$19,803
Other Hazardous Waste (Liquids)	123	Drum	\$138	Drum	\$16,974
Other Hazardous Waste (Solids)	111	Drum	\$138	Drum	\$15,318
Other Hazardous Waste (Bulk Container)	0	Ton	\$87	Ton	\$0
Non-RCRA Waste (Bulk Container)	0	Ton	\$23	Ton	\$0
Subtotal For Container Storage Building =					\$174,096

## 9.8 Closure Cost Estimate (10-Day Transfer Facility)

Indicated below is the most recent closure cost estimate for the 10- Day Transfer Facility based upon the maximum quantities indicated in the Closure Plan and the methods indicated for treatment and/or disposal.

10-DAY TRANSFER FACILITY CLOSURE COST

Waste Materials	Disposal Volume	Units	Disposal Cost	Units	Cost Estimate
Flammable Liquids	59	Drum	\$107	Drum	\$6,313
Oxidizers	15	Drum	\$261	Drum	\$3,915
Reactives & Flammable Solids	15	Drum	\$407	Drum	\$6,105
Poisons	48	Drum	\$315	Drum	\$15,120
Corrosives - Alkaline	22	Drum	\$151	Drum	\$3,322
Corrosive - Acid	28	Drum	\$161	Drum	\$4,508
Other Hazardous Waste (Liquids)	91	Drum	\$138	Drum	\$12,558
Other Hazardous Waste (Solids)	86	Drum	\$138	Drum	\$11,868
Other Hazardous Waste (Bulk Container)	0	Ton	\$87	Ton	\$0.00
Non-RCRA Waste (Bulk Container)	0	Ton	\$23	Ton	\$0.00
Subtotal For 10-Day Transfer Facility =					\$63,709

Treatment and disposal costs for both the TSDF and Transfer Operations are based on actuals charged by various disposal contractors used by EQFL during 2015.

## 9.9 Closure Cost Estimate (Waste Processing Building)

Closure of the Waste Processing Building would consist of removal of 5,000 gallons of hazardous waste, the hazardous waste treatment tank, the reactives magazine, remaining reagents used for hazardous waste treatment, the shredder and the solid waste treatment unit. Costs for removal of the shredder and solid waste treatment unit are provided in the solid waste permit renewal application (Volume 3 of 3). The costs presented below relate more directly to closure of the hazardous waste side of the Waste Processing Building and general clean-up of the building itself.

The maximum cost for closure of the hazardous waste treatment tank would occur if the tank were filled with material to be treated, or that had been partially treated, at shutdown. In this case the contents would be removed and placed back into appropriate containers for off-site disposal. No additional cost for treatment of this material has been assumed in this case because the disposal volume has already been accounted for in either the TSDF or Transfer Operations Closure presented in Sections 9.7 and 9.8. The only additional cost would be the time to empty the contents of the tank. Rinsate costs are based on

assumption of generating 0.5 gallons per square foot. Labor hours are based on cleaning 225 square feet per hour at a rate of \$40 per hour.

Coincidentally with removing the contents of the tank, the remaining materials to be disposed of at closure of the treatment building would be any reagents being stored for use in treatment of the characteristically hazardous waste. A total of 40 tons was assumed for closure cost estimating and the unit price for transportation and disposal is currently \$26 per ton.

After removal of the contents, closure of the treatment tank would consist of a high pressure steam rinse with collection of the accumulated rinsate and any sediment into containers for analysis to determine ultimate disposal requirements. Because of the waste codes treated in the tank, analyses would be need only for corrosives (D002) and the metals (D004-D011). The tank will be allowed to air dry and then will be cut into manageable sections and be shipped off site for recycling as scrap metal. In this instance, the material would not be considered a solid waste under RCRA and would fall under the scrap metal exemption in 261.4(a)(13).

Once the tank is removed, the reactivities magazine will be decontaminated and the floor of the waste processing building, including sumps, will be steam cleaned and the rinsate collected for proper disposal. Cleaning and decontamination of miscellaneous equipment will also occur at this time.

The Waste Processing Building consists of a concrete slab approximately 8-in thick. No provisions have been made in the closure cost estimate for sampling of soils to determine if there has been a release to the subsurface. Further, no estimates have been provided for additional cleaning and potential removal of the upper surface of the slab and treatment of the resulting debris. At closure, the FDEP will be requested to tour the treatment building and make a joint determination with EQFL as to whether soil sampling or concrete cleaning will be required based on evidence of spills, cracks in the slab, or other means by which the slab has been compromised and would justify subgrade soil sampling. Should such testing be required, the funding set aside for contingency provided in Section 9.10 will be available for this purpose. Pending the outcome of this inspection, a closure certification will be provided by a registered professional engineer.

WASTE PROCESSING BUILDING CLOSURE COST

Waste Materials	Disposal Volume	Units	Disposal Cost	Units	Cost Estimate
Flammable Liquids	0	Drum	\$107	Drum	\$0
Oxidizers	0	Drum	\$374	Drum	\$0
Reactivities & Flammable Solids	0	Drum	\$426	Drum	\$0
Poisons	0	Drum	\$315	Drum	\$0
Corrosives - Alkaline	9	Drum	\$151	Drum	\$1,359
Corrosive - Acid	64	Drum	\$161	Drum	\$10,304
Other Hazardous Waste (Liquids)	18	Drum	\$138	Drum	\$2,484
Other Hazardous Waste (Solids)	0	Drum	\$138	Drum	\$0
Other Hazardous Waste (Bulk Container)	0	Ton	\$87	Ton	\$0
Non-RCRA Waste (Bulk Container)	0	Ton	\$23	Ton	\$0
Subtotal For Waste Processing Building =					\$14,147

**WASTE PROCESSING BUILDING DECONTAMINATION CLOSURE COST**

Item	Quantity	Unit	Rate	Cost
Disposal of Unused Reagents (Transportation & Disposal)	40	Ton	\$26	\$1,040
Remove Contents of Treatment Tank (9000 Gallons)	2	Hour	\$40	\$80
Steam Clean Treatment Tank (Inside & Out)-1152 Sq. Ft. and Pump Out Rinsate	6	Hour	\$40	\$240
Dismantle Tank for Scrap/Recycling (4-Man Crew)	32	Hour	\$100	\$3,200
264 Sq. Ft.(Floor, Roof & Inside)	2	Hour	\$40	\$80
8,050 Sq. Ft. Floor and Sumps	26	Hour	\$40	\$1,040
Pumps, Filters, Hand Trucks	4	Hour	\$40	\$160
Rinsate Disposal/Treatment	4733	Gallon	\$0.69	\$3,266
Misc. Equipment Rental	2	Day	\$200	\$400
Mobilization and Demobilization	2	Day	\$1,850	\$3,700
Closure Certification	1	Each	\$1,500	\$1,500
<b>Subtotal for WPB Decontamination =</b>				<b>\$14,706</b>

**9.10 Closure Cost Estimate (Bulk Container Storage)**

Indicated below is the most recent closure cost estimate for the Bulk Container Storage based upon the maximum quantities indicated in the Closure Plan and the methods indicated for treatment and/or disposal.

**BULK CONTAINER STORAGE CLOSURE COST**

Waste Materials	Disposal Volume	Units	Disposal Cost	Units	Cost Estimate
Flammable Liquids	0	Drum	\$107	Drum	\$0
Oxidizers	0	Drum	\$374	Drum	\$0
Reactives & Flammable Solids	0	Drum	\$426	Drum	\$0
Poisons	0	Drum	\$315	Drum	\$0
Corrosives - Alkaline	0	Drum	\$151	Drum	\$0
Corrosive - Acid	0	Drum	\$161	Drum	\$0
Other Hazardous Waste (Liquids)	0	Drum	\$138	Drum	\$0
Other Hazardous Waste (Solids)	0	Drum	\$138	Drum	\$0
Other Hazardous Waste (Bulk Container)	400	Ton	\$87	Ton	\$34,760
Non-RCRA Waste (Bulk Container)	400	Ton	\$23	Ton	\$9,112
<b>Subtotal For Bulk Container Storage =</b>					<b>\$43,872</b>

**9.11 Closure Cost Estimate (Combined Operations)**

A summary of the closure cost for the combined operations is provided below. These costs assume a 10% contingency which is considered an adequate, industry standard, for unanticipated closure activities.

**TOTAL CLOSURE COST**

Container Storage Building =	\$174,096
10-Day Transfer Facility =	\$63,709
Waste Processing Building =	\$14,147
Bulk Container Storage =	\$43,872
Waste Processing Building Decon =	\$14,706
Transportation =	\$149,943
<b>Subtotal =</b>	<b>\$460,472</b>
Contingency @ 10% =	\$46,047
<b>Total Closure Cost =</b>	<b>\$506,519</b>

## 9.12 Financial Assurance

Total cost of Closure for the Combined Operations is estimated to be \$506,519. The current Letter of Credit of \$268,979, dated March 15, 2015, is less than the Combined Closure Cost Estimate.

EQFL, a division of EQ Holding Company, will meet its financial assurance requirements under 40 CFR 264.143 Subpart H Letter of credit guaranteeing payment into a closure trust fund. Requisite insurance documentation and a Letter of Credit in favor of the State of Florida will be issued upon the Department's review and acceptance of the facility closure cost estimate provided in Section 11.10. This information will demonstrate compliance with Rule 62-730.300(2)(b), Florida Administrative Code (F.A.C.) and 40 CFR Part 264 Subpart H as adopted by reference in Rule 62-730.180, F.A.C.

After initial submission of financial information, annual updates will be provided after the close of each succeeding fiscal year. Updated information will consist of the following:

1. An inflationary increase in the Letter of Credit held for facility closure.
2. A copy of the current Standby Trust Fund Agreement.
3. A copy of the current Certificate of Liability Insurance.

## 9.13 Schedule for Final Closure

EQFL plans to continue operating the EQFL permitted facility as long as it is a viable business activity, both economically and environmentally. There are currently no plans to stop waste management activities or close the facility. The schedule for final closure is listed below in the event closure is necessary.

EQFL will notify the FDEP in writing at least 45 days prior to the date on which final closure is expected to begin. This date (beginning of final closure) will be no more than 30 days after the receipt of the final volume of hazardous waste.

Indicated below is a list of tasks for final closure of the EQFL storage/treatment facility. These tasks will be performed within a schedule of 90 days from beginning closure activities.

1. Final Waste Acceptance	15 Days
2. Processing Complete	21 Days
3. Offsite Disposal Shipments Complete	30 Days
4. Facility Decontamination Complete	45 Days
5. Soil Sampling and Analysis Complete	60 Days
7. Closure Certification	89 Days
8. Final Date of Facility Closure	90 Days
<b><i>Total time required to close facility</i></b>	<b><i>90 Days</i></b>

All hazardous wastes will be removed within 90 days of receiving the final volume of hazardous waste. All closure activities will be complete within 180 days of receiving the final volume of hazardous waste.

## 9.14 Certificate of Closure

Prior to the implementation of the closure plan, EQFL will meet with FDEP to discuss the details of the closure plan. Based upon new regulations and/or guidance or policy issues, the plan may need to be amended and/or updated prior to its implementation.

Within 60 days of the closure of each hazardous waste unit and within 60 days of the final closure of the facility, EQFL will submit to the FDEP, by registered mail, a certification that the facility has been closed



in accordance with the EQFL Closure Plan. The certification will be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the closure certification will be included in this submittal.

The EQFL facility has no disposal units. Therefore, no survey or post closure care is required.

The EQFL Closure Plan will be amended as per the requirements of 40 CFR 264 Subpart G if amendments are necessary.

## **10.0 USE AND MANAGEMENT OF CONTAINERS**

### **10.1 Condition of Containers**

All hazardous waste containers are inspected by an EQFL driver or subcontract transporter prior to removal from the generator's site. The containers are checked for compliance with DOT (or other applicable) regulations. Containers are specifically checked for container and waste compatibility, container integrity, excess rust, excess corrosion, excess dents or defects, leakage, closure, labels, and proper shipping documents. All storage containers will comply with 40 CFR 264, Subpart I requirements. Unacceptable containers will be corrected at the generator's site. These corrections include things such as relabeling a container or tightening the closure. Unacceptable containers can be overpacked or the materials can be transferred to a new or acceptable container. Unacceptable containers, not resolved to EQFL satisfaction, will be left at the generator's site.

Containers are double checked for the same problems and conditions upon receipt at the EQFL facility. The same corrections or actions occur at the EQFL facility except unacceptable containers will be rejected and returned to the generator.

### **10.2 Compatibility of Waste with Containers**

EQFL will use containers made of or lined with materials, which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired. Chemical compatibility of the wastes with the containers will be in accordance with DOT regulations specified by 49 CFR. The DOT lists standards for containers made of steel, aluminum, metal (other than steel or aluminum), plywood, fiber, plastic, wood, natural wood, reconstituted wood, fiberboard, woven plastic, plastic film, textile, paper, composite with plastic liner, and composite with glass, porcelain, or stoneware liners.

EQFL utilizes many of these types of containers. The most common container types utilized are steel, plastic, fiber, and woven fiber. Most of the waste managed by EQFL is in 55-gallon steel drums. Fiber and woven fiber containers may be used for solid materials. Steel containers are used for nearly all types of waste materials except corrosives. Corrosives may be stored in steel containers if a plastic liner is used or if the corrosives are in lab pack form. Corrosive materials are usually stored in plastic (poly) containers. The container sizes usually range from a 5-gallon pail to one cubic yard totes. Bulk transport containers such as roll-off boxes and tankers are occasionally utilized for outbound or transfer shipments. All bulk tanker storage will be in the improved containment area located in front of Bay 2.

### **10.3 Management of Containers**

All containers at the EQFL facility will remain closed. The containers will be opened only when it is necessary to add or remove waste materials for sampling, transfer, or treatment. All containers managed by EQFL will be handled to ensure that no damage, rupture, or leakage will occur. Containers will be moved manually, by drum truck, forklift with proper container handling attachment, pallet jack, or suitable means designed or utilized for movement of containers of hazardous waste.

### **10.4 Inspections**

Container storage areas are inspected daily (each operating day) by EQFL personnel. The inspector will check for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors. Inspection of containers is described in the EQFL Inspection Plan provided as Section 5 of this permit renewal.

## **10.5 Containment Design & Operations**

### ***10.5.1 Base***

The EQFL container storage building has a containment system designed and built to contain leaks or spills of hazardous waste. The building is 5,866 square feet (MOL) and features a floor, which is five inches of 4,000 PSI concrete placed monolithically with 6x6, 10/10 wire mesh woven throughout. The base is free of gaps and cracks. The floor has been coated with a chemical resistant sealant and two layers of chemical resistant polyurethane coating. The specifications and manufacturer's information on the coating material are included in Appendix I. All floors and containments in the container storage building are built and coated to these specifications. The floors, sumps, and coatings are compatible with the materials stored in the building. The floors and sumps with coatings are impervious to contain leaks or spills.

### ***10.5.2 Slope and Drainage***

The building is divided into 3 (three) separate bays. An eight-inch wide concrete block wall separates each bay. The walls extend from the floor to the roof and are designed with a minimum fire resistance of 4 (four) hours. Bays 1 (north) and 3 (south) are for general storage (non-flammable) of hazardous waste. Bay 2 (center) is for the storage of flammable and reactive waste. Bays 1 and 3 have dimensions of approximately 48 feet by 50 feet. Bays 1 and 3 are each subdivided into two equal sections of approximately 24 feet by 50 feet. Each equal subdivided section of Bays 1 and 3 has its own containment sump (one sump each section, or two sumps each bay). Bay 2 is in the center of the building approximately half the size of Bays 1 and 3. The dimensions of Bay 2 are approximately 22 feet by 50 feet. Bay 2 has a separate containment sump giving the entire building a total of five separate equal size containment sumps. The floors of Bay 2 and the floors of each of the subdivided sections of Bays 1 and 3 slope 1/8 inch per foot to the central containment sumps. This ensures that any liquids resulting from leaks or spills will be directed to a central containment sump. Each containment sump is available to contain spills or leaks of different hazard class materials. This prevents the potential for incompatible materials to spill or leak into the same containment sump. No container will be more than 25 feet from a containment sump. The EQFL container storage building is located completely under roof (complete with 10-foot overhang and 50-foot roof extension) and there is no potential of accumulation of precipitation in the building. The containment sumps and container storage areas are shown on Figure 14 and the as-built record drawings for the hazardous waste/management building included in Appendix D (Volume 2 of 3).

Details regarding the capacity and containment provided within the waste processing building are provided in Section 6.2 of Volume 3 of 3.

### ***10.5.3 Capacity***

The five (5) warehouse containment sumps are of identical (MOL) rectangular dimensions of 8.5 feet (length) by 3.5 feet (width) by 4.5 feet (depth). The containment volume of each sump and the improved exterior containment areas located in front of Bay 2 are calculated below:

<b>Containment Area</b>	<b>Containment Calculations (L x W x H x 7.48 Gallons/Cubic Foot)</b>	<b>Total Volume (Gallons)</b>
Warehouse Sumps (Total 5)	$(8.5' \times 3.5' \times 4.5' \times 7.48) \times 5$	5,007
Improved Exterior Area #1	$(46' \times 25.41' \times 1.16' \times 7.48) / 2$	5,071
Improved Exterior Area #2	$46' \times 19.33' \times 0.59' \times 7.48$	3,924
Improved Exterior Area #3	$(46' \times 19.33' \times 1.16' \times 7.48) / 2$	3,858
<b>Total Containment Capacity</b>		<b>17,860</b>

The calculated containment volume of the warehouse sumps is approximately 5,007 gallons. The EQFL facility capacity of hazardous waste is 50,000 gallons. The containment capacity of the five sumps alone exceeds the required 10% containment of the maximum quantity of hazardous waste, which may potentially be on site at any time. The total containment capacity provided is 17,860 gallons, which is more than triple the containment capacity needed.

The EQFL facility containment is actually much greater if the following considerations are taken. Approximately one-fifth of the containers managed by the EQFL facility are lab packs (mostly exempt household waste). The lab pack containers contain a maximum of 20 gallons of hazardous waste per container. The remaining (non-lab packed) containers are approximately half with free liquids and half with no free liquids. The slope of the floors would also provide additional containment in an emergency. There is an approximate total of 3 inches of slope to each of the five containment sumps. The actual containment of the facility would actually far exceed the minimum required 10% when all these other conditions are considered. Containers without free liquids and lab packs (counted as 55 gallons instead of the actual 20-gallon maximum) have been included in the containment calculation to provide a worst case scenario. For the purposes of storage capacity, the actual quantity of liquids being stored will always be less than the permitted capacity.

#### **10.5.4 Run-On**

Run-on into the containment system is not possible. The floors to the storage building are approximately four feet above the exterior ground elevation. The storage building is totally enclosed to prevent run-on into the building. The exterior drainage is away from the building.

#### **10.5.5 Waste Removal**

Spilled or leaked waste will be removed from the containment sump in as timely a manner as is necessary to prevent overflow of the containment system or a threat to human health or the environment. Where a hazard is imminent or has already occurred, waste removal will be immediate. Wastes will be removed from sumps as soon as possible. Wastes will be removed the same day that waste is discovered in the sump by the daily (or other) inspections. The containment sumps are inspected daily as indicated in the Inspection Plan. All liquids which accumulate in the containment sumps, unless already identified, will be sampled and analyzed in accordance with the Waste Analysis Plan. The accumulated liquids will be pumped into appropriate containers and managed as hazardous waste if required.

### **10.6 Containers without Liquids**

Calculation of the containment capacity of the facility already includes all containers including those without free liquids. This is a conservative approach. The waste materials managed include liquids, sludges, and solids. Solids represent approximately one-third of the waste managed at the facility yet

containers of solids (with no free liquids) are counted as liquids and are included in the containment calculation. Should the facility need to test for free liquids, the procedures described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" US EPA SW 846 (latest edition) will be utilized. The test for free liquids is described in the Waste Analysis Plan of this permit renewal. The facility is designed and operated such that storage areas are able to drain and remove liquids so that containers do not remain in contact with accumulated liquids.

All wastes (including solids with no free liquids) which include waste codes F020, F021, F022, F023, F026, and F027 will have a containment system as required by 40 CFR 264.175.

### **10.7 Ignitable or Reactive Wastes**

Containers holding ignitable or reactive wastes will be located at least 50 feet from the facility's property line. Ignitable or reactive wastes are described in the Ignitable, Reactive, or Incompatible Wastes section of this permit renewal.

### **10.8 Incompatible Wastes**

The EQFL facility incompatible waste requirements and procedures are described in the Ignitable, Reactive, or Incompatible Wastes section of this permit renewal.

### **10.9 Closure**

At closure, all hazardous waste and hazardous waste residues will be removed from the containment systems. All containers, liners, bases, and soil containing or contaminated with hazardous waste (or residues) will be decontaminated or removed. This and the closure cost estimate are described in the Closure Plan, discussed in Section 11.0 of this permit renewal.

## **11.0 PROCESSES, PROCEDURES, STRUCTURES, AND EQUIPMENT**

### **11.1 Inbound Shipments**

Hazardous waste shipments are unloaded for inbound receipt. Inbound hazardous waste shipments are inspected, sampled, and analyzed according to the procedures described in the EQFL Inspection Plan, EQFL Waste Analysis Plan (WAP), and Manifest sections (Sections 5, 4 and 9 respectively) of this permit. Inbound waste shipments may be in semi-truck van, tractor trailer, roll-off box containers, tanker, or other similar DOT approved forms of transportation.

Hazardous waste container shipments are unloaded directly to the warehouse. The vehicle backs directly to the facility warehouse (in the loading/unloading area shown on Figure 16) where containers are unloaded directly from the vehicle (trailer or van) to the warehouse. Container unloading is usually done manually utilizing a "drum truck" (dolly). A forklift may be utilized for unloading, but will not be utilized in Bay 2, the flammable storage bay. EQFL will sign manifests acknowledging receipt of hazardous waste shipments within 24 hours of arrival at the facility or prior to the transporter leaving the facility, whichever is sooner. Inbound hazardous waste container shipments will be unloaded within (5) five calendar days (excluding holidays) of arrival at the facility. If the arrival dates or unloading dates are different from the receipt dates, they will be noted in the operating record.

### **11.2 Bulk Shipments**

Bulk hazardous waste shipments may include tankers, roll-off box, and other similar type shipments. Bulk hazardous waste shipments manifested to EQFL will be sampled and analyzed per the EQFL WAP to verify conformance to its waste profile. Other requirements for containerized hazardous waste shipments would also apply to bulk hazardous waste shipments manifested to EQFL. Specifically, EQFL will sign manifests acknowledging receipt of bulk hazardous waste shipments manifested to EQFL within 24 hours of arrival at the facility or prior to the transporter leaving the facility, whichever is sooner. Inbound bulk hazardous waste shipments manifested to EQFL to be unloaded (if applicable) will be unloaded within five (5) consecutive calendar days (excluding holidays) of arrival at the facility. Bulk hazardous waste shipments manifested to EQFL will be shipped off-site upon approval from the final disposal facility for acceptance and scheduling of waste. EQFL will notify the DEP if any unforeseen problems require exceeding the original 24 hours.

### **11.3 Processing Areas**

Inbound waste shipments may be unloaded into the warehouse to a temporary processing area for obtaining samples and waste verification. The temporary processing area will have separate containment by utilizing a temporary dike, boom or berm. Inbound waste will be stored in the temporary processing area for a maximum of 5 operating days. All applicable requirements such as inspections and operating record will apply to these wastes. The processing area will be designated with a sign. Upon completion of verification sampling, the Operations Manager may designate a portion of inbound waste shipments for staging and treatment within the waste processing building.

Temporary processing areas have been identified on Figure 14. The areas are normally utilized as permitted hazardous waste storage and processing areas. A temporary berm or containment will be utilized to designate and contain the temporary processing area when in use. A sign designating "Temporary Processing Area" and "Temporary Processing Start Date \_\_\_\_\_" will also be utilized for each temporary processing area. The temporary processing area, temporary berm or containment will contain the volume of the largest container or 10% of all containers in the temporary area (whichever is greater).

Hazardous waste designated for outbound shipments may be moved to a temporary processing area. Outbound hazardous wastes will be stored a maximum of 10 days in the temporary processing area. All applicable requirements such as inspections and operating records will apply to these hazardous wastes.

#### **11.4 Transfer Facility/Staging Area**

EQFL plans to continue utilization of the transfer facility located on the 8<sup>th</sup> Avenue property. The transfer facility is incorporated in the EQFL Contingency and Closure Plans and exceeds all applicable requirements. Transfer facility waste shipments do not include shipments to EQFL (designated facility) or from EQFL (generator). Vehicles/trailers parked in this area are marked as a 10-Day vehicle/trailer to avoid being confused with other vehicles/trailers that may also be located in the same vicinity. Transfer facility waste shipments are noted in a separate Transfer Log (operating record).

This staging area on the 8<sup>th</sup> Avenue property will also continue to be used by EQFL. The staging area is only used for inbound loads waiting for unloading and receipt, and outbound loads waiting completed transportation paperwork. Vehicles/trailers in this area are marked as either an inbound load or an outbound load to avoid being confused with other vehicles/trailers that may also be located in the same vicinity.

Vehicles/trailers located in both areas are parked on a man-made impervious surface. Secondary containment is provided if vehicles/trailers are going to be parked in this area for more than 24-hours. All vehicle/trailers with ignitable and/or reactive waste onboard will be parked at least 50 feet from the property line. The locations of these areas are identified as the Transfer Facility/Staging Area on Figure 16.

#### **11.5 Outbound Shipments**

Outbound shipments of hazardous waste may be loaded to bulk containers (roll-off box or tanker). Outbound roll-off shipments will be loaded by emptying containers into the roll-off container. Containers are emptied utilizing a forklift with a container handling attachment. Outbound tanker shipments are loaded by pumping the container directly to the tanker utilizing the tanker pump (or a portable pump).

Outbound hazardous waste vehicles back directly to the facility warehouse (in the loading/unloading area shown on Figure 16). Hazardous waste containers are loaded to outbound vehicles directly from the warehouse. Container loading is usually done manually utilizing a "drum truck" (dolly). A forklift may be utilized for loading, but will not be utilized in Bay 2, the flammable storage bay. The waste is physically removed from the warehouse and placed into the transport vehicle. Outbound hazardous waste paperwork is reviewed for completeness, accuracy, quantities, and piece count.

The loading of outbound hazardous waste container shipments will be completed within 10 consecutive workdays of initiating the loading of the outbound shipment. All hazardous waste outbound shipment load quantities will continue to be inspected daily and counted towards the total facility capacity until the outbound shipment has departed from the facility. The EQFL operating record will document the loading operations of hazardous waste.

#### **11.6 Hazardous Waste Processing/Flow Summary**

##### ***11.6.1 Inbound Transportation***

Hazardous waste container shipment manifests will be signed within 24 hours of arrival at the facility or prior to the transporter leaving the facility, whichever is sooner.



### ***11.6.2 Bulk Inbound Shipments***

Hazardous waste bulk shipments are received, managed, and will depart from the facility upon approval from the final disposal facility for disposal and scheduling of waste. All hazardous waste bulk inbound shipment load quantities will be counted towards the total facility capacity until the bulk inbound shipment has departed from the facility.

### ***11.6.3 Unloading***

Hazardous waste container shipments will be unloaded within five (5) consecutive calendar days (excluding holidays) of arrival at the facility.

### ***11.6.4 Loading of Outbound Shipments***

The loading of outbound shipments of hazardous waste will be completed within 10 consecutive working days of initiation of the loading of the outbound shipment.

### ***11.6.5 Waste Receipt, Sampling, and QC Analysis***

Waste receipt, sampling, and QC analysis procedures are described in the EQFL Waste Analysis Plan.

### ***11.6.6 Waste Storage***

All applicable requirements for waste storage are described in the appropriate section of this permit.

### ***11.6.7 Waste Treatment***

Waste treatment (solidification) in the on ground treatment tank is described in Section 44 12.

### ***11.6.8 Waste Recontainerization or Consolidation***

Some of the waste received will be recontainerized. In general, recontainerization includes consolidation of like waste into similar size or larger containers; however, there will be no increase in container size for any of the waste categories. Other recontainerization operations will include paint can processing, empty container and or rag compacting, loading to roll-offs, and loading to tanker truck. All waste transfer and recontainerization is conducted utilizing best management practices.

Hazardous wastes will have already been profiled and approved as described in the EQFL Waste Analysis Plan prior to recontainerization. In addition, each hazardous waste stream will also have been sampled and quality control verified as described in the EQFL Waste Analysis Plan. Only compatible wastes are transferred or recontainerized in each batch operation. The same waste management practices for inspections, contingency, preparedness and prevention, training, precautions for ignitable, reactive, and incompatible wastes, waste analysis, recordkeeping, and container management that apply for treatment and storage will also apply for hazardous waste transfer and recontainerization.

Additional precautions will be taken when bulk (roll-offs, sludge boxes, and tankers) recontainerization occurs. The loading/unloading area will be inspected prior to the

recontainerization. The EQFL stormwater system will be shut off. Additional precautions such as the use of plastic sheeting, pads, and booms will be utilized if necessary to contain possible drippage. Roll-offs will be utilized for solid material, sludge boxes will be utilized for sludges, and tankers will be utilized for liquids. A liner will be utilized for roll-offs. Containers will be dumped into the top of the roll-off. The roll-off will be covered by a lid or tarp when loading is complete. Containers will be dumped or pumped through the top opening of the sludge box. The box will be closed and sealed when loading is complete. Containers will be pumped directly to tankers. Special care will be taken to prevent drippage from hoses or fittings. The tanker will be closed and sealed when loading is complete. The loading/unloading area will be inspected after each loading operation. Any drippage or residue will be cleaned up. If drippage occurs, it will be contained by disposable plastic sheeting and/or absorbent materials. Disposable items containing waste residues will be managed appropriately as solid or hazardous waste. The stormwater system will be turned back on only when any material processing has been stopped and inspection verifies that the area has been properly cleaned if necessary.

#### ***11.6.9 Universal Waste***

The facility receives Universal Waste including batteries and mercury-containing lamps such as fluorescent lamps. Lamps are also received from Conditionally Exempt Small Quantity Generators (CESQGs). If Universal Waste is received in containers that show evidence of leakage, spillage, or damage that could cause leakage, the material will be repackaged into containers that are structurally sound and compatible with the waste. All Universal Waste is handled in a manner that will prevent breakage, releases of their components, and their exposure to moisture. Once received, the lamps and batteries are placed in storage. Universal Waste batteries are stored on the ramp located adjacent to Bay 3B as shown on Figure 14. Universal Waste Lamps are stored in the cargo area of a box truck that is able to be sealed from the weather. The storage location for the Universal Waste Lamps is also illustrated on Figure 17.

#### ***11.6.10 Paint Can Processing***

The facility receives water-based latex and solvent-based paint in cans for recontainerization and disposal. The majority of the paint received is from household waste. This operation includes manually pouring the paint to a container or processing the paint cans through the processing unit which crushes the cans, separating the paint from the emptied container. Equipment specifications of the paint can processor are included in Appendix I.

EQFL will use best management practices when operating the unit. Practices include using plastic sheeting to contain any drippage. Each hazardous waste stream processed by the unit will have had waste analysis completed as described in the Waste Analysis Plan.

#### ***11.6.11 Empty Container and Rag Compacting***

The drum crusher and rag compactor will consist of a closed cabinet unit located inside the storage building. A drum is placed inside the unit and a ram is used to crush the drum. The unit contains a grate and collection pan at the bottom to catch any liquid or solid residue material from the crushed drum. The material is drummed as waste.

The rag compactor works in a similar manner in that a drum of waste rags is placed inside the unit. A ram which is slightly smaller than the drum opening is used to compact the rags inside the drum. Equipment specifications of the drum compactor are included in Appendix I.

## **11.7 Empty Container Management**

Empty containers and/or inner liners removed from empty containers which meet the requirements of 40 CFR 261.7 will be managed as RCRA Empty. Empty containers and/or liners that have held an acute hazardous waste listed in 40 CFR 261.31, 231.32, 261.33(e) will be managed as Acute Empty. Containers and/or liners which do not meet the requirements of RCRA Empty will be managed as Non-Empty Containers.

### ***11.7.1 RCRA Empty***

RCRA Empty containers smaller than 55 gallons will be recycled or managed as non-RCRA regulated solid waste. RCRA Empty containers 55 gallons and larger will be recycled, returned to reconditioners, or managed as non-RCRA regulated solid waste.

RCRA-Empty containers will be accumulated on an empty trailer, and/or at the truck loading/unloading area. The empty containers will be sent off-site for recycling, reconditioning, and/or disposal when sufficient quantity is available (usually a truckload). The empty container storage area will be inspected as per the inspection plan. Empty containers may be crushed and/or compacted on site.

### ***11.7.2 Acute Empty***

Acute empty containers will be triple rinsed or managed as hazardous waste. Containers that are triple rinsed will be thoroughly rinsed using an appropriate solvent a minimum of three (3) times. The container will be fully emptied into a container, typically a 55-gallon drum or 5-gallon bucket following each rinse. The collected rinse solvent will be managed as hazardous waste. The rinsing will occur within the warehouse above the impervious floor.

### ***11.7.3 Non-Empty***

Non-Empty containers will be managed as per the requirements for the material within the container.

## **11.8 Unknown Waste Handling Procedures**

EQFL is currently authorized to store any RCRA hazardous waste under the special provisions detailed in Specific Condition Part I, Item 3, and Part V, Item 2 of the existing permit. (i.e., unknown waste received during emergency clean-up activities) The unknown waste referred to are actually not totally unknown. The "unknown wastes" in all cases have been sufficiently characterized (by Hazcat Kit, laboratory quality control, or similar means) to determine the waste compatibility and hazard class. This information will be sufficient for DOT approved shipping and handling of the waste, but may not be sufficient to fully manage the waste per 40 CFR Part 268 (Land Disposal Restrictions) until further information is received. EQFL will utilize the following procedure for the management of "not fully characterized" (i.e., unknown) wastes.

1. EQFL (or other approved) personnel will sample the container of waste following DEP SOP 5000 (Waste Sampling) and/or other "procedures and guidelines" mentioned in this paragraph procedures and guidelines for approaching and sampling unknown waste.
2. Field screening tests for color, density, physical state, pH, ignitability, oxidizer potential, solubility, and water reactivity will be performed to characterize the compatibility and hazard class of the waste.

3. The waste will be labeled and manifested for transport to the EQFL facility. Shipping name will be determined by the field characterization and, at minimum, will be Hazardous Waste Solid (or Liquid), Not Otherwise Specified (NOS). The legend "Pending Analysis" will be written on the container (or label) and manifest.
4. Any "not fully characterized" (unknown) waste received by the EQFL facility will be segregated from all other hazardous wastes until the wastes are identified and waste compatibility is determined. This is an extra precautionary measure since waste compatibility will have been field determined prior to receipt. The segregated area utilized for these wastes will have a separate containment system not contiguous with the containment systems provided for the known wastes. EQFL utilizes containment pallets for separate containment.
5. Each container of "not fully characterized" (unknown) waste will be sampled and analyzed following the procedures specified in the EQFL Waste Analysis Plan.
6. Once the waste is fully characterized, the waste will be moved to the appropriate storage location and scheduled for treatment or shipment to an off-site disposal facility.
7. EQFL will notify the Department detailing waste type and quantity if characterization of the waste indicates the waste is not authorized by the EQFL permit. The waste will be removed within 10 working days to a permitted treatment, storage, disposal facility if it is not authorized by the EQFL permit.

### **11.9 Transfer Facility Operating Record Procedures**

EQFL is also a registered hazardous waste transporter with a state registered (on site) transfer facility. EQFL exceeds all applicable regulations for transporter transfer facility operations. The EQFL transporter transfer facility is similar to transfer facilities of other transporters except it happens to be located at a permitted facility. EQFL exceeds the minimum regulatory requirements for transfer facilities.

The EQFL Transfer Facility operating record will track shipments of hazardous waste by EQFL (as transporter), where EQFL is not the generator or designated TSDf and the shipment is stored in the transfer facility more than 24 hours and not to exceed ten (10) consecutive calendar days.

1. Record the manifest number for each shipment that enters and leaves the facility, or, for a shipment from a CESQG without a manifest, an identifying number from the shipping document.
2. Record the date when all hazardous waste enters and leaves the facility.
3. Record the generator's name and the EPA/DEP identification number. For CESQGs without and EPA/DEP identification number, record the name and address of the generator.
4. Record the amount of hazardous waste and hazardous waste codes associated with each shipment into and out of the facility.
5. File the signed transporter copy of the manifest.
6. Transfer facility storage must not exceed ten days.
7. All shipments must meet all applicable DOT and RCRA requirements such as placarding and manifesting.
8. Transfer shipments must be inspected daily.

### **11.10 Non-RCRA Regulated Waste Management**

The inclusion of non-RCRA regulated waste information in this document is for informational purposes only. These items are regulated under Subtitle D regulations and RCRA Subtitle C regulations do not apply (by definition). EQFL exceeds all applicable regulations for solid waste transfer facility operations. The EQFL solid waste transfer facility is similar to transfer facilities of other solid waste facilities except it happens to be located at a permitted facility. One of the primary purposes of this renewal submittal is to

combine the Solid Waste and Hazardous waste permits under one umbrella and the Solid Waste renewal application is contained in Volume 3 of 3 in this set of documents.

### **11.11 Household Hazardous Waste Management**

EQFL manages a significant quantity of Household Hazardous Waste (HHW). The HHW is solid waste (mostly labpacks) which is not hazardous waste as defined in 40 CFR 261.4 (b) 1). The HHW is regulated under Subtitle D regulations which (by definition) do not apply to this permit. The inclusion of HHW information is for informational purposes only. EQFL exceeds all applicable regulations for HHW Management. Nearly all HHW managed at the EQFL facility is managed as if it were hazardous waste. EQFL typically manifests (including Land Disposal Restriction notification) labels, and enters this information into the facility operating record for HHW shipments. Other permit requirements such as training, inspections, and contingency are typically adhered to by EQFL for the management of HHW. The management of HHW is included in EQFL facility capacity as labpack waste (20 gallons maximum per 55 gal. drum), containment, closure, and financial assurance calculations. Management of HHW does not interfere with management of RCRA regulated hazardous waste.

### **11.12 Stormwater Management System**

The EQFL facility is designed and built to minimize the potential release of hazardous waste or hazardous waste constituents to the air, soil or surface water. The waste storage and treatment building is totally enclosed. The building floor is more than four (4) feet above the grounds of the site to allow loading and unloading directly from truck to warehouse and from warehouse to truck. The building roof overhangs ten feet out over the loading and unloading docks.

Many features have minimized the potential of stormwater contacting hazardous waste or hazardous waste constituents. The 10-foot roof overhang reduces the amount of stormwater in the loading and unloading area. All waste managed in the loading and unloading area is in closed containers. Currently, an extra precautionary design of the facility is a stormwater filtration system. It should be noted that this system is not a required by this permit and is included for information purposes only.

The loading and unloading area is constructed of concrete and asphalt materials. The surface is sloped to containment trench. The containment trench runs from the north loading and unloading area to the south accumulation sump. All stormwater from the loading and unloading area flows to the 640-gallon concrete sump through the containment trench. The accumulated stormwater is pumped from the sump through a sand filter, two (2) carbon filters, and then to the stormwater drain where it flows (by gravity) to the stormwater retention pond.

The pump remains off during waste management operations with a potential of release of hazardous waste or hazardous waste constituents. When these operations (such as loading or unloading) are complete, the area, stormwater and stormwater systems are inspected. Unsatisfactory conditions (if any) are corrected prior to turning the pump on to activate the system. These inspections are also conducted daily (each operating day) as indicated the EQFL Inspection Plan.

The retention pond has dimensions of 126 feet x 35 feet with an average volume of 0.1335 acre-feet and a slope of 3:1. The pond retains filtered stormwater. Non-filtered stormwater from roof drains also discharges into the pond. The stormwater containment trenches and sump are constructed of concrete. The holding sump has a capacity of 640 gallons. The sump pump can pump 30-40 gallons per minute. The sand filter has 3.1 square feet of filter area in a fiberglass wrapped shell. The sand filter can accommodate flow rates of 20-62 gallons per minute. The sand filter is an efficient means of filtering out potential solids, oils and greases. The sand in the sand filter system typically lasts for many years and is

changed out as required. The filter can be back flushed when the filter pressure is high or the flow rate is restricted. Back flushed materials will be managed as either solid or hazardous waste depending upon the waste characterization. The carbon filter consists of a 55-gallon drum/carbon filter. The filter contains 200 pounds of activated carbon, which provides approximately three minutes of contact time at 20 gallons per minute. The filter is an effective means of filtering potentially toxic (organic and metal) constituents. The carbon will be replaced at least annually. Documentation of filter carbon replacement will be included in the facility operating record. EQFL may increase the amount of sand or carbon if it becomes necessary. More frequent changing will occur if breakout or breakthrough is detected. The spent carbon will be managed as solid or hazardous waste (depending upon the waste characterization) if it is not returned to the manufacturer for regeneration.

### **11.13 Structures**

The facility structures include an office building, a 5,866 square foot (MOL) totally enclosed building utilized for the container storage and treatment of hazardous waste, a loading/unloading vehicle area and an 8,050 square foot waste processing building that will house the hazardous waste treatment tank and the solid waste solidification pit.. The laboratory is located across the street at our 8<sup>th</sup> Avenue office complex. These structures are shown on Figures 6 and 7. The office building is not utilized for RCRA regulated hazardous waste management other than QC analysis of samples in the laboratory as described in the Waste Analysis Plan.

The waste storage and treatment building is described in the Use and Management of Containers section of this permit renewal. The loading and unloading area is described in the Stormwater System part of this section.

There are several temporary or portable structures at the EQFL facility. These include supply shed and trailers, empty container (new or reconditioned) trailers, and an empty container (used) trailer.

### **11.14 Equipment**

The EQFL facility equipment includes the items previously described in this section. Equipment specifications for these items are included as Appendix I. These items are:

- Empty Drum and Waste Rags Compactor
- Fluorescent Bulb Processor
- Paint Can Processor

Each piece of equipment will be inspected prior to each batch use. The inspections will be included in the facility operating record. Filter replacement will be according to the manufacturer's specifications and will be documented in the facility operating record.

Other small portable equipment utilized at the EQFL facility includes containers, adsorbents, pallets, pumps, funnels, drum trucks (dollies), pallet jacks/stackers, forklifts, fork attachments, bung wrenches, ratchets, slings, vacuums, and other similar waste handling, emergency, and safety equipment.

## 12.0 ON GROUND TREATMENT TANK SYSTEM

### 12.1 Design of New Tank System

As described in the introductory sections, EQFL operates an on ground treatment tank system to treat selected characteristic hazardous wastes (waste codes D002 and D004 through D011, and K062). No treated hazardous waste is being proposed for disposal at the facility.

The design of the tank system and/or ancillary equipment is provided in Appendix I (Volume 2 of 3). Although the tank ~~will be~~ is on ground, it is not ~~be~~ directly in contact with the soil, or with water, and therefore does not require, as part of the design, and evaluation by a corrosion expert. The tank sits on the covered, concrete slab that forms the foundation of the existing treatment building. Because the tank is not in a saturated zone, not located in a seismic fault zone, and not subject to the effects of frost heave, it does not require anchoring to prevent flotation or dislodgement. However, the tank is anchored on the north, west and south sides as shown on the design drawings.

The treatment tank dimensions are 20-ft wide x 20-ft long x 4-ft 7-in tall. The tank capacity is approximately 68 cubic yards (CY) but the working volume is approximately 2/3 of that, or between 40-45 CY. This allows adequate freeboard to prevent over topping of the tank due to wave or wind action and precipitation is not considered an issue because the tank is located inside a covered building. The building does contain open sides on the west and east and provisions will be made to counteract wind-related impacts, as necessary, if it is determined that wind becomes an issue during operation of the treatment unit.

The hazardous waste treatment tank is a custom manufactured piece of equipment, essentially meeting the 40 CFR, Part 264.10 definition of an on-ground tank. The unit was fabricated on site and is constructed of steel plates that have been welded into the shape of a box. The box is 20-ft. wide by 20-ft. long and is 4-ft. 7-in tall. The floor and walls of the box are 3/4-inch and 1/2-inch steel plate, respectively, and the top of the box is open. The connections between the plates are joined together with full penetration welded joints so that the box is liquid-tight and will not allow waste to escape. The design and installation of the new on ground solidification tank complies with all the requirements specified in 40 CFR, Subpart J, and the design drawings and specifications for the treatment tank as well as the engineering certification of the design are provided in Appendix I (Volume 2 of 3).

Once constructed and prior to being placed in use, the tank system was inspected by an independent, qualified, P.E., for the presence of the following items before the tank system was placed in service:

- (1) Weld Breaks
- (2) Punctures
- (3) Scrapes of protective coatings
- (4) Cracks
- (5) Corrosion
- (6) Any other structural damage or inadequate construction/installation

EQFL will keep on file at the facility written statements by those individuals required to certify the design and installation of the tank system and attest that it was properly designed and installed and that any required repairs, described above, were performed. Appropriate written statements will contain the requisite certification statement provided in 40CFR, Part 270.11(d).

The primary reagents used for treatment of the waste include hydrated lime/lime kiln dust, ferrous sulfate, sodium sulfide/sulfide flakes and hypochlorite. The amount of reagent varies based on the waste stream

but is generally a 5:1 ratio when absorbing liquids and 10:1 for solids (i.e., 1 ton of waste to 200 pounds of lime).

Candidate containers of hazardous waste potentially amenable for treatment in the on-ground hazardous waste treatment tank are selected from the current inventory and reviewed by the Operations Manager prior to bench testing in the on-site lab. When the selection process is complete, representative samples of each selected waste stream are collected and forwarded to the on-site lab for bench testing. The bench testing determines waste compatibility and the sequence that the waste and reagents are added to the treatment tank in order to ensure complete treatment. Based on the bench test results, pH monitoring, and established solubility curves, a batch treatment recipe is developed by the QA/QC Chemist and the Operations Manager (or designee).

The approved batch treatment recipe is forwarded to the Waste Processing Building (WPB) Supervisor for processing. All of the selected containers on the batch recipe are verified by the Supervisor, or by a designated WPB staff member under the Supervisor's direct supervision, prior to being placed in the treatment tank. The waste and reagents are placed in the treatment tank as prescribed by the batch recipe and then thoroughly mixed using an excavator. The treatment process is complete when all of the reagents have been added to the waste according to the batch recipe, the material has been mixed thoroughly, and all free liquids have been removed.

When the treatment is complete, a representative sample of the treated waste is collected and forwarded to the QA/QC Chemist. The QA/QC Chemist conducts a Paint Filter Test in the on-site lab to demonstrate that the waste has no free liquids remaining in the mixture. The remaining sample is then prepared and sent off-site to a NELAP/NELAC certified lab for TCLP and UTS analysis. If the material fails the Paint Filter Test (PFT), additional treatment reagent is added to the mixture to ensure that all free liquids have been removed. The treated waste is then retested as required.

If the material passes the PFT, the batch is removed from the treatment tank and placed into bulk containers (usually 2-4 boxes per batch). A hazardous waste bulk container ID tag is applied to each bulk container in the batch. The ID tag identifies the bulk container as a hazardous waste and includes the accumulation start date, batch #, bulk container #, and the bulk container count (ex., 1 of X, 2 of X, etc.). Each bulk container is moved from the Waste Processing Building and placed into storage. The bulk container storage area is located within the 10-Day Transfer Facility/Inbound & Outbound Staging/Bulk Container Storage Area as identified in Figure 16 of the application.

When the TCLP and UTS results are received from the off-site lab (usually within 2-business days of sample submittal), the QA/QC Chemist and the Operations Manager (or designee) review the analytical results and determine whether the batch has been decharacterized and meet the Underlying Hazardous Constituent treatment standards. If the results indicate that the batch has failed for either TCLP or UTS treatment standards, the batch and its associated bulk containers maintain their original hazardous waste bulk container ID tags and are placed on the schedule for retreatment. Retreatment usually occurs within 2-business days of analytical receipt. The failed batch bulk containers remain in the storage area until their scheduled retreatment. If both the TCLP and UHC treatment standards are met, no further treatment is required and the treated waste is now identified as Non-RCRA waste. The original hazardous waste bulk container ID tags are removed and replaced with new Non-RCRA bulk container ID tags which identified the accumulation start date, batch #, bulk container #, and the bulk container count (ex., 1 of X, 2 of X, etc.).

The analytical results of treated of non-RCRA waste are sent to the Subtitle D landfill for review and approval per their acceptance requirements. When the acceptance approval is received from the Subtitle D landfill, the non-RCRA waste bulk containers are loaded onto a transportation vehicle, removed from



the storage area, and transported to the landfill for disposal. Generally, all non-RCRA waste is removed from the storage area within 10-business days of passing treatment standard testing and being declared non-RCRA waste.

Based on generator knowledge and the Waste Characterization Reports submitted with the in-bound shipments, no organic UHCs are present at the point of generation in the characteristically hazardous metals containing waste received for treatment. Therefore, identification of additional UHCs should not be necessary and the waste will be treated to meet the inorganic constituent concentration UTS's listed in Part 268-Subpart D so that the treated material is rendered non-hazardous and can be decharacterized.

Table 12.1 summarizes the characteristic hazardous wastes to be treated by EQFL and the standards to be achieved for decharacterization and meeting the LDRs. It should also be pointed out that the disposal facility accepting the treated material may require additional testing above and beyond a TCLP test before they will accept the waste. EQFL will determine testing requirements for the proposed disposal facility and have the samples analyzed accordingly.

## **12.2 Routine Maintenance/Decontamination**

As previously noted in Section 5.0, the hazardous waste treatment tank will be inspected daily. Depending on usage rates and quantities of materials treated, the treatment tank will require periodic decontamination. This will consist of a rough brush of the sides and bottom, followed by a high pressure water rinse. Mixing equipment decontamination will be considered when moving from one characteristically hazardous category or group (e.g., metals) to another (e.g., corrosives.) The equipment will receive a rough surface brush followed by a clean water rinse. The decontamination solids and liquids will be containerized and temporarily stored until the next batch of like material is to be treated and it will be added to that batch rather than disposed of in some other fashion. Because each batch of treated material will be tested to assure it can be decharacterized and meets LDRs before disposal, it would appear redundant to also have to test or characterize the decontamination solids and liquids. The internal SOPs used by EQ for decontamination are contained in Appendix J (Volume 2 of 3).

## **12.3 Alternate Treatment Standards for Soils and Contaminated Debris**

EQFL is aware of the alternate treatment standards applicable to soils as per 268.49. However, the objective of constructing the treatment tank is to produce a final product that will be below the Universal Treatment Standards and which, after proper testing, will support decharacterization of the waste and meet the LDRs for ultimate disposal at a Subtitle D, non-hazardous waste facility.

The alternate debris treatment standards are contained in the treatment Table 12-2. The method of treatment for debris will be microencapsulation and EQFL has indicated they only intend to treat contaminated debris that comprises less than 50% of a batch subject to treatment. Sampling will be as described above although an auger or other sampling device may be more appropriate depending on the nature of the contaminated debris. This is a decision that will need to be made based on the debris being treated and the process for collecting the most representative sample.

When it is determined that the treatment tank needs replacing, the requested email information will be provided to the Department (i.e., schedule of major events). If the tank is to be replaced by an identical unit, no additional plans will be submitted, rather, the original drawings will be referenced or resubmitted in the request to construct a replacement tank. All procedures for certification of construction, noticing, and approval by the Department before placing the replacement tank in use will be followed. Regarding decontamination wastes, these should be similar to the decon solids and liquids described in an earlier comment. Because they would be decharacterized, they would be drummed up and temporarily stored

until the new treatment tank was constructed and operational and then they would be treated with the next like batch of characteristically hazardous material.

**Table 12-1. EQFL Wastes Treated and Standards for Decharacterization/Meeting LDRs**

Waste Code	Constituent	Concentration <sup>1/</sup>	Alternative Soil Treatment Standards <sup>2/</sup> 10 x UTS	90% Reduction	Non-Wastewater UTS/TCLP <sup>3/</sup>	Alt. Trmt. Stds for Haz. Debris <sup>4/</sup>	Other Rqmts <sup>5/</sup>
D002	Corrosive	2 ≥ pH ≥ 12.5	Remove/Deactivate Characteristic		DEACT	DEACT	PF
D004	Arsenic	5.0	50	-	5.0	IMMOB	PF
D005	Barium	100.0	210	-	21	IMMOB	PF
D006	Cadmium	1.0	1.1	-	0.11	IMMOB	PF
D007	Chromium	5.0	6.0	-	0.6	IMMOB	PF
D008	Lead	5.0	7.5	-	0.75	IMMOB	PF
D009	Mercury	0.2	0.25	-	0.025	IMMOB	PF
D010	Selenium <sup>6/</sup>	1.0	57	-	5.7	IMMOB	PF
D011	Silver <sup>7/</sup>	5.0	1.4	-	0.14	IMMOB	PF

**Notes:**

- 1/ Metals concentrations by TCLP (Toxicity Characteristic Leaching Procedure).
- 2/ Alternative Soil Treatment Standards to meet LDRs are 90% removal capped at 10 x UTS (Universal Treatment Standards). Characteristically hazardous metals could be land disposed if they are treated to the concentration shown in the 10 x UTS column. However, EQFL's intent is to decharacterize the waste through treatment so that it will no longer meet the characteristic, meets LDRs and can be disposed of in a Subtitle D landfill. The 90% reduction column would depend on the starting concentrations. In order to meet both LDRs and decharacterization at the same time, the required reduction may need to be >90%
- 3/ If the starting material is a liquid which is solidified/stabilized, there is a change in treatability group and the non-wastewater UTS concentration would apply. This is not considered impermissible dilution.
- 4/ 268.45, Table 1 lists alternative treatment standards for hazardous debris. Immobilization via microencapsulation is the technology employed by EQFL to reduce the leachability of the hazardous contaminants (with portland cement, fly ash, cement kiln dust, or other reagents).
- 5/ EQ does not intend to dispose of any bulk or noncontainerized treated liquids and will demonstrate the absence of free liquids by analyzing a sample by EPA SW-846 Method 9095B (Paint Filter Liquids Test).
- 6/ Selenium will retain its hazardous characteristics if treated only to meet the non-wastewater UTS. Therefore it will require treatment to 1.0 mg/L TCLP or less in order to be decharacterized and meet LDRs.
- 7/ If silver starting concentration is between 14-50 mg/L, the 90% reduction will meet LDRs and decharacterization. If starting concentration is <14 mg/L, use 10 x UTS which meets LDRs and decharacterization.

## **13.0 FACILITY AIR EMISSIONS REQUIREMENTS**

### **13.1 Introduction**

EQFL operates a hazardous waste treatment and storage facility located in Tampa, Florida. The primary operation at the EQFL facility is storage and processing of hazardous waste in containers, primarily 55-gallon drums. A minimum of 10 percent of each waste stream entering the facility is sampled. Some waste is processed (recontainerized or consolidated) in other containers of similar size or larger. Recontainerization operations may also include use of a paint can crusher, fluorescent light bulb crusher, drum crusher, and rag compactor. A filter press is also located at the facility, which separates liquid and solid components of sludges. Wastes are primarily shipped out of the facility in 55-gallon drums, although some wastes will be consolidated in roll-off dumpsters or tanker trucks for transport off-site.

The facility has recently renewed its Part B Hazardous Waste Permit. The facility currently does not require an air permit. The potential air emissions of volatile organic compounds (VOCs), to include these activities, have been evaluated and are presented herein to provide information that shows levels to be below air permitting requirements. Because this renewal application is not requesting any change in waste codes or quantities, the write up and analysis provided below is still considered accurate and applicable to this evaluation.

### **13.2 Description of Operations**

Waste is received at the facility primarily in 5-gallon drums to 330 gallon totes. The containers are offloaded at the concrete loading/unloading area just outside the storage building. The containers are moved inside the building and are categorized and stored according to waste type. The following waste type categories are handled at the facility:

1. Non-RCRA
2. Flammable
3. Poisons/Toxic and Other Regulated Materials
4. Acids
5. Alkaline
6. Hazardous organic compounds (HOC)
7. Oxidizers
8. Reactives

The containers are inspected and a portion, i.e., a minimum of 10 percent of each waste type received, are sampled and analyzed. Waste types include liquids, solids, sludges, and a variety of lab packs, i.e., waste that is packaged in its original container. Waste handling and associated operations completed at the site include:

- Container Sampling
- Recontainerization
- Container Loading
- Paint Can Processing
- Drum Crushing and Rag Compacting
- Loading to Roll-Offs
- Bulk Tank Loading
- Laboratory Analysis

### 13.3 Potential Air Emissions

#### 13.3.1 Volatile Organic Compounds

The facility is currently permitted to handle virtually all types of hazardous waste. The primary VOCs handled at the facility are methyl ethyl ketone (MEK), methanol, xylenes, toluene, and benzene. In order to conservatively estimate emissions, the vapor pressure of acetone was used to represent all potentially evaporative waste at the facility. Acetone has the highest vapor pressure of the evaporative waste managed at the facility. Therefore, for the emission calculations, all evaporative liquid is assumed to contain 100 percent acetone and approximately half of the waste handled at the facility is assumed to contain all VOC. This assumption produces conservative emission estimates because:

1. Assuming that all liquid waste is 100 percent volatile produces emission estimates significantly higher than actually expected, since liquid waste does not contain 100 percent VOC.
2. Because primary VOC constituents have vapor pressures less than acetone, the assumption that all VOC at the facility is acetone is conservative.

Other assumptions made for the emission estimates will also produce conservative results:

1. The effect of the storage building for containment of VOC emissions was not taken into consideration. All evaporation was assumed to occur outdoors to ambient air. Most operations occur within the storage building by the roll up doors.
2. True vapor pressure at a temperature of 90 degrees Fahrenheit (deg F) was assumed for all emission calculations. Mean annual temperatures in the Tampa area for years 1961 through 1998 were approximately 82 deg F. Therefore, assuming a vapor pressure at 90 deg F would result in higher emission estimates on an annual basis.

Potential VOC emissions have been estimated for several operations at the facility. A summary of primary activities at the facility and estimated emissions is included on Table 13-1. Emission calculations for individual operations are included on Tables 13-2 through 13-5.

Total facility emissions were estimated to be just 3.25 tons per year. As mentioned, these emissions are based on conservative assumptions and actual emissions are expected to be much less.

#### 13.3.2 Lead

Lead is considered to be the most significant toxic heavy metal constituent handled at the facility. It is estimated that approximately 20 percent of all waste handled contains some quantity of lead. RCRA regulated lead hazardous waste managed usually ranges from 5 to 500 parts per million in concentration. Therefore, the amount of lead present at the facility is less than the amount of VOCs present. The vapor pressure of lead in aqueous solution is much lower than VOCs, and, as such, lead emissions are expected to be negligible based on the same conservative assumptions used and emission estimates calculated for VOC emissions.

## **13.4 Regulatory Applicability**

### ***13.4.1 Stationary Sources***

Because the facility handles waste which may contain small amounts of benzene, the National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations relating to benzene were analyzed for potential applicability.

#### **40 CFR 60 Subpart A-Standards of Performance for New Stationary Sources**

There are no stationary sources or affected facilities as defined in this section that apply to this permit renewal application.

### ***13.4.2 Pumps in Light Liquid Service***

EQFL will utilize pumps to transfer materials within the processing area of the permitted facility. The total use of equipment subject to the requirements of this subpart will not exceed 300 hours per calendar year. Each pump will be inspected visually each calendar week to determine that no indications of leaking liquids from the pump seals are present. Additionally, if an instrument reading of greater than 10,000 ppm is measured the pump will be considered to be leaking. If a leak is detected it will be repaired as soon as practical, not to exceed 15 calendar days. No pump that is known to leak will be used for hazardous waste transfer operations.

#### **40 CFR 61 Subpart J-National Emission Standards for Equipment Leaks (Fugitive Emission Sources) of Benzene**

This subpart applies to sources (i.e., pumps, compressors, pressure relief devices, sampling connections, etc.) which are intended to operate in benzene service. However, "benzene service" refers to facilities with process units that contain equipment in benzene service. A "process unit" is defined under 61.241 as equipment assembled to produce a volatile hazardous air pollutant (VHAP) or its derivatives as intermediates or final products, or equipment assembled to use a VHAP in the production of a product. Because the facility does not produce or manufacture a product, it is not subject to this subpart.

#### **40 CFR 61 Subpart V-National Emission Standards for Equipment Leaks (Fugitive Emission Sources)**

Again, this unit applies to equipment operating in VHAP service, which is part of a process unit. Because the facility does meet the requirements of a process unit (see Section 4.2.1), the facility is not subject to this subpart.

#### **40 CFR 61 Subpart BB-National Emission Standards for Benzene Emissions from Benzene Transfer Operations**

This subpart applies to loading racks at benzene production facilities and bulk terminals only. Therefore, the facility is not subject to this subpart.

#### **40 CFR 61 Subpart FF-Emission Standards for Benzene Waste Operations**

This subpart applies to owners and operators of chemical manufacturing plants, coke byproduct recovery plants, and petroleum refineries, or owners and operators of hazardous waste treatment,

storage, and disposal facilities that treat, store, or dispose of hazardous waste generated by any of the affected facilities. Because EQFL does not currently accept waste from these facility types, this subpart does not apply.

#### **40 CFR 264 Subpart BB-Emission Standards for Equipment Leaks General**

Compliance with the requirements of 40 CFR 264, Subpart BB will be attained by the following the procedures described in this section. This section requires facilities to identify and repair leaks in specified pieces of equipment. Equipment is considered to be leaking when materials are dripping from pump seals or valves, or when an instrument reading of greater than 10,000 ppm is measured. The detection instrument used for monitoring will meet the performance criteria of Reference Method 21 in 40 CFR Part 60. Equipment used to transfer hazardous waste (with an organic concentration of at least 10 percent by weight) at EQFL is used less than 300 hours per calendar year. This equipment is exempt from the requirements of Sections 264.1052 through 264.1060 once identified as required by 264.1050 (e) and (f). EQFL uses pumps in light liquid service as identified herein.

##### ***13.4.3 Trucks in Vacuum Service***

EQFL will utilize equipment that is in vacuum service. Vacuum trucks are used to transport and transfer hazardous materials.

#### **40 CFR 264 Subpart BB-Emission Standards for Equipment Leaks General**

Compliance with the requirements of 40 CFR 264, Subpart BB will be attained by the following the procedures described in this section. This section requires facilities to identify and repair leaks in specified pieces of equipment. Equipment is considered to be leaking when materials are dripping from pump seals or valves, or when an instrument reading of greater than 10,000 ppm is measured. The detection instrument used for monitoring will meet the performance criteria of Reference Method 21 in 40 CFR Part 60. Equipment used to transfer hazardous waste (with an organic concentration of at least 10 percent by weight) at EQFL is used less than 300 hours per calendar year. Equipment in vacuum service is also used. This equipment is exempt from the requirements of Sections 264.1052 through 264.1060 once identified as required by 264.1050 (e) and (f). EQFL uses trucks in vacuum service as identified herein.

##### ***13.4.4 Containers***

EQFL stores hazardous waste in containers greater than 26 gallons and as such must follow the requirements of 40 CFR 264 Subpart CC. Most of the hazardous waste processed by EQFL will have a VOC concentration of greater than 500 ppmw. In most cases, hazardous waste that may have a VOC concentration of less than 500 ppmw and will be managed as if it does have a VOC concentration of greater than 500 ppmw. EQFL does not have any existing tanks, surface impoundments or hazardous waste stabilization treatment processes and therefore these items are not addressed in this permit renewal.

#### **40 CFR 264 Subpart CC- Air Emission Standards for Tanks, Surface Impoundments, and Containers**

EQFL shall control air pollutant emissions from all containers stored or processed at the permitted facility. The transfer of hazardous waste in or out of containers will be accomplished in a manner that minimizes the exposure of hazardous waste to the atmosphere. This will be done to

the extent practical, considering the physical properties of the hazardous waste and good engineering practices. Containers having a design capacity of 0.1m<sup>3</sup> - 0.46 m<sup>3</sup> will be managed using U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as a Level 1 control standard. Containers will comply with the requirements of 49 CFR part 178, except as permitted by EQFL approved DOT exemption for lab packs managed in accordance with 49 CFR part 178 or combination packages specified in 49 CFR 173.12. Containers having a capacity of greater than 0.46 m<sup>3</sup>, that are in light service, will also comply with these DOT standards, as required, to provide Level 2 control. Containers meeting these standards are designed so that any potential release of VOC concentrations are eliminated with proper care and use. EQFL will ensure that containers have secured closure devices (drum lid, tanker lid or equivalent) in place and closed when materials are not being loaded to the container. This will be done within 15 minutes, when the person performing the loading operation leaves the immediate vicinity of the container, or the process generating the material being added to the container shuts down, whichever occurs first. Containers will also be opened as needed to allow access for routine activities other than the transfer of hazardous waste. These activities may include sampling, measurement, inventory, or repackaging. The container will be properly closed and secured immediately following the completion of the activity.

All containers will be inspected for visible cracks, holes, gaps or other spaces into the interior of the container when closed and secured in order to insure that no emission release into the environment will occur. If defects are discovered they will be corrected (repaired, replaced, repacked or overpacked) within 24 hours of detection. Section 12, Use and Management of Containers, provides detailed information on inspection practices.

### 13.5 Conclusions

Potential emissions of VOCs have been estimated for operations at the EQFL facility. Because the proposed treatment tank will only treat characteristically hazardous wastes (D002 corrosives and D004-D011 metals), which have low volatilities and do not contain any VOCs, the calculations previously performed by EQFL for the facility appear appropriate for the current renewal application. The emission estimates have been prepared based on conservative assumptions. Therefore, the estimated emissions are expected to be far lower than presented herein. These data show that current air emission estimates are below the existing standard of 10 tons per year (TPY). Rule 62-210.300(3)(b), F.A.C. requires a level of greater than 10 TPY for air permitting to be required. These data have been presented to the Hillsborough County Environmental Protection Commission (HCEPC) during prior permit renewals.

### 13.6 Section References

Environmental Protection Agency, 1987. Hazardous Waste Treatment, Storage, and Disposal Facilities, (TSDF)-Air Emission Models. EPA-450/3-87-026. Section 7.3.1.  
Florida Department of Environmental Protection, 1994a. Letter from Howard L. Rhodes to Angela R. Morrison, May 20, 1994. Title V Insignificant Source Summary-Electric Power Plants.  
Florida Department of Environmental Protection, 1994b. Letter from Howard L. Rhodes to Jose F. Alvarez, October 5, 1994. Title V Insignificant Source Summary-Sugar Cane Industry.  
Florida Department of Environmental Protection, 1994c. Letter from Howard L. Rhodes to Nancy Stephens, January 26, 1994. Title V Insignificant Source Summary-Chemical Industry.  
Weather History at: [http://www.ncdc.noaa.gov/cgi/bin/gsod\\_xmgr](http://www.ncdc.noaa.gov/cgi/bin/gsod_xmgr)



Table 13-1 – Summary of Primary Activities and Estimated Emissions

Activity Description	Activity Location	Potential Air Emissions	Comments/ Assumptions	Reference for Emission Calculation	Estimated VOC Emissions (Tons Per Year)
Closed container loading/unloading	Loading/unloading dock	None	Containers remain closed	NA	NA
Container sampling	Inside Building	Minimal	10% of containers are sampled	Table 16-2	0.0009
Recontainerization operations:					
Container to container	Inside building	Minimal	Typically pumped or poured; include lab packs	Table 16-3	0.26
Paint can crushing	Outside processing area	Minimal	Solvent-based paints	Table 16-6	0.40
Fluorescent bulb crushing	Inside building	Negligible	Carbon filter used	NA	NA
Drum crushing/rag compacting	Inside building	Negligible	Low use, enclosed unit	NA	NA
Container to roll-off	Outside processing area	Minimal	Typically solid material	Table 16-4	2.02
Tanker loading	Loading/unloading dock	Minimal	Liquids only	Table 16-5	0.57
Emergency exhaust fans	Flammable storage area	Negligible	Emergency use only	NA	NA
Portable floor fans	Bays 1 & 2	Negligible	Personnel cooling	NA	NA
Roll-off storage	Outside storage area	Negligible	Covered when not active	NA	NA
Laboratory hood exhaust	8 <sup>th</sup> Ave. office area	Negligible	Activity exempt (F.A.C. rule)	NA	NA
<b>TOTAL</b>					<b>3.25</b>

Table 13-2 – Worksheet for Estimating Emissions from Container Sampling

Calculation Parameters:				
Variable	Descriptions	Value	Standard Value	Basis
Po	Atmospheric Pressure, mm Hg	760		
MW	Molecular Weight, g/g mol	58.08		Chemical database
yi*	Equil mole fraction in gas phase (xi*Pi*/Po)	0.20		Calculated
xi*	Mole fraction in aqueous liquid	0.5		Assumption
Pi*	Component vapor pressure, mm Hg	306		Based on 5,917 psia at 90 deg F
w	Width of dump to wind flow, cm	7.62		Assume 15 feet dumpster length
R	Gas constant, 62,300 mm Hg* cm <sup>3</sup> /g mol*K	62,300		Given
T	Temperature, Deg K	305.4		90 Deg F
Di	Diffusivity in air, cm <sup>2</sup> /s	0.124		Chemical database
l	Length of dump in direction of wind flow, cm	7.6		Assume 10 feet dumpster width
U	Windspeed, cm/s	22.35		Assume nominal 1 mph
Fv	Ficks law correction factor (function of yi*)	0.85		From Graph 16-1
Equation:	$(2)(Po)(MW)(yi^*)(w)/(R/T) \times (Di)l(U)(3.14)(Fv) \sim 0.5$	0.02 g/s		Calculated emission factor
Operating Data:				
Variable	Descriptions	Value		Basis
NC	Number of containers sampled, containers/ yr.	1,560		10% of all containers
t	Typical sampling time, seconds per container	25		Conservative assumption
Equation:	$Calculated\ emission\ factor \times NC \times t/454\ g/lb$	1.72		Pounds per year
	<b>Total Emissions</b>	<b>0.0009</b>		<b>Tons per year</b>

Assumptions: Conservatively assume that half (by mole fraction) of all liquid waste sampled is acetone.  
Source: Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF) - Air Emission Models. EPA-450/3/87-026, December 1987.

Table 13-3 – Worksheet for Estimating Emissions from Drum Loading (Recontainerization)

Calculation Parameters:			
Variable	Descriptions	Value	Basis
S	Saturation Factor	1.45	Based on splash loading
P	True Vapor Pressure of Liquid (psi)	5.917	VP of acetone at 90 deg F
M	Molecular Weight of Vapors (lb/lb-mole)	58.08	MW of acetone
T	Temperature of Bulk Liquid (deg R)	550	90 deg F
<b>Equation:</b>	<b><math>12.46(S)(P)(M)(T)</math></b>	<b>11.3 lbs/1,000 gal</b>	<b>Calculated emission factor</b>
Operating Data:			
Variable	Descriptions	Value	Basis
Q	Quantity loaded (gal/year)	47,850	Pumping or pouring operations
Pct	Amount of solids in waste loaded (percent)	95	Assumption
<b>Equation:</b>	<b>Calculated Emission Factor x Q/1000/2000 lbs/ton x Pct/100</b>	<b>0.26</b>	<b>Tons per year</b>

Assumptions: Conservatively assume that half of all liquid waste recontainerized is acetone.

Source: Compilation of Air Pollutant Factors (AP-42), Section 4.4. EPA, September 1985

Table 13-4 – Worksheet for Estimating Emissions from Loading Roll-Off Containers

Calculation Parameters:			
Variable	Descriptions	Value	Basis
Po	Atmospheric Pressure, mm Hg	760	Standard Value
MW	Molecular Weight, g/g mol	58.08	Chemical database
yi*	Equil mole fraction in gas phase (xi*Pi*/Po)	0.40	Calculated
xi*	Mole fraction in aqueous liquid	1	Assumption
Pi*	Component vapor pressure, mm Hg	306	Based on 5.917 psia at 90 deg F
w	Width of roll-off to wind flow, cm	457.2	Assume 15 feet dumpster length
R	Gas constant, 62,300 mm Hg* cm <sup>3</sup> /g mol*K	62,300	Given
T	Temperature, Deg K	305.4	90 Deg F
Di	Diffusivity in air, cm <sup>2</sup> /s	0.124	Chemical database
l	Length of roll-off in direction of wind flow, cm	304.8	Assume 10 feet dumpster width
U	Windspeed, cm/s	44.7	Assume nominal 1 mph
Fv	Ficks law correction factor (function of yi*)	0.7	From Graph 16-1
Equation:	$(2)(Po)(MW)(yi^*)/(R/T) \times ((Di)l/U(3.14)(Fv))^{0.5}$	23.53 g/s	Calculated emission factor
Operating Data:			
Variable	Descriptions	Value	Basis
Nr	Number of roll-offs loaded, roll-offs/month	12	20 nonhazardous/ 4 toxic (assume half acetone)
t	Typical loading time, hours/roll-off	1.5	Average loading time
Pct	Amount of solids in waste loaded, percent	95	Assumption
Equation:	$Calculated\ emission\ factor \times Nr \times t \times 3600\ s/hr / 454\ g/lb \times (1-Pct/100)$	335.85	Pounds per year
	Total Emissions	2.02	Tons per year

Assumptions: Conservatively assume that half of all liquid loaded to roll-offs is acetone.

Roll-offs kept covered except when loading.

Source: Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF) - Air Emission Models. EPA-450/3/87-026, December 1987.

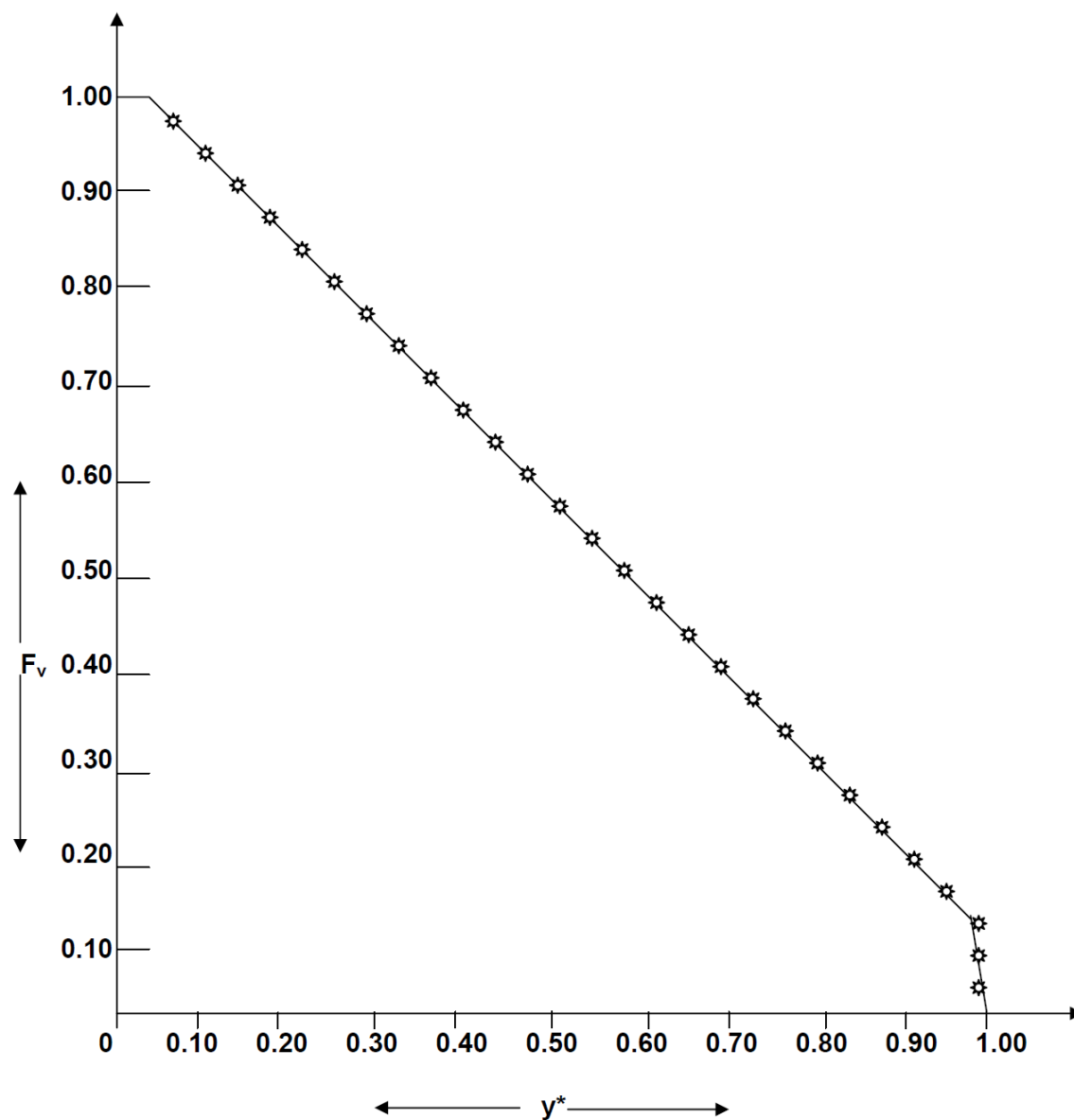
Table 13-5 – Worksheet for Estimating Emissions from Tanker Truck Loading

Calculation Parameters:			
Variable	Descriptions	Value	Basis
S	Saturation Factor	1.45	Based on splash loading
P	True Vapor Pressure of Liquid (psi)	5.917	VP of acetone at 90 deg F
M	Molecular Weight of Vapors (lb/lb-mole)	58.08	MW of acetone
T	Temperature of Bulk Liquid (deg R)	550	90 deg F
<b>Equation:</b>	<b><math>12.46(S)(P)(M)(T)</math></b>	<b>11.3 lbs/1,000 gal</b>	<b>Calculated emission factor</b>
Operating Data:			
Variable	Descriptions	Value	Basis
Q	Quantity loaded (gal/year)	99,000	Assume 100 drums/tanker; 3 tankers loaded/month (½ acetone)
Pct	Amount of solids in waste loaded (percent)	95	Assumption
<b>Equation:</b>	<b><math>\text{Calculated Emission Factor} \times \frac{Q}{1000/2000 \text{ lbs/ton}} \times \frac{\text{Pct}}{100}</math></b>	<b>0.57</b>	<b>Tons per year</b>

Assumptions: Conservatively assume that half of all liquid waste loaded to tanker trucks is acetone.

Source: Compilation of Air Pollutant Factors (AP-42), Section 4.4. EPA, September 1985.

**Graph 13-1 – Fick's law correction factor  $F_v$  as a function of  $y^*$  <sup>31</sup>**



## 14.0 EXPOSURE INFORMATION

As part of the permit renewal and construction of the treatment tank, an exposure analysis was conducted to determine if the proposed activities represent a substantial modification of the permit, thereby requiring modeling and a RMP (Risk Management Plan). The results of this analysis were provided to the Department in an e-mail from Jerry Kubal to Tony Tripp, dated April 16, 2013. The discussion in this section is consistent to the discussion provided in the referenced e-mail.

As noted in the Introduction (Section 2.0) EQFL is not requesting any change in waste codes accepted, nor an increase in quantities of materials received. The principal change in the renewal request is the addition of the on ground hazardous waste treatment tank to treat, on-site for off-site disposal, a limited list of characteristic hazardous waste treatment codes including: D002 (corrosivity); D004 (arsenic); D005 (barium); D006 (cadmium); D007 (chromium); D008 (lead); D009 (mercury); D010 (selenium); ~~and~~ D011 (silver); and K062.

As part of the exposure analysis, a review of the in-bound records for EQFL for the period 1/1/12-12/31/12 was evaluated for materials they plan to treat under the new hazardous waste permit. These in-bound records are summarized in Appendix K (Volume 2 of 3). The table is broken out by waste category and size and number of containers received. The FDEP is supplied with reports of this type routinely from EQFL under the existing permit, but this table has been broken out to summarize just those shipments they intend to begin treating.

The summary table provides both waste type and size container, which consists primarily of a mixture of container sizes from 5-gallon drums to 330-gallon totes. This material is currently stored on the "hazardous waste" side of the facility (Orient Road property). The new treatment unit will be in the existing waste processing building on the 8<sup>th</sup> Avenue property and some wastes will be staged in this area prior to treatment.

From a substantial modification standpoint, EQFL will only store material in containers up to the maximum size shown for the various waste categories summarized in the table in Appendix K. While some of the material will be staged in the existing waste processing building after construction of the hazardous waste treatment unit, none of the material stored either in this area or on the Orient Road property will be present in containers of a larger size than has been received in the past. In fact, EQFL anticipates that the largest container it will process in the ~~new~~ hazardous waste treatment unit will be a 275-gallon tote, which is smaller than the largest capacity units currently received at the facility. In the rare event a larger size container than is shown in the table is received at the facility which would potentially trigger an increase in the risk, the material will be repackaged into containers of similar size to those previously received/stored so there is no increase in the overall risk.

Based on the expected quantities, waste codes, and how the material will be stored before treatment, any increase in risk would be considered negligible. Further, there will be no increase in container size for any of the waste categories and it does not appear that any of the operating permit modifications being proposed by EQ will cause an increase in overall risk at the facility. As such, there will be no need to conduct risk management modeling since the proposed changes do not represent a substantial modification.

## **15.0 ITEMS NOT APPLICABLE TO THE PERMIT RENEWAL APPLICATION**

The following items are not applicable to the EQFL facility and information pertaining to them is not included in this permit renewal application:

- Surface Impoundments
- Waste Piles
- Land Treatment
- Landfills
- Incinerators
- Compliance Schedule
- Groundwater Protection
- Research, Development, and Demonstration
- Air Emission Standards for Process Vents
- Air Emission Standards for Equipment Leaks
- Boilers and Industrial Furnaces
- Requirements for Drip Pads
- Professional Geologist Certification



## **FIGURES**