UES Used Oil Processing Facility
Permit Application Submission

Universal Environmental Solutions, LLC

Revision 0

10/31/2014

Universal Environmental Solutions, LLC

ED KINLEY
PRESIDENT

OFFICE (813) 241-9206
FAX (813) 241-9215
CELL (813) 390-0659
EMAIL: ekinley@uestampa.com
www.uestampa.com

P.O. BOX 76105 TAMPA, FL 33675
1650 HEMLOCK ST. TAMPA, FL 33605

UES Used Oil Processing Facility
Permit Application Submission

Universal Environmental Solutions, LLC

Revision 0

10/31/2014

UNIVERSAL ENVIRONMENTAL SOLUTIONS

Letter of Transmittal

To: Mr. Sean McGinnis FDEP Southwest District office Temple Terrace, Florida 33637	Date:	October 16, 2014
	File:	UES Process Permit
	Re:	Used Oil Processing Facility Permit Application

Enclosed please find:
_X_herewith __under separate cover: __drawings __descriptive literature __letters

If all information listed is not received, please contact us immediately.

Quantity	Title	Comments
1 PDF (Electronic)	Used Oil Processing Facility Permit Application UES, LLC– FLR00019980 Revision 0, October 2014	Y

*Comment letter code:
R-Reviewed **N**-Reviewed and Noted **I**-For your Information **Y**-For your approval

The attached draft UES Used Oil Processing Facility Permit Application is being submitted in response to a site audit at the UES facility located at 1650 Hemlock St Tampa Fl. and subsequent deficiency letter dated September 22, 2014. A response letter was prepared and submitted detailing our intent to apply and submit an Oil Processing Facility permit request. This draft is being submitted for your review and comment prior to the final submission for initial comments on completed sections.

The following items are not complete as of October 16,2014 or have being submitted but not approved by the DEP.

- Alternate Equipment Approval (62-762.851 FAC) request for use of a 10K Poly Used Oil storage tank at the facility. UES has submitted a request to allow the use of polyethylene to store used oil. The process utilize to recycle the used oils will result in a reaction / degradation to metal or steel tanks over a extended period of time. An Alternative Equipment request has been prepared and is attached under Attachment 9 Unit Management Plan but has not been approved by the DEP at the time of this permit submission.
- No Exposure Certification From NPDES Stormwater Permitting (form has been prepared and is attached under Attachment 7 - SWPP Plan and is schedule to be submitted to the DEP on October 30, 2014). Presently the exemption request is being certified by our PE.

- Certified State of Florida PE signatures are required on the permit application and the requested being submitted above. These have not been completed due to review scheduling. UES fully anticipates final PE review and signature no later than October 30, 2014

Our intent is to have your department perform a draft review of the permit submission package while our PE is completing their review and signature requirements. A copy of the September Deficiency letter and response is attached to this transmittal.

Upon final approval UES will submit the final permit application, and closure bond with completed PE signatures.

Regards,

Ed Kinley
President
Universal Environmental Solutions, LLC

DISTRIBUTION:

Bheem Kothur (FDEP)
Elizabeth Knauss (FDEP)
Anthony Tripp (FDEP)
Bryan Baker (FDEP)
Keith Coats (P.E.)
Jim Seavy (Consultant)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

September 22, 2014

Mr. Ed Kinley, President
Universal Environmental Solutions, LLC
P.O. Box 76105
Tampa, FL 33675
ekinley@uestampa.com

Re: Compliance Assistance Offer
Universal Environmental Solutions, LLC
Facility ID No. FLR000199802
Hillsborough County

Dear Mr. Kinley,

A hazardous waste and used oil program inspection was conducted at your facility on August 12, 2014, under the authority of Section 403.061, Florida Statutes (F.S.). During this inspection, possible violations of Chapter 403, F.S., Chapter 62-621, Florida Administrative Code (F.A.C.), and Chapter 62-710, F.A.C. were observed. The purpose of this letter is to offer you compliance assistance as a means of resolving these matters.

Please see the attached inspection report for a full account of Department observations and be advised this Compliance Assistance Offer is part of an agency investigation preliminary to agency action in accordance with Section 120.57(5), F.S. We request you review the items of concern noted in the attached inspection report and respond in writing within **15 days** of receipt of this Compliance Assistance Offer. Your written response should either:

1. Describe what you have done to resolve the issue (see "Recommendations for Corrective Action" section of the report),
2. Provide information that either mitigates the concerns or demonstrates them to be invalid, or
3. Arrange for one of our inspectors to visit your facility to offer suggested actions to return to compliance without enforcement.

It is the Department's desire that you are able to document compliance or corrective actions concerning the possible violations identified in the attached inspection report so that this matter can be closed without enforcement. Your failure to respond promptly in writing (or by e-mail) may result in the initiation of formal enforcement proceedings.

Florida Department of

Environmental Protection

Hazardous Waste Inspection Report

FACILITY INFORMATION:

Facility Name: Universal Environmental Solutions LLC

On-Site Inspection Start Date: 08/12/2014 **On-Site Inspection End Date:** 08/12/2014

ME ID#: 108745 **EPA ID#:** FLR000199802

Facility Street Address: 1650 Hemlock St, Tampa, Florida 33605-6602

Contact Mailing Address: 1650 Hemlock St, Tampa, Florida 33605

County Name: Hillsborough **Contact Phone:** (813) 241-9206

NOTIFIED AS:

Non-Handler
Transporter

INSPECTION TYPE:

Routine Inspection for Transporter facility

Routine Inspection for Used Oil Transfer Facility

INSPECTION PARTICIPANTS:

Principal Inspector: Elizabeth Knauss, Environmental Consultant

Other Participants: Ed Kinley, President; Brad Salzgerber, Plant Operator

LATITUDE / LONGITUDE: Lat 27° 56' 17.0326" / Long 82° 26' 28.1097"

SIC CODE: 4212 - Trans. & utilities - local trucking, without storage

TYPE OF OWNERSHIP: Private

Introduction:

Universal Environmental Solutions has notified as a registered hazardous waste and used oil transporter and used oil transfer facility. To date, the company has not transported any hazardous waste. The original notification did not include petroleum contact water management activities, although the facility's main business is pre-treating bilge water, oily waste water and fuel contaminated water from shipyard and port terminal facilities. The facility also accepts landfill leachate, fertilizer contaminated waste water and other non-hazardous industrial waste waters for pretreatment prior to discharge to the City of Tampa's Howard F. Curren domestic waste water treatment facility. The plant is located on property leased from Hendry Corporation's shipyard. This was the Department's first inspection of the facility. Ed Kinley, the company president and Brad Salzgerber, the plant operator explained operations during the inspection.

Process Description:

Universal's Subcategory D centralized waste treatment ("CWT") permit from the City of Tampa, issued March 4, 2014, allows the company to accept metal bearing, oily and organic category waste waters for treatment. The company has a waste profile process, but individual profiles are not required for all waste streams. At this time, Universal is accepting waste from one other transporter. Otherwise, trucked waste is transported by Universal vehicles. These wastes are usually generated by Universal's tank and barge cleaning activities, and can be categorized by product and process knowledge. The facility also had a number of Chlor-d-Tect kits on site for screening incoming oil. Test results are noted on the shipping papers. However, the kits had recently passed their expiration date. Mr. Kinley stated that new kits would be purchased.

Universal also receives waste through a six inch underground pipeline from the Hendry docks. The underground portion of the pipeline is provided with secondary containment, and a flange connects to two, three inch lines leading to the treatment plant. The three inch above ground lines are not

provided with secondary containment for about five feet between the pipeline and the concrete containment structure around the treatment system. The pumps associated with loading area are provided with containment.

The treatment plant includes an outdoor concrete secondary containment structure surrounding treatment and storage tanks where settling and oil/water separation takes place. Waste water from the outdoor treatment tanks is pumped for further treatment into additional tanks located within an adjacent metal building. Waste water inside the building is treated by gravimetric separation, pH adjustment, flocculation and dissolved air flotation. Recovered organics are managed as used oil. Waste water is discharged through pipes to the sanitary sewer. It should be noted that the plant's schematic flow diagram indicates that the existing eight inch sewer line receiving the waste water is a terra cotta pipe. Additional details on the treatment process may be found in the facility's submittals to the City of Tampa's pretreatment program and on the company's web site.

Sediments from the treatment process are being accumulated in a roll off container located on the west side of the building, and will be tested for the toxicity characteristic prior to disposal. To date, Universal has only disposed of Number 6 oil bottoms from a ship cleaning operation as waste. This material had not been processed through the treatment plant, but was accumulated separately. It was shipped to an off site facility for solidification and disposal to a landfill. The company believes that solids will need to be removed from the outside treatment tanks on an annual basis.

The treatment building is also used for container storage. At the time of this inspection, a number of IBC containers and drums of material were being stored, and none were labeled as "used oil." Mr. Kinley explained that the company also stores oil such as hydraulic oil while ships are being repaired. These oils are returned to the ship when repairs are complete. While being stored, each container is labeled with the type of fluid and the ship or customer name. A number of labels also had the words "Non Regulated Waste." This labeling should not be used for materials that are not wastes.

The outdoor tanks include three, 69,300 gallon capacity compartmented tanks used for settling solids and for oil/water separation. The three tanks are operated in parallel, and all connect to a fourth tank located perpendicular that provides for additional settling before water is pumped into the building for additional treatment. The outdoor containment area also includes three blue 5,000 gallon steel tanks, one labeled for gasoline storage and two labeled for diesel. The gasoline and diesel tanks are dedicated to holding fuel removed from ships and port terminal facilities. This off specification fuel is not returned to the ship or terminal. Instead it is marketed as fuel for further processing. The shipping papers for the material indicate it is shipped as either gasoline, diesel or "transmix" to a processor that will market the fuel. A 10,000 gallon tank for storing recovered oil is also located within the outdoor containment. This tank was labeled "waste oil" rather than as "used oil," and this has been corrected. At the time of the inspection, registration forms had been submitted for the 5,000 gallon tanks, but not the 10,000 gallon tank. Final inspections had not been completed, and the facility had not yet been issued a Tanks Program facility identification number. In addition, Universal had not registered with USDOT to offer hazardous materials for transport. This was corrected after the inspection.

At the time of this inspection, the facility was holding partially treated oil in several frac tanks located outside the containment structure. Mr. Kinley said that the material was emulsified shale oil that the facility was processing to try to separate additional water. The frac tanks were not labeled with the words "used oil" and had been stored on site for more than 35 days. In addition, the tanks were not provided with secondary containment. Universal intended to ship the oil to Raider Environmental Services for additional processing as off specification oil. Universal does not market used oil fuel. Universal was in compliance with acceptance and delivery record keeping requirements. The facility had submitted its annual report on time, and maintained the required certificate of insurance.

The Hendry Corporation NPDES Multi Sector Generic Storm Water permit as a shipyard does not cover Universal's activities as a waste recycling and treatment facility. If Hendry is not willing to amend its coverage, Universal must seek separate coverage under a separate permit.

New Potential Violations and Areas of Concern:

Violations

Type:	Violation
Rule:	62-710.401(6)
Explanation:	Used oil was being stored in frac tanks that were not labeled or provided with secondary containment. Used oil was also being stored in a 10,000 gallon tank that was labeled "waste oil" instead of "used oil." The label on this tank was corrected after the inspection.
Corrective Action:	Used oil tanks and containers must be labeled "used oil" and must be provided with secondary containment when stored for more than 24 hours at a transfer facility.

Type:	Violation
Rule:	62-710.800
Explanation:	Universal Environmental Solutions is engaged in used oil processing and petroleum contact water management and does not have a permit from the Department for these activities. Universal has also stored used oil more than 35 days without complying with processor standards under 40 CFR 279 Subpart F standards.
Corrective Action:	Universal must submit an application for a used oil processing permit to the Department.

Type:	Violation
Rule:	62-621.100
Explanation:	Universal had not applied for coverage under a NPDES Multi-Sector Generic Storm Water permit ("MSGP") for its industrial activities.
Corrective Action:	Universal must submit its notice or intent to use the MSGP and develop a Storm Water Pollution Prevention Plan appropriate to the facility's used oil and waste water pretreatment activities.

Conclusion:

Based on the nature of the activities conducted by Universal Environmental Solutions, the company is operating as a used oil processor and petroleum contact water recovery facility. The facility must apply for appropriate permits from the Department for its activities.

Please address your response and any questions to Sean McGinnis of the Southwest District Office **at (813) 470-5866, or via e-mail at** sean.mcginnis@dep.state.fl.us**. We look forward to your cooperation with this matter.**

Sincerely,

Kelly Bishop

Kelly L. Bishop, PG
Assistant Director
Southwest District
Florida Department of Environmental Protection

KLB/sm/ek

Enclosures: **Inspection Report**

ec: **Gerry Javier, HEPC (javier@epchc.org)**

Signed:

A hazardous waste compliance inspection was conducted on this date, to determine your facility's compliance with applicable portions of Chapters 403 & 376, F.S., and Chapters 62-710, 62-730, 62-737, & 62 -740 Florida Administrative Code (F.A.C.). Portions of the United States Environmental Protection Agency's Title 40 Code of Federal Regulations (C.F.R.) 260 - 279 have been adopted by reference in the state rules under Chapters 62-730 and 62-710, F.A.C. The above noted potential items of non-compliance were identified by the inspector(s).

This is not a formal enforcement action and may not be a complete listing of all items of non-compliance discovered during the inspection.

Elizabeth Knauss	Environmental Consultant	
PRINCIPAL INSPECTOR NAME	**PRINCIPAL INSPECTOR TITLE**	
E Knauss	FDEP - SWD	8/13/2014
PRINCIPAL INSPECTOR SIGNATURE	**ORGANIZATION**	**DATE**

Supervisor: **Sean McGinnis**

NOTE: By signing this document, the Site Representative only acknowledges receipt of this Inspection Report and is not admitting to the accuracy of any of the items identified by the Department as "Potential Violations" or areas of concern.

UNIVERSAL ENVIRONMENTAL SOLUTIONS

September 29, 2014

Mr. Sean McGinnis

FDEP Southwest District Office
13051 North Telecom Parkway
Temple Terrace, FL. 33637

Re: Compliance Assistance Offer Letter (09/22/2014)

Dear Mr. McGinnis,

Please consider this correspondence as our initial reply to your letter dated (09/22/2014). We offer the following:

- Item #1 (Violation of Rule #67-710.800): The 10,000 Gallon tank has a corrected label that now clearly reads, on two sides, "USED OIL". Please note that this tank was omitted from our recent tank registration with the EPC. An application is being prepared to have it formally registered. Our target date for submission is 10/10/2014.

- Item #2 (Violation of Rule #62-710.800): We are preparing our application for our operation as a "Used Oil Processing Facility". There is quite a bit of detail involved to this application including drawings, photographs, and descriptions. We are working with our Professional Engineer and General Contractor to finalize this submittal. Our target date for submission is 10/10/2014.

- Item #3 (Violation of Rule #62-621.100): We intend to apply for a "No Exposure Certification for Exclusion from NPDES Stormwater Permitting". During the inspection, the FDEP Representative correctly identified that the facility had (4) temporary Frac tanks storing an Oil and Water mix outside of the permanent containment of the tank farm. We have emptied three of the four tanks. The fourth tank will be emptied before 10/10/2014. We intend to construct additional containment to hold future temporary frac tanks. This containment will satisfactorily meet the 110% storage criteria. A drawing highlighting this additional containment will be submitted with our NPDES Stormwater Exclusion application. We expect to submit our application before the end of October.

We appreciate your willingness to assist our operation in its effort to be in compliance. We are only interested in operating within the Department's rules and expectations.

Kindest Regards,

Ed Kinley

President

P.O. Box 76105. Tampa. FL 33675 ~ Phone (813) 241-9206 ~ Fax (813) 241-9215

USED OIL PROCESSING FACILITY PERMIT APPLICATION

Part I

TO BE COMPLETED BY ALL APPLICANTS (***Please type or print***)

A. General Information

1. New [x] Renewal [ ] Modification [ ] **Date current permit expires** _____

2. Revision number [0]

3. NOTE: Used Oil Processors must also meet all applicable subparts, **(describe compliance in process description for applicable standards)** if they are:
   - [ ] Generators (Subpart C of Part 279)
   - [x] Transporters (Subpart E)
   - [ ] Burners of off-spec used oil (Subpart G)
   - [x] Marketers (Subpart H)
   - [x] are disposing of used oil (Subpart I)

4. Date current operation began: March 2014

5. Facility name: Universal Environmental Solutions, LLC (UES)

6. EPA identification number: FLR000199802

8. Facility mailing address:

P.O. Box #76105	Tampa	Florida	33605
Street or P.O. Box	City	State	Zip Code

9. Contact person: Ed Kinley Telephone: (813) 241-9215

   Title: Facility Owner/Operator Email ekinley@uestampa.com

   Mailing Address:

P.O. Box #76105	Tampa	Florida	33675
Street or P.O. Box	City	State	Zip Code

10. Operator's name: Ed Kinley Telephone: (813) 241-9215

    Mailing Address:

P.O. Box #76105	Tampa	Florida	33675
Street or P.O. Box	City	State	Zip Code

11. Facility owner's name: Ed Kinley Telephone: (813) 241-9215

    Mailing Address:

P.O. Box #76105	Tampa	Florida	33675
Street or P.O. Box	City	State	Zip Code

12. Legal structure:
    - [x] Corporation (indicate state of incorporation) Florida
    - [ ] Individual (list name and address of each owner in spaces provided below)
    - [ ] Partnership (list name and address of each owner in spaces provided below)
    - [ ] Other, e.g., government (please specify) _____

If an individual, partnership, or business is operating under an assumed name, enter the county and state where the name is registered: County Hillsborough State _____

Name: _____
Mailing Address:
_____
Street or P.O. Box City State Zip Code

Name: _____
Mailing Address:
_____
Street or P.O. Box City State Zip Code

Name: _____
Mailing Address:
_____
Street or P.O. Box City State Zip Code

Name: _____
Mailing Address:
_____
Street or P.O. Box City State Zip Code

13. Site ownership status: [☐] owned [☐] to be purchased [☐] to be leased ____ years
[■] presently leased; the expiration date of the lease is: in perpetuity

If leased, indicate: Land owner's name: Hendry Corporation
Mailing Address:
1650 Hemlock Street Tampa Florida 33605
Street or P.O. Box City State Zip Code

14. Name of professional engineer Keith Coats Registration No. FL PE NO. 48917
Mailing Address:
2608 South 86th Street Suite B Tampa Florida 33619
Street or P.O. Box City State Zip Code
Associated with: Seavy & Associates, Inc.

B. SITE INFORMATION

1. Facility location:
County: Hillsborough
Nearest community: Palmetto
Latitude: 27.93855 Longitude: 82.44129
Section: 19 Township: 29 South Range: 19 East
UTM # 17 / 358200 / 3091231 / _____

2. Facility size (area in acres): 1.29 Acres

3. Attach a topographic map of the facility area and a scale drawing and photographs of the facility showing the location of all past, present and future material and waste receiving, storage and processing areas, including size and location of tanks, containers, pipelines and equipment. Also show incoming and outgoing material and waste traffic pattern including estimated volume and controls.

The facility's detailed process description is labeled as Attachment 1

C. OPERATING INFORMATION

1. Hazardous waste generator status (SQG, LQG, Etc.) N/A

2. List applicable EPA hazardous waste codes:

N/A

3. Attach a brief description of the facility operation, nature of the business, and activities that it intends to conduct, and the anticipated number of employees. No proprietary information need be included in this narrative.

A brief description of the facility operation is labeled as Attachment 2

4. A detailed description of the process flow should be included. This description should discuss the overall scope of the operation including analysis, treatment, storage and other processing, beginning with the arrival of an incoming shipment to the departure of an outgoing shipment. Include items such as size and location of tanks, containers, etc. A detailed site map, drawn to scale, should be attached to this description. [See item four (4), page four (4) of the instructions.]

The facility's detailed process description is labeled as Attachment 1

5. The following parts of the facility's operating plan should be included as attachments to the permit application. [See item five (5), page four (4) of the instructions.]

   a. An analysis plan which must include:
   (i) a sampling plan, including methods and frequency of sampling and analyses;
   (ii) a description of the fingerprint analysis on incoming shipments, as appropriate; and
   (iii) an analysis plan for each outgoing shipment (one batch/lot can equal a shipment provided the lots are discreet units) to include: metals and halogen content

   The analysis plan is labeled as Attachment 4

   b. A description of the management of sludges, residues and byproducts. This must include the characterization analysis as well as the frequency of sludge removal.

   Sludge, residue and byproduct management description is labeled as Attachment 5

   c. A tracking plan which must include the name, address and EPA identification number of the transporter, origin, destination, quantities and dates of all incoming and outgoing shipments of used oil.

   The tracking plan is included as Attachment 6

6. Attach a copy of the facility's preparedness and prevention plan. This requirement may be satisfied by modifying or expounding upon an existing SPCC plan. Describe how the facility is maintained and operated to minimize the possibility of a fire, explosion or any unplanned releases of used oil to air, soil, surface water or groundwater which could threaten human health or the environment. [See item six (6), page five (5) of the instructions.]

The preparedness and prevention plan is labeled as Attachment 7

7. Attach a copy of the facility's Contingency Plan. This requirement should describe emergency management personnel and procedures and may be met using a modifying or expounding on an existing SPCC plan or should contain the items listed in the Specific Instructions. [See item seven (7), page five (5) of the instructions.]

The contingency plan is labeled as Attachment 8

8. Attach a description of the facility's unit management for tanks and containers holding used oil. This attachment must describe secondary containment specifications, inspection and monitoring schedules and corrective actions. This attachment must also provide evidence that all used oil process and storage tanks meet the requirements described in item 8b on page 6 of the specific instructions, and should be certified by a professional engineer, as applicable.

The unit management description is labeled as Attachment 9

9. Attach a copy of the facility's Closure plan and schedule. This plan may be generic in nature and will be modified to address site specific closure standards at the time of closure. [See item nine (9), page six (6) of the instructions.]

The closure plan is labeled as Attachment 10

10. Attach a copy of facility's employee training for used oil management. This attachment should describe the methods or materials, frequency, and documentation of the training of employees in familiarity with state and federal rules and regulations as well as personal safety and emergency response equipment and procedures. [See item ten (10), page seven (7) of the instructions.]

A description of employee training is labeled as Attachment 11

APPLICATION FORM FOR A USED OIL PROCESSING PERMIT

PART II - CERTIFICATION

TO BE COMPLETED BY ALL APPLICANTS

Form 62-710.901(6) Operator Certification

Facility Name: Universal Environmental Solutions, LLC EPA ID# FLR000199802

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 or knowing violations. Further, I agree to comply with the provisions of Chapter 403, Florida Statutes, Chapters 62701 and 62-710, F.A.C., and all rules and regulations of the Department of Environmental Protection

Signature of the Operator or Authorized Representative*

E. Kinley

Ed Kinley President/Owner/Operator

Name and Title (Please type or print)

Date: 10/16/14 Telephone: (813) 241-9206 X-183

* If authorized representative, attach letter of authorization.

APPLICATION FROM FOR A USED OIL PROCESSING PERMIT

PART II - CERTIFICATION

Form 62-710.901(6) Facility Owner Certification

Facility Name: Universal Environmental Solutions, LLC EPA ID# FLR000199802

This is to certify that I understand this application is submitted for the purpose of obtaining a permit to construct, or operate a used oil processing facility. As the facility owner, I understand fully that the facility operator and I are jointly responsible for compliance with the provisions of Chapter 403, Florida Statutes, Chapters 62-701 and 62-710, F.A.C., and all rules and regulations of the Department of Environmental Protection.

Signature of the Operator or Authorized Representative*

E. Kinley

Ed Kinley President/Owner/Operator

Name and Title (Please type or print)

Date: 10/16/14 Telephone: (813) 241-9206 X-183

* If authorized representative, attach letter of authorization.

APPLICATION FROM FOR A USED OIL PROCESSING PERMIT

PART II - CERTIFICATION

Form 62-710.901(6) Land Owner Certification

Facility Name: Universal Environmental Solutions, LLC EPA ID# FLR000199802

This is to certify that I, as land owner, understand that this application is submitted for the purpose of obtaining a permit to construct, or operate a used oil processing facility on the property as described.

Signature of the Operator or Authorized Representative*

E. Kinley

Ed Kinley President/Owner/Operator

Name and Title (Please type or print)

Date: 10/16/14 Telephone: (813) 241-9206 X-183

* If authorized representative, attach letter of authorization.

APPLICATION FORM FOR A USED OIL PROCESSING PERMIT

PART II - CERTIFICATION

Form 62-710.901(6) P. E. Certification [Complete when required by Chapter 471, F.S. and Rules 62 - 4.050, 62-761, 62-762, 62-701 and 62-710, F.A.C.]

Use this form to certify to the Department of Environmental Protection for:

1. Certification of secondary containment adequacy (capacity), structural integrity (structural strength), and underground process piping for storage tanks, process tanks, and container storage.
2. Certification of leak detection.
3. Substantial construction modifications.
4. Those elements of a closure plan requiring the expertise of an engineer.
5. Tank design for new or additional tanks.
6. Recertification of above items.

Please Print or Type

Yes Initial Certification No Recertification

1. DEP Facility ID Number: FLR000199802 2. Tank Numbers: 8

3. Facility Name: Universal Environmental Solutions, LLC

4. Facility Address: 1650 Hemlock Street Tampa Florida 33605

This is to certify that the engineering features of this used oil processing facility have been designed/examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, 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.

Signature

Keith Coats, P.E.

Name (please type)

Florida Registration Number: 48917

Mailing Address: 2608 South 86th Street Suite B

Street or P. O. Box

Tampa Florida 33619

City State Zip

Date: 10/3/17 Telephone (813) 917-9267

MICHAEL KEITH COATS LICENSE No. 48917 STATE OF FLORIDA PROFESSIONAL ENGINEER

PLEASE AFFIX SEAL

TABLE OF CONTENTS

ATTACHMENT 1 – PERMIT ATTACHMENT STRUCTURE & FACILITY'S DETAILED PROCESS DESCRIPTION

1.0 UES Used Oil Processing Permit Submission Attachment Structure

The attachments contained in this submission package are to be utilized as one document designed to meet the requirements for information about the UES facility, facility process, operators, owners, best management practices, and historical data and surrounding properties. The following Attachments are included in the submission:

1.1 Detailed Facility Process Figures

The following scaled figures, and site photos depict the site location, facilities location of all past, present and future material and waste receiving, storage and processing areas. Incoming and outgoing material and waste traffic pattern is located in **Section 1.7**. Estimated volumes and controls are located in **Section 1.8.** These figures and photos will be referenced throughout this permit submission document.

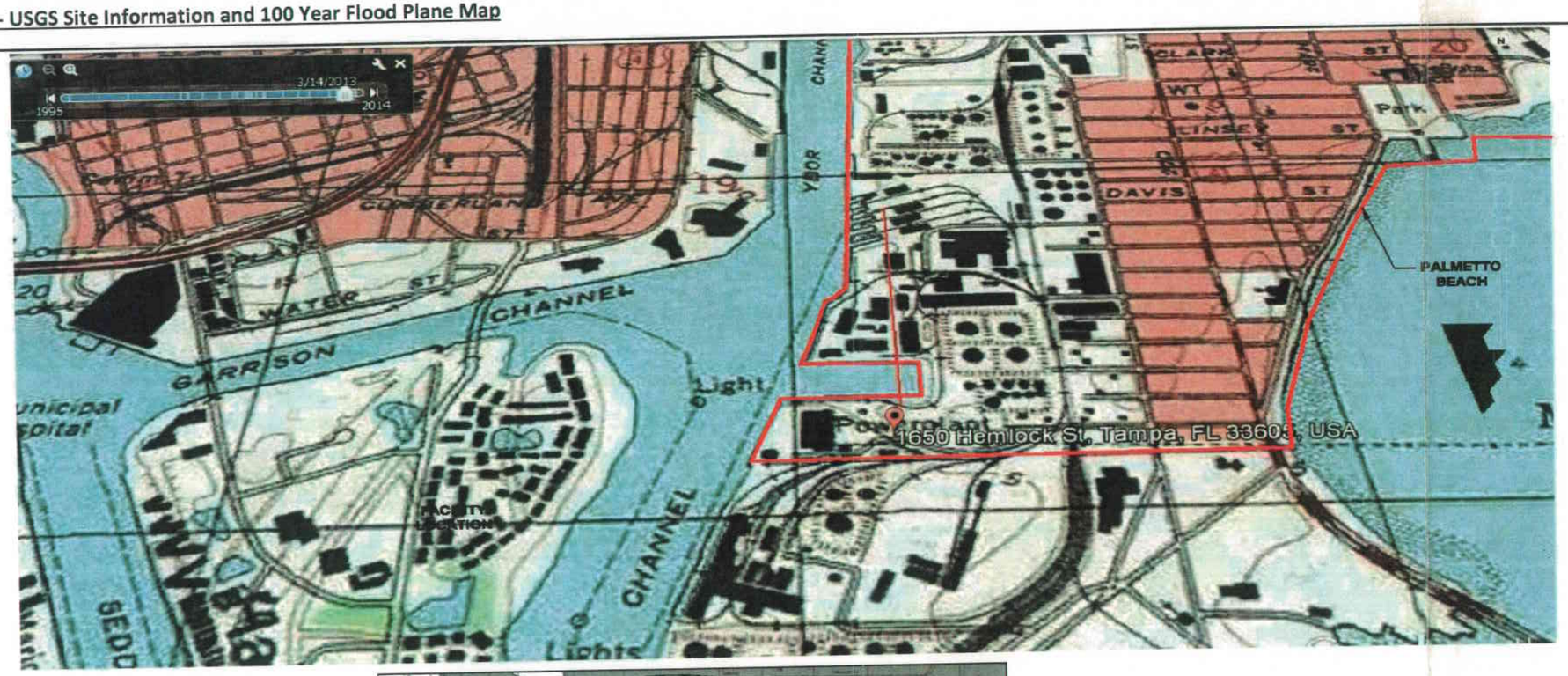
1.1.0 Figure -1 - USGS Site Information and 100 Year Flood Plane Map - The USGS map depicts the site location and 2000 foot radius. General Notes include UTM, site coordinates, neighborhood name, elevation data and plat map data. The Palmetto Beach neighborhood is located approximately 2,000 feet to the east of the facility and the Sparkman Channel is located approximately 800 feet to the west.

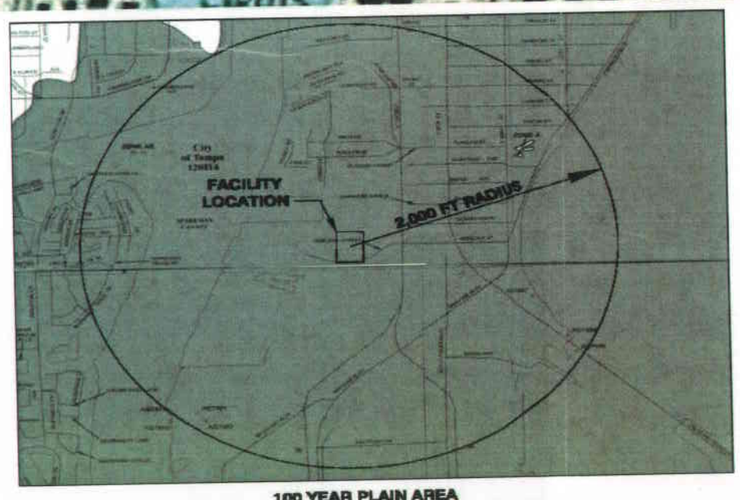
1.1.1 Figure -2 – Site Location Map – The Site Location Figure depicts the site area including the pretreatment system area of extents, and acreage estimates. Surveyor's contour data is included in this figure.

1.1.2 Figure -3 – Process Flow Map – The process flow figure depicts waste management area unit designators, dimensioned containment areas, tank labels and sizes, process piping and flow direction as well as fencing, fence gate, pipeline flow direction and equipment identifiers.

1.2 Aerial Site Photo Maps 2002,2012, and 2014 –Aerial photos taken from 2002, 2012 and 2014 depict the sites transition from a TECO power plant into a support area for shipbuilding and maintenance activities. The 2014 aerial photo shows the completed plant and details site features.

Figure -1.1.0 - USGS Site Information and 100 Year Flood Plane Map





100 YEAR PLAIN AREA
HILLSBOROUGH COUNTY, AUGUST 28, 2008
MAP NO. 12057C0354H, MAP NO. 12057C0358H
MAP NO. 12057C0362H, MAP NO. 12057C0366H

GENERAL NOTES:

1. PALMETTO BEACH
2. 27.93855°N - 82.44129°E
3. ELEVATION = 1.3M
4. SECTION 19, TOWNSHIP 29 SOUTH, RANGE 19 EAST.
5. UTM # 17/358200/3091231.

SEAVY & ASSOCIATES, INC.
2608 South 89th Street, Suite B
Tampa, FL 33619

DRAWING TITLE: USGS SITE INFORMATION AND 100 YEAR FLOOD PLAIN MAP
PROJECT TITLE: UES OIL PROCESSING PERMIT APPLICATION REVISION 0

CLIENT: HENDRY CORPORATION
1650 HEMLOCK STREET
TAMPA, FL 33605

Keith Cook P.E.
P.E. No. 42617
CERTIFICATE OF AUTHORIZATION NO. 9528
PHONE: (813)917-9287
FAX: (813)635-1807

BY	REVISIONS

DESIGNED BY: J.S.
DRAWN BY: R.M.
CHECKED BY: J.S.
DATE: 10-13-14
SCALE: AS SHOWN
PROJECT NO.: 3120
SHEET 1 of 3
1

Figure -1.1.1 - Site Location Map

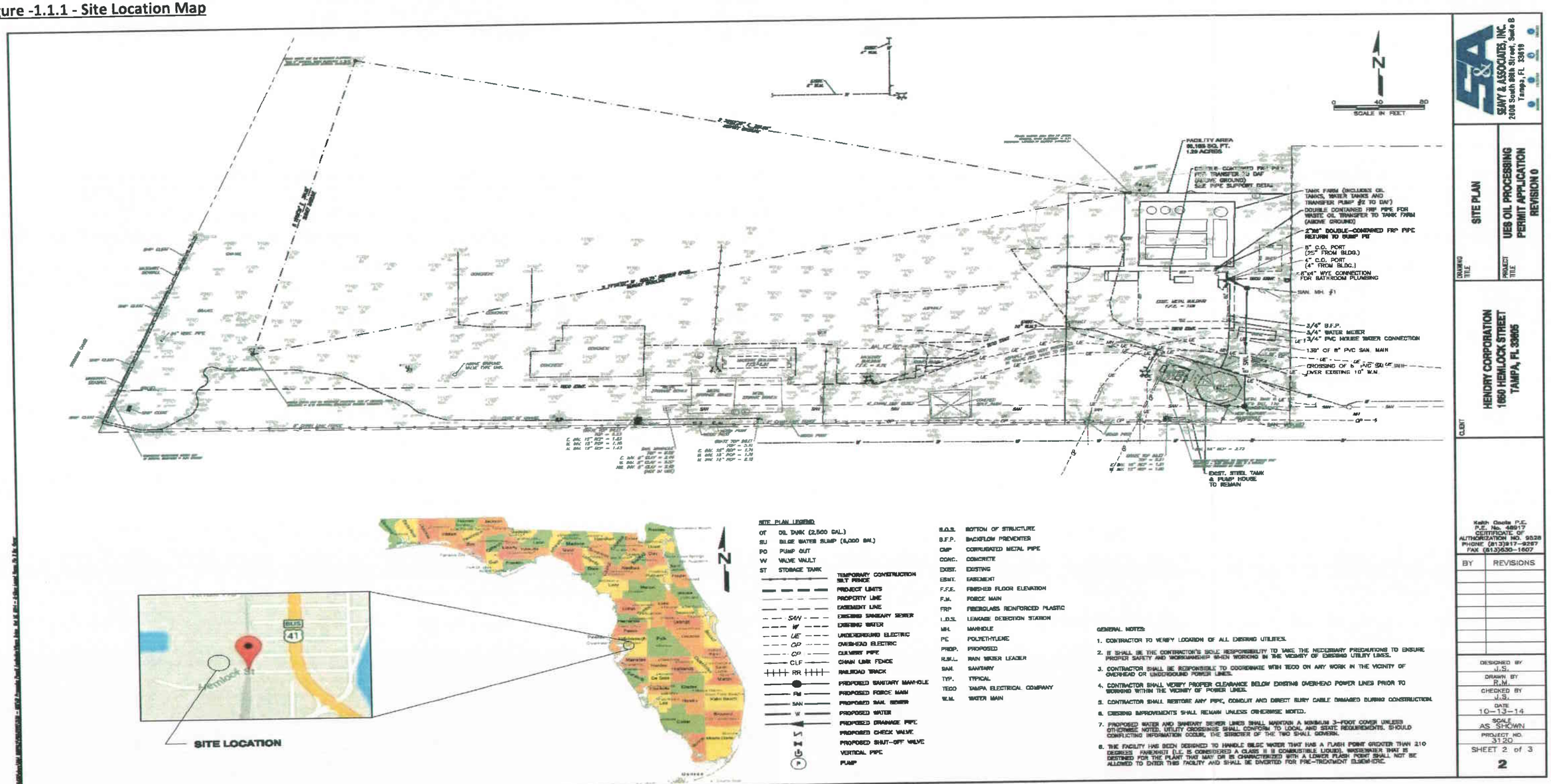
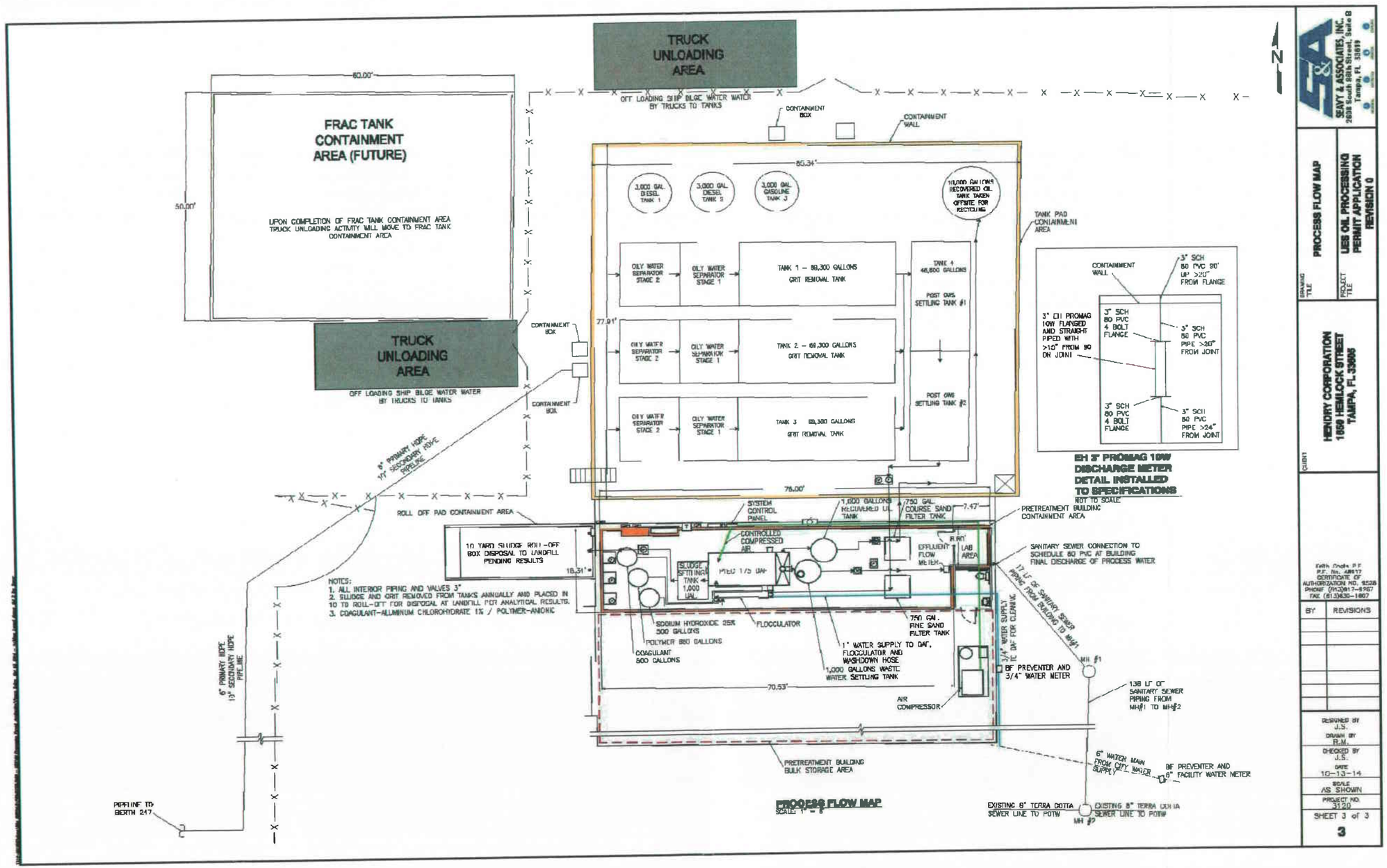


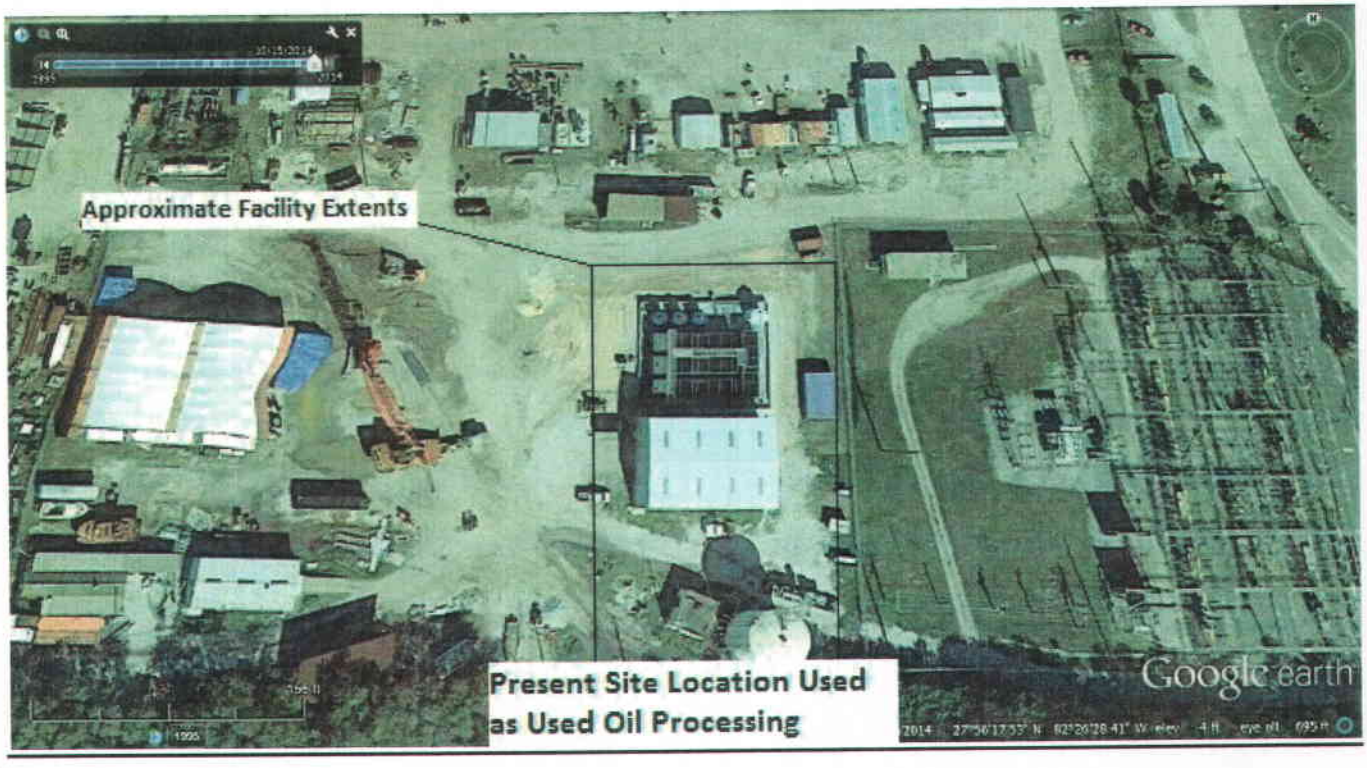
Figure -1.1.2 - Process Flow Map



1.2 Aerial Site Photo Maps 2002

1.2 Aerial Site Photo Maps 2012

1.2 Aerial Site Photo Maps 2014



ATTACHMENT 2 – FACILITY DESCRIPTION

2.0 Facility Description

Universal Environmental Solutions, LLC (UES) has completed construction of its wastewater pre-treatment facility. UES is located in the Port of Tampa and its primary operation will be servicing the local shipyards. The project has been completed as pre-approved for construction under Service Request 07-03-12A. As detailed in the service request submittal, the treatment plant is designed to pre-treat various wastewater streams created from area shipyards. Other waste streams include, but are not limited to: cleaning and maintenance processes, environmental sampling and disposal activities, industrial process water separation systems, and contaminated stormwater. All wastewater will be non-hazardous prior to treatment. **Attachment 6** describes the processes utilized by the plant operator to prevent entry of hazardous wastes into the plant. The operation has one Plant Operator, and one Plant Technician. Operations are Monday – Friday (0730 – 1600 hours).

2.1 Accepted Waste Streams

Below is a list of anticipated waste streams that the pre-treatment facility system has been designed to recycle:

2.1.1 - Bilge Oily Water – created by leaks of salt water, cooling water, fuel oil and lube oil, by the dewatering of sedimentation and sludge tanks, by the draining off of various cleaning processes and by particles of soot and dirt. BOW is typically a complex mixture of bilge water and chemicals used in ship maintenance and repair.

2.1.2 - Fuels, oils and grease residues - resulting from cleaning / purging of the cargo pipelines and tanks of vessels transporting petroleum products. Residuals include diesel fuel, gasoline, # 6 oil, crude oil, and shale oil.

2.1.3 - Fertilizer residues - resulting from the cargo tank cleaning of vessels that transport bulk fertilizers. This service is required when a vessel is changing cargoes to another commodity (i.e. Fertilizer to Animal Feed).

2.1.4 - Alumina residues - resulting from the cargo tank cleaning of vessels that transport bulk Alumina. This service is required when a vessel is changing cargoes to another commodity.

2.1.5 - Landfill leachate – wastewater / stormwater from landfills requiring off site treatment. **NOTE**: This wastewater will be strictly limited to prior analyses (waste profile acceptance, bench test sample treatment results) as specified in wastewater discharge guidelines.

2.1.6 - Brine – process wastewater used for cooling in industrial applications.

2.1.7 - BOD / COD – commercially generated wastewaters with high concentrations of organic matter.

2.2 Waste Management Unit Designations

The pre-treatment facility consists of eight separate unit management designators. The designators were developed to describe distinct pre-treatment process locations. The designators will be used in the attachments contained within this permit submission. The unit designators are shown in Section B.3 - Figure 3 of this permit submission a description of the unit designators is listed below:

2.2.1 Containment Pad Area – The containment pad area consists of an 80'x76'x2.5' concrete containment area located to the north of the pre-treatment building. This area contains the pre-treatment process tanks and piping as well as pumps, filters, valves, used oil storage tanks and used fuel storage tanks. The area is open to rainfall which is collected and pumped back into the process system via a sump located in the south east corner.

2.2.2 Pre-Treatment Building Containment Area – The pre-treatment building is located to the south of the containment pad. The containment area consists of an 80'x40'x1' containment wall. The area houses the pre-treatment equipment consisting of sludge settling tank, used oil tank, process settling tank, flocculent and process piping and meters, dosing pumps, sodium hydroxide, polymer and flocculent tanks, Dissolved Air Floatation system (DAF), air pumps, electric pumps, control system. The area is 100% under cover of the building roof and receives no rainfall.

2.2.3 Bulk Storage Area – The Bulk Storage Area is located to the south of the pre-treatment building containment area and consists of a concrete pad. Bulk non-hazardous wastes are store inside of the building in drums or totes. The drums and totes are characterized and sent off for disposal or recycling.

2.2.4 Lab Area – The lab area is located in the northeast area of the pre-treatment building. The lab room is a 10'x10' lab room that houses laboratory testing equipment, regents, documents, records and manifest. The facility operator's office equipment including a computer and printer is located in this area.

2.2.5 Roll Off Area – The roll off area is located to the west of the pre-treatment building in the north corner. The roll off area consists of a roll off pad and containment wall, sump for removal of rainwater and a dedicated 10 yard roll off that is used to collect and dispose of the sludge's and sediments from processing of oily waters. The rainwater is pumped to the sump located in the tank containment pad area and into the process tanks for treatment.

2.2.6 Truck Unloading Areas – The Truck Unloading Areas are located to the north and west of the Tank Containment Pad area. The unloading area to the west of the containment pad is utilized to unload bulk tanker trucks through a pump located on the east side of the containment pad. The unloading area located to north of the containment area is utilized to load and unload used fuels and to load used oil designated for recycling.

2.2.7 Frac Tank Storage Area – The Frac Tank Storage Area is an impervious concrete pad. The frac tank storage area is located on the northwest side of the tank containment pad area. The Frac tank containment area consists of a sloped 50'x60'x0.75' pad and will store up to two 21,000 frac tanks.

The frac tanks are utilized for additional storage of used oils and process oily water that requires additional treatment or filtration. Rainfall and water collected in the frac tank storage area is collected in a sump located in the south east corner of the pad. The sump contains a pump that transfers the water to the tank containment pad sump and into the process for treatment.

2.2.8 Pipeline Area – The Pipeline Area is located to the west of the containment pad, it consist of an 6" primary, 10" by 800' doubled walled HDPE pipeline from Berth 247 to the truck unloading area piping and into the plant for processing. The pipeline runs from berth 247 underground in the old abandoned 15" stormwater pipe for added protection and additional spill containment protection.

2.3 Facility Non-hazardous Waste Disposal Processes

The pre-treatment of oily waters results in several waste streams that require disposal. The following list details non-hazardous waste streams that require disposal.

2.3.1 Sludge Waste – Sludge's and sediments are created from the processing of oily water and oily water waste streams are collected in the bottom of the primary holding tanks, of the DAF system. Other sources of sludge wastes are created from cleaning and maintenance processes. These wastes are pumped to the roll off, then characterized, manifested and disposed offsite.

2.3.2- Used/Recycled Oils – Used oils are separated from the DAF process and collected in the used oil tank located on the tank containment pad area. The oils are sent offsite to be recycled.

2.3.2- Maintenance Solid Wastes – Materials and rags used for cleanup of spilled materials are collected in drums and sent off for disposal at the local incinerator.

ATTACHMENT 3- DETAILED PROCESS FLOW DESCRIPTION

3.0 DETAILED DESCRIPTION

The following detailed description should be used in conjunction with **Appendix-A and Figure-3** in the Process Flow Plan provided. The attached site plan depicts location and transmission points for the various process descriptions described in the sections below.

3.1 Pre-Treatment System Components Description

Plant components were selected based on a progressive pre-treatment design. The components were sized and selected based on previous data available from operations conducted at the shipyard. The specific plant equipment processes will be discussed in **Section 3.0** and the operation of these processes will be detailed in Section 4.0. An equipment and process diagram is attached as **Figure-3** to clarify process flow and equipment location and layout. Two areas house the pre-treatment process equipment, process storage, solid waste storage and primary piping and pumps are located outside on the concrete containment pad and dosing, DAF and filtration systems, secondary piping and the lab are locate in the pre-treatment system warehouse. The following equipment is installed to complete wastewater pre-treatment processes:

3.1.1 Offloading & Piping – Offloading of trucks will be conducted on the west side of the plant. Trucks with wastewater will offload using a 3" cam-locked and valved flexible hose to 3" plant piping connection inside of a double walled containment box. The containment box has two connections, one for trucks with pumps and one for trucks that require a pump to offload. The plant operator will make the proper connection and direct the wastewater to appropriate primary storage tank. Tank selection will be based on several factors: type of wastewater, required treatment, similarity to existing tank contents, batch and cleaning schedule and settling time required.

3.1.2 Storage Tanks & Roll-Off – The tank farm consists of 4 steel tanks, three of the tanks have an estimated 69,600 gallon capacity each. These three tanks are configured with two oily/water separators each and a primary large to medium grit and sediment settling chamber each. Each tank has an oily water separator capacity of 30,160 and a primary settling chamber or grit removal chamber has a capacity of 39,440 each. One secondary settling tank is piped in series with each of three oily water separators and has 48,600 gallon capacity. A 10,000 gallon reclaimed oily and process waste oil collection tank is located adjacent to the 4 tanks. A 20 yd roll-off is installed on a concrete containment pad located in front of the DAF process building for waste sludge collection. All tanks are installed within a re-enforced concrete containment system with a sump for collection and treatment of rainwater.

3.1.3 Pumps Systems – The pre-treatment plant utilizes 3 types of pumps to move process water from offloading to storage to treatment and discharge. Two 3" Hydromatic 150 gpm self priming pumps are installed on the containment pad and are utilized to offload trucks and transfer wastewater from storage tank system to storage tank system or pumped inside for process treatment, one 3" Hydromatic 150 gpm self priming pump is installed on the discharge piping to transfer wastewater. Four pneumatic positive displacement pumps are installed for waste processing storage and disposal. One 4" Wilden pump is installed in secondary containment at the influent of

the plant for additional truck offloading. Two - 2" Wilden pumps are installed, one at the DAF process emulsified oils settling tank to transfer recovered emulsified oil to the 10K storage tank outside and one to supply the pre (coarse) and post (fine) treatment sand filter systems. One 3" Wilden pump is installed in the DAF process tank to pump sludge out the roll-off and settled process water back to the storage tanks. The DAF contains an air blending and mixing pump that is controlled by the DAF control panel.

3.1.4 Chemical Dosing & Flocculation – The plant's initial contact treatment consists of a chemical feed and dosing systems. Chemicals are injected into a pre-DAF Flocculator with two inline mixers and several sampling ports. Three LMI pump dosing pumps feed by storage tanks are installed and piped to inject and mix with the wastewater in the Flocculator. The three chemicals types selected for solids removal and DAF preparation of the wastewater are: **base, flocculent, and coagulant.**

3.1.5 Dissolved Air Floatation – The DAF installed for treatment is a PTEC 175. This DAF design utilizes state of the air blending pumps to create treatment surface area. The DAF is designed to process 100 gpm normally and 175 gpm/max.

3.1.6 Post Treatment Settlement Tanks – Two 1,000 gallon polypropylene tanks are installed for post DAF settling. One 1,300 gallon steel open topped rectangle low profile tank is installed on the DAF sludge discharge to facilitate sludge dewatering.

3.1.7 Post and Pre-treatment Sand Filtration Systems – Two 500 gallon sand filtration systems are installed in the process train to allow for solids separation. Wastewaters that contain high amounts of suspended solids / sediments will be processed through these units if necessary. One unit contains coarse sand and one a fine sand pre or post treatment if necessary. Normal plant operations do not utilize sand filtration. The sand filters have a backwash system that allows sludge removal to the sludge settling tank.

3.1.8 PLC Main Control Panel, DAF Sub-Control Panel, Tank Leveling Meters, pH and Flow Meters- Plant operations will be controlled by an operator onsite at all times. The process operations are controlled by an Allen-Bradley PLC system that runs all aspect of plant operations. The primary and secondary storage tanks are equipped with tank level sensors that indicate tank levels and volumetric quantification of wastewater stored onsite. Two Endress-Hauser flow meters record both flow into the process system and flow discharge to the POTW. An inline pH probe is installed with a logic loop program to control the chemical dosing system. The DAF operations are controlled by a sub panel with and Eaton PLC that communicates with the Main Control panel PLC. The PLC system is programmed to allow the operator to start and stop the system based on conditions.

3.1.9 Bench Testing Laboratory – UES has installed a Quality Control (QC) testing lab in the plant area for bench testing of influent, process and discharge wastewaters. The lab is equipped with colorimetric meters, titration equipment, oven, burners and glassware to perform qualitative real-time analyses of influent and discharges as well as waste products to assure proper plant operations and to provide confirmation of off-site analytical lab results.

3.1.10 – Containment Systems – The storage tanks are installed on an 86' x 78' containment pad with 42" containment walls. All process equipment is contained inside an adjacent warehouse building. Equipment for transport and treatment of wastewater is housed within containment

structures to prevent accidental spillage of wastewater from reaching the environment. Outside containment capacity is approximately 160,000 gallons. The containment system inside the warehouse building is designed to contain 16,400 gallons. An anti-siphon valve is installed inline prior to wastewater entry from the containment pad storage area into the warehouse containment area to prevent errant flow from the storage tanks into the process area.

3.1.11 Water and Air Supply – A 175 cfm 145 psi regulated air compressor was installed to operate the DAF system and supply the pneumatic pumps located throughout the plant. The system has a 300 gallon storage tank and an air dryer to protect critical DAF operation components. Water for cleaning and plant wash down operations is available throughout the plant.

3.2 PRE-TREATMENT SYSTEM PROCESS DESCRIPTION

Design of the plant was based off of batch type operations and that allow for a graduated treatment of the wastewaters processed through the plant. Four treatment types are utilized in normal plant operations: Oily/water separation, Solids Settling, Chemical Dosing and DAF. Additional sand filtration can be utilized in the event of wastewater influents that contain high sediments, solids and turbidity. A schematic flow diagram is attached as Attachment A.

3.2.1 Pre & Post Sand Filtration - Wastewaters with high turbidity above discharge limits will be pumped through a coarse or fine sand filter prior to treatment. The sand filters systems can be operated in parallel, series or independent of the other. Backwash with process or potable water is required once sand system has been blinded.

3.2.2 Non-emulsified Oily Water and Grease Separation Process - The primary and secondary oily water treatment process is designed to remove non-emulsified oils and greases with primary solids treatment. This process traps floating and non-emulsified oils and grease in a two stage oil water separation system. The non-emulsified oils and grease will separate from the wastewater as it enters the head of the system. The waste oils and grease contained in the primary and secondary oily water separators are pumped off by the operator and stored in the 10K recovery oil tank located in the tank farm. Large sediments and debris are captured in the primary and secondary oily water chambers; this material is removed and placed in the onsite roll-off periodically as needed. The separators utilize hydraulic pressure created by wastewater entering the oily water separators at the top of the tank at 11' above tank bottom grade and hydraulically displace wastewater located at bottom of the first chamber through an opening at 2' above tank bottom grade. Wastewater is then hydraulically displaced from the second chamber through a 12" pipe located 2' above the bottom grade of the tank, the pipe discharges into the top of the tanks settling chamber.

3.2.3 Secondary Solids Settling Process – A secondary settling treatment tank is piped in series so each of the three oily/water separator discharges flow through it prior to entry into DAF treatment. The secondary settlement tank has a 48,600 gallon storage capacity and is divided in half to create 2 settling chambers. Medium to small size grit sand and sediments are removed by gravity as the wastewater flows through the tank.

3.2.4 Chemical Dosing - Chemical dosing treatment is designed to separate emulsified oils and grease from water. A chemical feed pump supplies Sodium Hydroxide to increase the pH of water. Emulsified oil products tend to separate from water at elevated pH levels. The high pH wastewater is treated with a flocculent and coagulant in preparation of entry in the DAF treatment tanks. The flocculent mixes with the sediments, oil and grease and fine particles and the coagulant combines them for ease of removal in the DAF treatment tanks.

3.2.5 Dissolved Air Floatation (DAF) Treatment Process - The Dissolved Air Floatation (DAF) PTEC 175 utilizes compressed air and wastewater to increase the specific gravity of the wastewater allowing the flocculent and coagulant to remove oils and particulates from the water. The waste flocculent is then removed by a skimmer and stored in the 1,000 gallon oil recovery tank. Solids and sludge settled out during the DAF process are removed from the DAF system using a time pneumatic valve that is programmed to open and close as directed by the DAF control panel.

3.3 PRE-TREATMENT PLANT OPERATION DESCRIPTION

The plant consists of offloading systems, storage and primary treatment, storage and settling treatment, chemical dosing treatment, Dissolved Air Floatation treatment, coarse and fine sand filtration if required, post treatment settling, discharge of clean process water, storage and disposal of solids and collection, storage and recycling of waste oil byproducts. The following procedures detail wastewater entry to clean water discharge:

3.3.1 Wastewater Management & Influent – Wastewater produced by onsite and offsite cleaning operations will be properly manifested and documented (UES operations as "Generator Knowledge" / waste profile / or laboratory characterization) prior to entry into the plant. Details of the processes used to create the wastewater will be documented. Some wastewater may require sample submittal for bench test characterization and treatment determination. All waste profiles and manifest copies will be retained for three years on site and retained in off - site storage for an additional two years. All wastewater deliveries will be sampled in advance of discharge for waste profile conformity. The majority of wastewater entering the plant will be offloaded from tanker or vacuum trucks. Some trucks are equipped with offloading pumps and some are not and will require offloading by pneumatic pump. Wastewater enters the system through Influent piping on Tank #1, Tank #2 Tank #3 or Tank #4. Batch processes are most likely to be run when system capacity of approximately 270K gallons has been stored.

3.3.2 Primary Oily Water and Settling Treatment - Wastewater is pumped through the primary, secondary oil/ water separators then through the primary and secondary settlement and into the Flocculator and DAF by the operator. The valves must be set in the proper position. The PLC records the four tank level sensors, influent and effluent flow meters and the dosing pumps to assure that movement of the wastewater is identical to the selections make by the operator prior to startup. Discharge flow rates and influent flow rates as well as tank level calculations are determined by the PLC. The PLC is calculated to assure proper movement of flow from entry into the system to discharge. Prior to plant startup the operator will take a representative sample of the influent wastewater and run scan analyses. Bench testing will be conducted in accordance with lab testing SOP's provided by manufacturer of equipment. Calibration and testing records will be kept onsite for review.

3.3.3 Chemical Dosing and Flocculation – Sodium hydroxide will be used to increase the pH on the wastewater post pre-treatment. If required the operator can provide the PLC startup with a pH set point. The loop ladder logic will control the pH dosing pump to increase dosing until the desired set point pH level is reached. The loop feedback from the inline pH probe will continue to control caustic dosing. Caustic levels will vary based on reduction and efficiency of the DAF process. "Chem-Treat" will be used as an anionic polymer to provide flocculation of the wastewater stream prior to entry into the DAF unit. Polymer dosing will be calculated based on preliminary bench testing prior to the startup of each batch. Coagulant dosing assists in DAF pre-treatment. Dosing will be determined by bench testing prior to plant discharge. Dosing rates and quantities are entered into the PLC screen by the operator during the plant startup. The plant discharge will be sent to the front of the system to circulate the wastewater while bench testing is being conducted. Recirculation allows for bench testing under real-time process operations. Several sample ports are installed to sequentially bench test wastewater: Prior to placement into the storage tanks; prior to entry into the Flocculator; after the caustic, polymer and coagulant dosing; after a secondary polymer dosing location; after discharge from the DAF and prior to entry in the sanitary sewer system. Bench testing calculations will be documented and scaled up dosing rates applied and tested prior to entry in the sanitary sewer system. A brief description of the flocculator operations is detailed below:

The P-TEC PF Flocculator is a Plug Flow Type Pipe Flocculation Reactor fabricated with stainless steel piping with a stainless steel stand. It includes mixing zones for both coagulation and flocculation required for chemical treatment of most wastewater. The term "plug flow" refers to the fact that retention time and/or mixing energy is constant in any given cross section of the pipe. As such, all particles are subjected to the same amount of mixing energy for the same amount of time. This results in a highly uniform floc with excellent separation characteristics.
A coagulant is usually dosed to the raw water at the inlet of the flocculator. Immediately after the dosing point, a static mixer is installed for the mixing of the coagulant and the raw water. The reaction is completed in the pipe following the mixer. Mixing energy and reaction energy, in the mixers and the pipe are a result of turbulence (Reynolds number). Coagulation is the destabilization (by electrical charge neutralization) of the influent pollution particles into *microfloc* particles. When coagulation is completed, a flocculent is dosed just ahead of a second static mixer. Flocculation is performed by collecting and trapping these microfloc particles into larger M*acrofloc* particles by the use of long-chained synthetic polymers. These polymers usually have either a negative (anionic) or positive (cationic) charge. Mixing of the water and the flocculants takes place in a second static mixer. Floc growth is completed in the pipe, following the mixer.
The PF Flocculator allows for the addition of a portion of the DAF recycle flow containing dissolved air "whitewater" just after the flocculant. This enhances the floc's buoyancy by incorporating micro-bubbles *inside the floc's as they are forming*, which makes separation inside the DAF more efficient.

3.3.4 DAF Operation – Flocced wastewater enters the DAF and is blended and recirculated through an air blending pump. The blending pump produces microscopic bubbles that increase surface area contact with the flocced wastes and float the larger flocced particles to the surface. The cleaned wastewater is discharge through a weir, the flocced waste products are skimmed off of the top using a motorized skimmer. Skimmer speed and operation is dictated by quantity and type of flocced materials that are present. The operator is required to adjust as necessary.

The heavier materials are separated and sink to the bottom of the DAF. These heavy materials are discharged by a timed pneumatic valve. Sludge, grit, sand and wastewater are discharged into a 1,300 gallon tank and allowed to settle as necessary. Sludge is discharged to the roll-off for characterization and disposal, remaining wastewater is pumped to the front of the oil water separator for reprocessing.

A brief technical description of the DAF PTEC 175 operation is included below:

The HS MacroDAF is a "High Solids" Dissolved Air Flotation (DAF) system that utilizes a large free surface area for flotation in high solids loading applications. The system features all stainless steel construction and is equipped with two high pressure recirculation (air dissolving) pumps; one pump operating and one pump as a 100% stand-by. System operation can be either manual or automatic using a PLC-based control panel that integrates with other installed equipment, (feed pumps, chemical feed systems, etc.). The raw water enters the unit through an inlet distribution box that spreads the flow of water across the width of the unit while decreasing its velocity. Once inside the unit heavy sand or grit particles settle into an inverted pyramid type cone where they are manually or automatically discharged through a settled solids drain. In automatic operation, timers in the PLC periodically open a pneumatically operated valve. Whitewater from the recirculation system is dosed at the inlet of the unit to provide micro-bubbles that attach to the floc's giving them buoyancy to float them to the surface to form a floating layer. The floc is collected in the floating layer (sludge), a unique grid system is installed on the surface that aids in dewatering/thickening the sludge. The sludge is removed with a full-length skimmer system. Sludge removal by the dewatering/skimmer system can be adjusted by water level. Adjustable outlet weirs are provided to set the level in the flotation unit in the optimum position. Treated water leaves the DAF via an effluent channel and overflow weirs. Part of the treated water is recycled through a specially designed pump to produce whitewater (micro-bubbles). Air is dosed in the aeration pump(s). Air flow meters are installed in the air supply control panel to adjust the volume of air metered into the recirculation pump(s). The pump(s) pressurizes the air/water mixture to 95 -110 psi in order to dissolve air into the recycle water (Henry's Law). Further dissolving of the air (as well as separation of any excess, undissolved air) takes place in the aeration header. From the aeration header, the whitewater is dosed to various points of the unit. Depressurization takes place in aeration ball valves, forcing the dissolved air to come out of solution to form micro-bubbles. Micro-bubbles attach to equally sized or larger particles. If a flocculator is installed before the flotation unit, part of the whitewater may be dosed into the flocculator to trap micro-bubbles inside the flocs *as they are forming*. These trapped micro-bubbles will stabilize the floc and keep it buoyant as it remains in the floating layer.

3.3.5 Final Discharge Settling Tank – The treated clean water is allowed to settle in a 1,000 gallon poly tank after being discharged from the DAF. The water is gravity feed into the top of the tank and fills until a high float turns the discharge pump on, if the low float is activated the pump stops until the high level float is activated.

3.3.6 Alarms and Plant Operation – The Pre-treatment system is equipped with several alarms to prevent spills and control discharge to sanitary sewer. The alarm on the plant stops all plant operation, closes all plant functions and indicates an audio and visual alarm that will require operator activity to restart. The alarms are as follows:

High Storage Tank Level – If the primary and secondary storage tanks are filled to 1' below overflow, the system and the alarm will indicate.

Flow Disparity – If the flow volume coming into the plant and leaving the plant are not within 2-3 % of each other the alarm will activate. If the volume of water calculated leaving the storage tanks is not within 2% of the volume calculated leaving the plant the alarm will indicate.

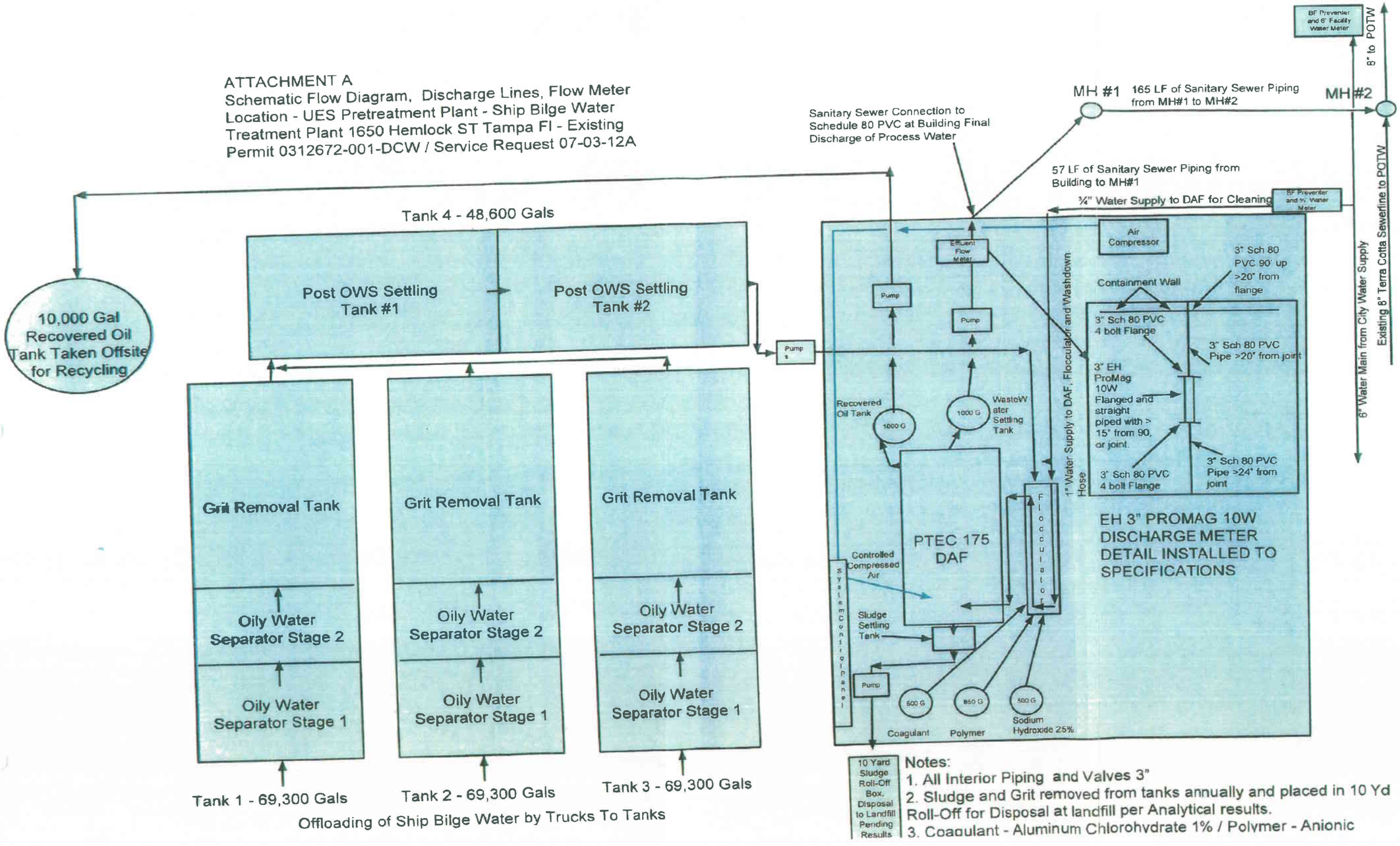
Dosing Pump Error – If the dosing pumps cannot supply required rate, or required pH level or the backpressure is too high, the alarm will indicate.

DAF Dry – If the DAF tank does not have enough flow, the alarm will indicate.

Overflow in Containment Area – One inch of liquid in the containment area will set off the alarm.

Rainwater collected on the storage tank containment pad is collected by drainage runs that are installed and graded to a sump located in the southeast corner of the pad. The rainwater is collected and pumped to the front of the pre-treatment system for treatment. Plant operations require a startup procedure entered by the plant operator. The startup procedure requires the operator to check and position all valves, dosing rates, pump operations and calibrations prior to discharge.

ATTACHMENT A
Schematic Flow Diagram, Discharge Lines, Flow Meter
Location - UES Pretreatment Plant - Ship Bilge Water
Treatment Plant 1650 Hemlock ST Tampa Fl - Existing
Permit 0312672-001-DCW / Service Request 07-03-12A



Notes:
1. All Interior Piping and Valves 3"
2. Sludge and Grit removed from tanks annually and placed in 10 Yd Roll-Off for Disposal at landfill per Analytical results.
3. Coagulant - Aluminum Chlorohydrate 1% / Polymer - Anionic

ATTACHMENT 4 - WASTE ANALYSES AND SAMPLING PLAN

4.0 WASTE ANALYSES and SAMPLING PLAN (WASP)

This document is a Waste Analysis and Sampling Plan (WASP) prepared for use by Universal Environmental Solutions, Inc (UES) located at 1650 Hemlock Ave in Tampa, Florida. UES conducts services associated with the treatment and recycling of petroleum contact water (PCW) and emulsified oils in waters created by ship cleaning and offsite deliveries. UES is not a small or large quantity hazardous waste generator or transporter.

The WASP is required for a large or small hazardous waste generator who treats hazardous waste to meet applicable Land Disposal Restrictions (LDR), a permitted hazardous waste treatment, storage, or disposal (TSD) facility, or a used oil processor and used oil marketer.

This WASP is required because UES is a used oil processor. The WASP will also be used if UES treats a hazardous waste to meet applicable Florida Department of Environmental Protection (FDEP) requirements. UES is not a permitted to accept or process hazardous listed waste. The WASP will also be used as a guide to document waste analysis procedures that are used for the receipt of non-hazardous waste and materials that are brought into the UES facility. The purpose of this Waste Analysis Plan (WASP) is to also document the required sampling and analytical methods as well as the quality control/quality assurance (QA/QC) procedures that are used to ensure that used oil accepted from UES customers meets allowable limits. This WASP will also be used to ensure that specification for used oils recycled by UES meets required specifications as per applicable State and Federal requirements.

This WASP has been divided into four sections. *Section One* is a description of Facility and Process procedures. *Section Two* contains Sampling Procedures; *Section Three* contains information on the various analytical tests that are used for rendering waste determinations, total halogen tests for used oil, and testing for used oil fuel product specifications. *Section Four* of this WASP pertains to UES acceptance, handling, processing and testing of used oil as a transporter, processor, and recycler of used oils and rebuttable procedures.

4.1 GENERAL FACILITY DESCRIPTION AND PROCESS INFORMATION

Historically, shipyard cleaning and decontamination operations have been costly and performed by outside service providers. UES is an affiliate operation of two large shipyards: Gulf Marine Repair and the Hendry Corporation. The UES facility is located at the Port Hendry Terminal. UES has been developed to expand onsite operations of these respective shipyards. This operation is an effort to reduce costs by internalizing this important shipyard function. Critical to this strategy is the pre-treatment facility to streamline cleaning and decontamination processes and the large volumes of wastewater generated. UES contracted two Tampa based engineering businesses that have extensive experience in wastewater design, engineering and construction, SCS Engineers and Seavy & Associates, Inc., to assist them in the design, construction and operations of the Bilge & Oily Water Pre-treatment Plant (plant). As detailed in the initial evaluation of the service request submittal; UES intends to operate this plant on a continual basis with discharge to the POTW occurring when processing operations are complete. The plant design methodology included implementation of alarm and safety systems to eliminate or reduce risks in the loading, transport, offloading, storage, and disposal wastewater created by cleaning and decontamination activities.

4.1.1 UES Material Acceptance Requirements - UES has established procedures for the acceptance and handling of materials that are brought into the facility. Many of these procedures have been developed by best management and regulatory permitted practices. UES accepts materials through a contract or purchase order. Only pre-approved shipments are received at the facility. UES customers are required to submit waste determination documentation (UES Waste Profile) that may be based upon generator process knowledge, material data safety sheets, and/or analytical testing. UES reviews this information as part of its acceptance procedures. This process helps to ensure that only approved materials are accepted at the UES facility. This process also helps UES address questions as to whether or not the waste or material that is accepted is regulated or exempt, is a listed or characteristic waste, is a special waste, or a material that will not be accepted. Waste determinations for residuals and waste produced by UES as part of its facility operations are based upon a generator's process knowledge, material safety data sheets, or analytical testing. UES annually renews waste profiles with solid waste facilities that accept UES solid waste. This includes requirements for analytical testing. Analytical testing is also performed to ensure that on-specification discharges from the facility to the local POTW are compliant with local wastewater regulations.

4.1.2 Record Keeping - Used oil and waste or materials that are accepted at the UES facility require the customer to prepare and/or sign a bill of lading or nonhazardous waste manifest. UES maintains required tracking information and documentation that is required for a used oil transporter and used oil processor. Reports are filed with the FEDP as per the applicable regulations. Copies of the representative forms are provided as an attachment to this WASP. The FDEP requires the completion of annual forms. UES maintains its documentation for a minimum of three years as per applicable regulations on record keeping.

4.2 SAMPLING PROCEDURES

4.2.1 Representative Samples -When UES collects samples for analytical testing, samples are collected in accordance with FDEP approved methods, and a protocol to assure that a representative sample is collected. The samples are sent to an FDEP approved and licensed laboratory, under a chain of custody. Samples are analyzed in accordance with *written procedures outlined in FDEP and "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. Environmental Protection Agency (EPA) Publication No. SW-846, Third Edition, Chapter 1 (November 1986), and its updates.*

Each parameter and its applicable analytical method are provided in the certified laboratory's Quality Assurance and Quality Control (QA/QC) Plan. All sampling procedures are designed and performed in a manner to ensure that samples are representative of the bulk material from which they are taken.

Based upon sample design, sample approaches may vary based upon the sample purpose, type of material to be sampled and the type of container. Sample approaches may include composite samples for large tanks, discrete grab samples, unbiased random sampling, biased or authoritative samples based upon knowledge of the materials to be sampled. Sampling strategies are also based upon the materials to be collected and the purpose of the analysis. Random sample patterns may include simple, stratified or systematic, dependent upon sampling objectives.

4.2.2 Representative Sampling Procedures:

- Prior to conducting sampling, personnel are required to wear the proper level of personnel protective equipment. This may include gloves, safety glasses, (with face shields) and respirators as required.
- Safety equipment is also required for assessing tanker truck and tanks, including required fall protection.
- Prior to sampling trucks, the pressure or vacuum must be relieved from the vessel by the driver. Upon confirmation, the hatch levers will be slowly released until the hatch can be safely opened. The coliwasa or bailer will be lowered into the tank to obtain a representative sample.
- Samples collected from tanks will involve the collection of a representative sample from the sample ports on top or at the base of the tank or hose, taking to account the heterogeneous layering in the tank that may include solids, water, and oil. Samples may be collected in clean and approved buckets, bottles or sample containers, bailer, large tank coliwasa, or similar sampling device.
- Samples collected from containers or carboys will involve the collection of representative samples. Dependent upon the consistency and state of the material, samples may be collected using a clean coliwasa, drum thief, bailer or dipper, based upon the substance to be sampled and the configuration of the container (open head, closed head, or screw top, etc.).
- Samples collected from bins, roll-off boxes or totes will be representative samples that may include scoops or core samples based upon depth, access, stratification of the material in the bin.
- Samples that are collected are to be labeled and maintained under a chain of custody.

Clean sample containers that are used are provided by the licensed analytical lab. The size, type, and any preservatives in the container are based upon the analytical test that is being requested and are provided by the lab. Sample quality control is maintained and may include temperature blanks for samples that must be kept at a certain temperature. Other quality control may include trip blanks and

equipment blanks as required based upon the type of sampling and applicable requirements. UES takes split samples and duplicate samples periodically based upon the circumstance as determined by QA/QC need, the request of a customer or regulatory agency. Sample VOAs may also be used for the collection of liquid samples that require zero headspace. Compliance samples are analyzed at a licensed / accredited lab (SunLabs). Analytes tested are based upon purpose and requirements for waste determinations, waste profiling and screening as required by regulatory requirements, product quality control and assurance, or as required by offsite disposal facilities or UES customers.

4.3 ANALYTICAL TESTING

4.3.1 Analytical Tests - Analytical testing is completed for a variety of purposes. This may include waste determinations, waste profiles, constituent screening, and quality control. Waste is required to be profiled and applicable LDR certifications are required. These are updated annual. UES may render waste determinations and deny acceptance or disposal based upon analytical testing or generator knowledge. Analytical testing may be required for characteristic hazardous waste. Waste determinations can also be rendered by the generator based upon generator process knowledge which may include material safety data sheets. UES currently utilizes SunLabs for screening and compliance analytical testing. UES also completes analytical testing as part of the process used to send non-RCRA regulated solid waste to approved disposal facilities. Solid waste facility approvals typically require the completion of a waste profile. On an annual basis, analytical testing is also typically required. UES follows the waste acceptance procedures that are required by the solid waste facility. Waste that is sent to solid waste landfills may include non-hazardous waste derived from the UES facility or waste that is derived through UES customers. UES also conducts analytical testing for meetings its obligations as a used oil transporter, processor, and marketer. In addition to compliance testing completed by SunLabs, UES uses field testing for finger print analysis and screening onsite. Raider Environmental (Mulberry) or January Environmental (Bartow) recycles the waste recovered oils created by the separation process.

Table 4.3-1 of the following page provides a general listing of the analytical tests used by UES for various purposes under this WASP. The information includes parameters, analytes, when the test is used, notes and frequency of testing.

Table 4.3-1: Analytical Testing:

Parameter	Test Method	Constituents	When Used	Notes	Frequency
TCLP Extraction	SW 1311	TCLP Extraction	When documenting hazardous waste TCLP hazardous waste characteristics	1311 extraction may not be required if sample is 100% liquid with less than 0.5% suspended solids.	As needed for hazardous waste determinations
ICP Metals RCRA (7)	SW 6010B	Cadmium, chromium, arsenic, lead, silver, selenium, barium	Testing for RCRA 7 Metals, use extraction 1311 to document TCLP characteristics. Arsenic, lead, cadmium chromium also analyzed for on-spec oil testing	Method 6010B is used for solid samples including soil, sludge, sediments or concentrated liquids.	As needed for hazardous waste determination, every 20,000 gallon tank for fuel specification
Mercury	SW 7470A	Mercury Aqueous Sample	Testing Mercury, use extraction 1311 to document TCLP characteristics	Use 7471A for Mercury Solid Sample	As needed for hazardous waste determination
ICP Metals (All)	SW 6010B	31 metal constituents	Metals screen, more than RCRA Metals, may be used to help document LDR underlying Constituents	Specify metals, reference all, target metals or RCRA metals.	As needed for screen, underlying constituents or solid waste profiling
RCRA Volatiles	SW 8260B (14 RCRA Constituents)	14 RCRA volatile organic constituents	Used with TCLP 1311 to document RCRA VOC constituents. Use for solid samples including soil, sludge, sediment, or concentrated liquids	1311 extraction may not be required if sample is 100% liquid with less than 0.5% suspended solids.	As needed for hazardous waste determination, solid waste profiling, used

Parameter	Test Method	Constituents	When Used	Notes	Frequency
RCRA Semi-Volatiles	SW 8270C (18 RCRA Constituents)	18 RCRA semi-volatile organic constituents	Used with 1311 to document RCRA semi-volatile organic constituents. Use for solid samples including soil, sludge, sediment, or concentrated liquids	1311 extraction may not be required if sample is 100% liquid with less than 0.5% suspended solids.	As needed for hazardous waste determination or solid waste profiling
Volatiles	SW 8260B	62 Volatile Constituents	Can be used as a screen or for target analytes. May also be used to help identify underlying hazardous waste constituents.	Use for solid samples including soil, sludge, sediment, or concentrated liquids	As needed for screen or solid waste profiling
Semi-Volatiles	SW 8270C	65 Semi-Volatile Constituents in Test	Can be used as a screen or for target analytes. May also be used to help identify underlying hazardous waste constituents. Test also includes PAHs for testing excavated and regulated PCS contaminated soil	Use for solid samples including soil, sludge, sediment, or concentrated liquids. Regulated PCS requires special approval to transport or handle and special manifest	As needed for screen or solid waste or special waste profiling
PAHs	SW 8310	16 Polynuclear Aromatic Hydrocarbons	Petroleum Contaminated Soil screening for PAHs. SRC does not transport or handle regulated PCS waste.	Used to determine if excavated PCS is regulated based upon State regulatory limit	As needed for screen or solid waste or special waste profiling

	Test Method	Constituents	When Used	Notes	Frequency
PCBs	SW 8082	7 types of aroclor compounds	Screening for PCB required for certain customers. Test also used for on specification fuel oil quality control	Method 8082 used to determine concentrations in PCBs as aroclors or individual PCB congeners in extracts from solid and aqueous matrices	As needed for used oil from California, electrical transformers and every 20,000 gallon tank
Corrosivity (Aqueous)	SW 9040C	pH	Aqueous samples (has measurable pH, must contain at least 20% free water by volume	Hold times are limited requires immediate analysis or flag noted	As needed for hazardous waste determinations or profiling
Corrosivity (Liquid)	SW 1110A	pH	Non-aqueous liquid sample. Many aqueous samples are liquids so may need to run both tests if hydrogen ions do not disassociate on 9040C analytical test.	Test is based upon steel corrosion rates (see RO 13561 or Test Method)	As needed for hazardous waste determinations or profiling
Free Liquids	SW 9095B	Free Liquids Paint Filter Test	Used for determining if a waste is a liquid if required	Liquid for flashpoint or pH tests, may also use pressure test in 1311 if needed.	As needed for hazardous waste determinations or solid waste profiling

4.4 UES USED OIL ACCEPTANCE PROCEDURES TO MEET THE REBUTTABLE PRESUMPTION REQUIREMENTS

For used oil shipments, customers are required to enter into an agreement and provide information on their regulatory status and used oil handling practices as required. The UES plant operator conducts an EPA approved test for total halogens on used oil prior to delivery and acceptance of the used oil shipment. Customers are required to sign a bill of lading or non-hazardous waste manifest, dependent upon the shipment and the results of the testing. UES utilizes a contract for its used oil burner customers. For other customers, UES utilizes a purchase order agreement. Prior to accepting used oils or petroleum contact water from its customers, UES enters into an agreement and obtains information on the type of oil. If the source of oil is from a transformer, UES also requires PCB analytical testing, total halogen, flash point, and BTU analysis of the used oil as described in this WASP. Prior to UES picking up oil, UES transport drivers conduct testing of the oil to confirm the halogen content of the used oil. This test is performed using a "TIF XP – 1A Automatic Halogen Leak Detector" A "Dexsil Chlor-D-Tect 1000 ® test kit. The results of the test are marked on the shipping papers. If the total halogen content meets or exceeds 1,000 ppm total halogens, then UES will require the used oil generator to prepare a rebuttable presumption certifying that the used oil was not mixed with a listed hazardous waste. UES provides the customer with a certification form and instructions. In order to rebut the presumption that the used oil is not mixed with a hazardous waste, the customer is advised to have a sample of the used oil analyzed by a certified analytical lab and make the determination based upon the analytical results. The recommended analytical test is SW 8260B. The used oil customer may also rebut the presumption under certain circumstances if the oils contain chlorinated paraffin's or applying other knowledge of the halogen content of the used oil in light of the materials or processed used.

A used oil generator who is unable to rebut the presumption will need to ship the used oil as a hazardous waste to a designated facility for disposal. If the used oil generator rebuts the presumption based upon chlorinated paraffin's, analytical testing, or generator knowledge, UES will require documentation. UES also requires the following certification:

I certify that the used oil in this shipment has not been mixed with a listed hazardous waste, based upon my understanding of the hazardous waste and used oil regulations. I have based my determination upon the following information that is attached to this certification statement as required: __analytical testing, __material safety data sheet, __generator knowledge.

The used oil customer signs the form and based upon the information, UES either accepts the load, rejects the load or retests the load. Used oil shipments, that may be delivered by other used oil transporters requires similar information in terms of documentation. UES also tests the incoming used oil shipments to its facility and maintains the required documentation in accordance with applicable regulations. UES maintains a similar process for documenting acceptance as a used oil processor. UES maintains used oil records as a transporter and processor. Annual reports are also submitted to the FDEP on forms that are providedsee attachment).

UES does accept off specification used oil for processing and blending to make it on-specification used oil fuel. Other analytical tests as described in this WASP (Table 1) are used for screening, testing and to confirm that on specification used oil standards are met prior to product distribution.

The requirements and parameters for on specification fuel are provided in Table 4.4-1. Regulatory and WASP notes associated with this table are also provided. Sampling procedures for testing were described in *Section Two* of this WASP. Sample collection procedures are consistent with Appendix-1 of 40 CFR Part 261 and other applicable requirements.

TABLE 4.4-1:

On Specification Used Oil Fuel Parameters*

Constituent or Property Allowable Level Test Method SW-846

Arsenic 5 ppm maximum (EPA 6010B) Cadmium 2 ppm maximum (EPA 6010B)

Chromium 10 ppm maximum (EPA 6010B) Lead 100 ppm maximum (EPA 6010B)

Flash Point 100o F minimum (EPA 1010A) Total Halogens 4,000 ppm maximum (EPA 9075)

PCBs Less than 2 ppm (EPA 8082)

Note: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e). (UES WASP Note- Used oil containing less than 50 ppm PCBs is regulated under the used oil regulations; however, TSCA requirements will also apply for the burning of the oil. If the PCB concentration is 2 ppm or greater, TSCA limits the marketing of the used oil to a TSCA qualified incinerator or other marketers who market off specification used oil for energy recovery. The term qualified incinerator means a PCB incinerator, a high efficiency TSCA approved boiler, a RCRA incinerator, or an off spec used oil industrial boiler or furnace provided certain conditions are met. PCBs at concentrations of 50 ppm or greater are regulated by TSCA. There are also PCB dilution prohibitions. UES does not accept PCB contaminated used oil.)

The allowable levels do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see §279.10(b)). Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under §279.10(b)(1). Such used oil is subject to subpart H of part 266 of the RCRA regulations rather than the used oil regulations when burned for energy recovery unless the presumption of mixing can be successfully rebutted. (UES WASP Note: Even if the presumption of mixing has been successful, concentrations of total halogens in used oil greater than the 4,000 ppm are off specification). Metal values are based upon total metals and not TCLP values.

4.4.2 Requirements §279.55 Analysis Plan - Owners or operators of used oil processing and re-refining facilities must develop and follow a written analysis plan describing the procedures that will be used to comply with the analysis requirements of §279.53 and, if applicable, §279.72.

The owner or operator must keep the plan at the facility.

(A) *Rebuttable presumption for used oil in §279.53.* At a minimum, the plan must specify the following:

(1) Whether sample analyses or knowledge of the halogen content of the used oil will be used to make this determination.

(2) If sample analyses are used to make this determination:

(i) The sampling method used to obtain representative samples to be analyzed. Representative samples may be obtained using either:

(A) One of the sampling methods in appendix I of part 261 of this chapter; or

(B) A method shown to be equivalent under §§260.20 and 260.21 of this chapter;

(ii) The frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and

(iii) The methods used to analyze used oil for the parameters specified in §279.53; and

(3) The type of information that will be used to determine the halogen content of the used oil.

(b) *On-specification used oil fuel in §279.72.* At a minimum, the plan must specify the following if §279.72 are applicable:

(1) Whether sample analyses or other information will be used to make this determination;

(2) If sample analyses are used to make this determination:

(i) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either:

A) One of the sampling methods in appendix I of part 261 of this chapter; or

(B) A method shown to be equivalent under §§260.20 and 260.21 of this chapter;

(ii) Whether used oil will be sampled and analyzed prior to or after any processing/re-refining;

(iii) The frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and

(iv) The methods used to analyze used oil for the parameters specified in §279.72; and

(3) The type of information that will be used to make the on specification used oil fuel determination.

4.4.3 UES Compliance with §279.55 and 62-710, FAC Analysis Plan Requirements - This WASP represents UES efforts to document and describe its procedures as a used oil processer/re-refiner. UES follows this WASP to comply with the analysis requirements of §279.53 pertaining to the rebuttable presumption for used oil and §279.72 which pertains to used oil marketer requirements for on specification used oil fuel. UES maintains this WASP at its facility in Tampa FL. The UES WASP specifies for the rebuttable presumption for used oil (in §279.53) and 62-710, FAC that UES analyzes the halogen content of used oil to make this determination.

Used oil is tested using approved analytical methods when the used oil is picked up when UES is a transporter. Based upon the test results, that are described in *Section One* to *Section Three* of this WASP, the used oil is either accepted or rejected prior to being transported or accepted at the UES facility. Incoming trucks where UES is not the transporter are also tested for total halogens and total halogen tests are conducted through an offsite ADHS certified lab after each 20,000 gallon tank of on specification used oil is processed and before it is marketed for distribution.

Sampling methods used to collect and analyze representative samples are described in *Sections Two and Section Three* of this WASP and are in conformance with Appendix I of part 261 of the RCRA regulations or an equivalent method under §§260.20 and 260.21 of the RCRA regulations. This WASP also describes the frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and the methods used to analyze used oil for the parameters specified in §279.53 (*Sections One-Three and Tables I and 2* of this WASP). The information provided in this WASP describes the information that will be used to determine the halogen content of the used oil.

This WASP also specifies the sampling procedures and the analytical testing that will be used to document on specification fuel oil that is processed and marketed through UES. *Sections One-Three and Tables 1 and 2* provide this information. Sampling methods provide for the collection of a representative sample. Representative sampling methods are in conformance with appendix I of part 261 of the RCRA regulations or an equivalent method under §§260.20 and 260.21 of the RCRA regulations. This WASP also describes the frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and the methods used to analyze used oil for the parameters specified in §279.72. This analytical data provides information to make the on specification used oil fuel determination. Oil is sampled upon receipt (prior to processing) and after processing but before used oil fuel distribution. Records and tracking documents are maintained as per the referenced regulations.

ATTACHMENT 5 – SLUDGE, RESIDUE & BYPRODUCT MANAGEMENT PLAN

5.0 SLUDGE, RESIDUE AND BYPRODUCT MANAGEMENT DESCRIPTION

This document is a brief description of the management of the sludge waste entering and created by the oily water processing activities. Sludge requiring processing are created by settling in the primary filtration tanks described in Attachment 2 of this permit or created during the primary DAF system wash down process.

Sludge collected at the bottom of the flow through tanks are periodically removed from the bottom of the tanks using a dual-diagram pump. The waste sludge is transferred to an onsite roll-off detailed as **Attachment 1 -Figure 3** of the permit submission.

When the roll-off has reached 2/3 capacity a waste characterization sample is collected using the protocols detailed in the Attached Waste and Sampling Plan. The sludge contained within the box is characterized and disposed utilizing a certified hauler and approved waste landfill.

The attached sludge roll off laboratory analysis is the plant's baseline analytical. Prior to sludge disposal on subsequent a sample of the sludge waste will be sampled and analyzed for the waste parameters, as required under 40 CFR, Parts 279.10(e) and 279.59.

A copy of the baseline sludge analytical results is attached under **Section 6.3** of this submission. No indication hazardous waste was found per FAC 62-730.030 and 40 CFR 261 was found in the sludge analytical results.

ATTACHMENT 6 – TRACKING PLAN

6.0 WASTE TRACKING PLAN

The UES facility uses standardized forms for the tracking of materials into and out of the processing plant. The processing plant operator utilizes the Acceptable Knowledge approach as a primary indicator of hazardous wastes and testing as a secondary approach all wastes prior to processing plant entry. A waste profile approval form is required from the generator prior to acceptance of the delivery of non-hazardous wastes from non-UES facility or deliveries that are from sources that have not been identified. A uniform non-hazardous waste manifest is used to track these non-UES outside sources prior to entry into the plant. The USE plant operator signature is required on the uniform non-hazardous waste manifest before wastes enter the processing plant. Non-hazardous waste from UES personnel are profiled using the attached UES Waste Profile and processed using the attached uniform non-hazardous waste manifest. A copy of the forms are detailed in the sections included in this attachment as well as a copy of the baseline sludge profile analytical data.

6.1 UES Standard Operating Procedures for Hazardous Waste Assessment of Used Oils Prior to Pickup

6.1.1 What are halogens? - Halogens are any compound containing chlorine, bromine, fluorine and iodine. The following halogenated products are often mixed with used oil.

- Brake fluids
- Degreasers including petroleum distillates and mineral spirits
- Refrigerants (e.g., Freon)
- Paints
- Oil-based inks
- Antifreeze
- Carburetor cleaners

6.1.2 When is Used Oil considered a hazardous waste? - There are two primary approaches for determining whether the used oil is a hazardous waste.

- **First Approach** – Acceptable Knowledge (40 CFR 261.11 (c))

Process knowledge includes detailed information about the waste obtained from published or documented waste analysis data or studies conducted on wastes generated by processes similar to that which generated the waste in question.

- **Second Approach** – Testing (40 CFR 261.11 (c) and 40 CFR 761) Along with Acceptable Knowledge

Testing of the following four (4) hazardous waste characteristics are used to determine whether a used oil is a hazardous waste (Acceptable process knowledge can be substituted for one (1) or more the tests for the four (4) hazardous waste characteristics).

- Corrosivity
- Ignitability
- Reactivity
- Toxicity

1. **Corrosivity – pH**

An oil with a pH of less than or equal to 2 or greater than or equal to 12.5 are considered corrosive and hazardous and should not be picked up.

2. **Ignitability – Flash Point Determination**

An oil with a Flash Point below 140°F (60°C) are considered hazardous and should not be picked up. The Flash Point is the lowest temp at which vapors above a waste ignite when exposed to a flame.

3. **Reactivity – Liquid Reacts Violently or Explodes**

Other than the generator's knowledge, Oil is considered hazardous if any of the following characteristics are observed.

- Unstable and readily undergoes violent change without detonating
- Reacts violently or forms potentially explosive mixtures with water
- Releases toxic gases when mixed with water
- Is a cyanide or sulfide bearing waste that releases toxic gases when exposed to pH conditions between 2 and 12.5

4. **Toxicity - Based on the Potential to Contaminate Groundwater**

Oil is considered hazardous if it contains one (1) or more chemicals present out of a list of forty (40) chemicals at a concentration exceeding its Toxicity Characteristic Leaching Procedure (TCLP) concentration (see attached table). The purpose of the TCLP is to simulate the leaching that can occur in a landfill. Additionally, used oil is considered to be hazardous, if it contains more than 0.1 % or 1000 ppm (mg/L) of halogenated compounds or more than 50 ppm (50 mg/L) PCBs (40 CFR 761).

6.1.3 Why should we be concerned about the presence of halogenated compounds and PCBs in used oils? - Most used oil is recycled as fuel for industrial operations such as cement kilns and asphalt manufacturers. During the combustion process, some of the halogens (e.g., chlorine compounds) are chemically converted into hydrogen chloride. When combined with water, which also forms during the burning of fuels, hydrogen chloride becomes hydrochloric acid. Hydrochloric acid is a toxic compound that can corrode furnaces and threaten public health. Additionally, products created from the incomplete combustion of chlorine compounds, such as dioxins, pose significant health risks in the exhaust. Additionally, the more volatile halogen compounds have been shown to damage the ozone layer.

6.1.4 How do I determine whether I can pick up a load of used oil? - There are two (2) primary approaches to be used for determining whether the oil you plan on picking up is hazardous or not. The first approach is based on Your and/or Your Client's "Acceptable Knowledge" about the processes that generated the oils to be picked up. The second approach involves on-site assessments involving the use of your experience (i.e., chlorinated solvent-type odors), scanning of the tank headspace or a sample bottle headspace using your Cen-Tech Halogen Leak Detector model 92514 for Halogens and/or the use of Dexsil Kits to assess the existence of halogens at concentrations above 1000 ppm.

6.1.4.1 "Acceptable Knowledge" - You must first determine how the used oil was generated based on your experience, the operation that generated the used oil and the generator's knowledge and management of their operation. If you and the generator are sure that the process that generated the used oil did not involve any mixing with hazardous waste and/or the probability was very low that a hazardous mixture was generated based on the procedures used to store the used oil, you can be reasonably certain that the oil is not hazardous. However, if you have any doubts about the used oil based on the information provided by the generator, your experience or other knowledge you have, you should perform some field testing to confirm that the used oil is not hazardous based on the 1000 ppm halogen standard threshold.

6.1.4.2 Testing - Scan the used oil with the TIF XP – 1A Automatic Halogen Leak Detector that you carry with you in your used oil transport truck. The following procedure along with the "Assembly and Operating Instructions Manual" is to be used for scanning the used oil with you your detector.

- Switch the unit on by pressing the on / off key. The display will illuminate with the reset indication (left LED green, all others Orange) for 2 seconds. Verify the battery level by observing the constant power indicator.
- Upon turn on, the unit is set the sensitivity level to "5". A rapid, but steady beep rate will be heard. If desired the sensitivity can be adjusted by pressing the SENSITIVITY **a** or SENSITIVITY **b** key.
- Begin Halogen detection operation. If halogens are detected, then the audible tone will change to a siren type sound, distinctly different from the base beep rate. Additionally, the visual indicators will light progressively.
- Orient the probe tip within a distance of no more than ¼-inch from the surface of the liquid to be scanned.
- If the probe tip cannot be placed within a ¼-inch of the fluid surface, use a pipette or the like to collect a sample of the liquid to be scanned for halogens.
- Place the sample in a small plastic cup.
- If the detector indicates that halogens are present within a ¼-inch of the fluid being scanned, use the Dexsil "Clor-D-Tect 1000" kit to determine if the total halogen concentration in the used oil is less than or greater than 1000 ppm.
- If the Dexsil "Clor-D-Tect 1000" kit indicates that the concentration of halogens is greater than 1000 ppm, do not take the oil and contact Bryan Russel or Ed Kinley.

6.1.5 Assessment Supplies to be maintained on Every Truck for Field Testing:

- One TIF XP – 1A Automatic Halogen Leak Detector in working order with good batteries.
- Two (2) Dexsil "Clor-D-Tect 1000" kits that have not expired.
- Liquid Drum sampler or the like for drawing a sample to be placed in a glass jar.
- Two plastic cups for scanning samples of used oil, if the detector probe tip cannot easily be placed within ¼-inch of the used oil surface.

6.1.6 Required Paperwork - Record the pickup location and the rational ("Acceptable Knowledge") for not conducting hazardous waste field testing or the results of the conducted field tests prior to accepting the used oil for transport to the Universal Environmental Solutions Tampa facility.

6.2 Waste Tracking Documents

6.2.1 UES Waste Profile :

Universal Environmental Solutions, LLC
1650 Hemlock St, Tampa , FL. 33605
Ph.# (813) 241 - 9206 Fax# (813) 241 -9215
US EPA ID Number: FLR000199802 Profile #: _____

A. Billing Information
Company _____ Account # _____
Address _____
City/State _____ Zip _____ Contact _____
Phone _____ Fax _____

B. Generator Information/Location of Waste
Generator EPA ID _____
Generator Name _____ Site Contact _____
Address _____
City/State _____ Zip _____
Contact Phone _____ Contact Fax _____
Type of Business _____ SIC Code _____

C. Waste Description
Common Name of Waste _____
Process Generating Waste _____

D. Physical Properties

Physical State	Odor	Color	Viscosity	Layers
☐ 100% Solid	☐ None	Describe: _____	☐ Low	_____ Top
☐ 100% Liquid	☐ Mild		☐ Medium	_____ Middle
☐ Sludge	☐ Strong		☐ High	_____ Bottom
_____ % Free Liquid	Describe_____			

Flash Point		pH		Water	
☐ <73 F	☐ 140-199 F	☐ < 2	☐ 9.1 - 12.4	☐ < 5%	☐ 30-80%
☐ 73-99 F	☐ >199 F	☐ 2.1 - 4.9	☐ > 12.5	☐ 5-10%	☐ 80-100%
☐ 100-139 F	☐ N/A	☐ 5 - 9	☐ N/A	☐ 10-30%	☐ N/A

E. Volume
Anticipated Volume: _____ ☐ Drums ☐ 5-Gallon ☐ 30-Gallon ☐ 55-Gallon ☐ Tote
☐ Bulk ☐ Tanker ☐ Pump Truck ☐ Other: _____
Estimated Frequency: ☐ Weekly ☐ Semimonthly ☐ Monthly ☐ Quarterly ☐ Other _____

F. Constituents
Total must be equal to 100%. All constituents, including debris must be identified.

Constituents	Actual %	Range

G. Other Hazards
☐ Radioactive
☐ Water Reactive
☐ Oxidizer
☐ OSHA
☐ Carcinogen
☐ Explosive
☐ Pesticide
☐ Polymerizable
☐ Organic Peroxide
☐ Infectious
☐ Pryophoric

H. Additional Information
1 Does the waste contain dioxins? ☐ Yes ☐ No
2 Does the waste contain asbestos? ☐ Yes ☐ No
3 Does the waste contain benzene? ☐ Yes ☐ No
If yes, what is the concentration? _____ ppm
Is the waste subject to the benzene waste operations NESHAP? ☐ Yes ☐ No
4 Is the waste subject to RCRA Subpart CC controls? ☐ Yes ☐ No
5 Does the waste contain carcinogens that require OSHA notification? ☐ Yes ☐ No

Form (FT3/87903

I. Constituents
These values are based on ☐ Generator Knowledge ☐ Analytical Results

Inorganic

Metals	Limit	Level (mg/l)
D004 Arsenic	5.0	
D005 Barium	100.0	
D006 Cadmium	1.0	
D007 Chromium	5.0	
D008 Lead	5.0	
D009 Mercury	0.2	
D010 Selenium	1.0	
D011 Silver	5.0	

Pesticides/Herbicides	Limit	Level (mg/l)
D012 Endrin	0.02	
D013 Lindane	0.4	
D014 Methoxychlor	10.0	
D015 Toxaphene	0.5	
D016 2,4-D	10.0	
D017 2,4,5-TP	400.0	
D020 Chlordane	0.03	
D031 Heptachlor	0.008	

Organic

Volatile Compounds	Limit	Level(mg/l)
D018 Benzene	0.5	
D019 Carbon Tetrachloride	0.5	
D021 Chlorobenzene	100.0	
D022 Chloroform	6.0	
D028 1,2-Dichloroethane	0.5	
D029 1,1-Dichloroethylene	0.7	
D035 Methyl Ethyl Ketone	200.0	
D039 Tetrachloroethylene	0.7	
D040 Trichloroethlene	0.5	
D043 Vinyl Chloride	0.2	

Semi-Volatile Compounds	Limit	Level (mg/l)
D023 o-Cresol	200.0	
D024 m-Cresol	200.0	
D025 p-Cresol	200.0	
D026 Cresol	200.0	
D027 1,4-Dichlorobenzene	7.5	
D030 2,4-Dinitrotoluene	0.13	
D032 Hexchlorobenzene	0.13	
D033 Hexachlorobutadiene	0.5	
D034 Hexachloroethane	3.0	
D036 Nitrolbenzene	2.0	
D037 Pentachlorophenol	100.0	
D038 Pyridine	5.0	
D041 2,4,5-Trichlorophenol	400.0	
D042 2,4,6-Trichlorophenol	2.0	

J. Wastewater Pre-Treatment Facility Certification

Inorganics

	Concentration
Ammonia	
Nitrogen	
Phosphorus	
Potassium	
Formaldahyde	
PCB's	
Antimony	
Cobalt	
Copper	
Nikel	
Tin	
Titanium	
Vanadium	
Zinc	

Organics

	Concentration
bis (2-ethylhexy) pthalate	
Carbazole	
N-decane	
Fluoranthene	
O-Octadecane	

Form 57537903

K. D.O.T. Shipping Information

RCRA Hazardous Waste (per 40CFR261) ☐ Yes ☑ No State Regulated ☐ Yes ☐ No
USDOT Hazardous Material ☐ Yes ☐ No Used Oil ☐ Yes ☐ No

Proper USDOT Shipping Name: _____
DOT Hazard Class _____ UN/NA _____ Packing Group _____

L. Sample
Has a sample been included? ☑ Yes ☐ No If yes, sampled by: _____ Date _____

M. Generator's Certification

I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge. I also certify that any samples submitted are representative of the actual waste. If U.E.S., LLC discovers a descrepancy during the approval process, Generator grants U.E.S., LLC or it's authorized third party facilities, the authority to amend the profile, as U.E.S., LLC deems necessary, to reflect the descrepancy.

_____ _____ _____

N. Reserved for Facility Use

1. Date Approved _____ Approver's Initials _____

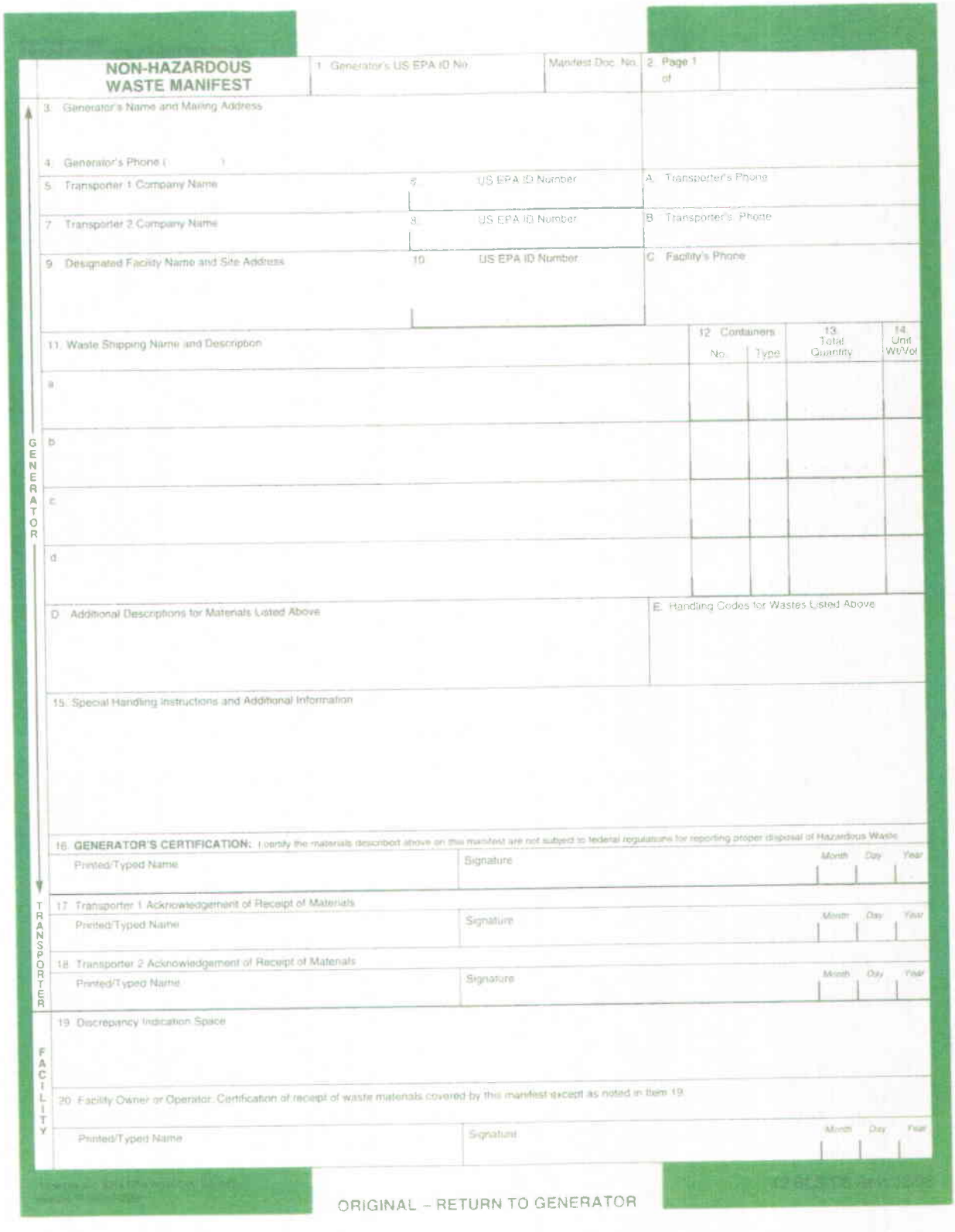
2. Sample

____	MSDS Attached	____	Incineration	____	Pricing
____	Analytical Attached	____	WWT		
____	Landfill			____	Freight

Outbound _____

Form GFS87903

6.2.2 Uniform Non-hazardous Waste Manifest:



NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Doc. No. | 2. Page 1 of

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name | 6. US EPA ID Number | A. Transporter's Phone

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address | 10. US EPA ID Number | C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a				
b				
c				
d				

D. Additional Descriptions for Materials Listed Above | E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

TRANSPORTER

FACILITY

ORIGINAL – RETURN TO GENERATOR

6.3 Sludge Analytical Results

Ed Kinley
Universal Environmental Solutions
PO Box 76105
Tampa, FL 33675

September 29, 2014

SunLabs Project Number: **4090807**
Client Project Description: **Plant Sludge Box**

Dear Mr. Kinley,

Enclosed is the report of laboratory analysis for the following samples:

Sample Number	Sample Description	Date Collected	Date Received
4090807-01	Roll-off/Sludge Box	09/08/14 11:30	09/08/14 16:50

Narrative

Unless otherwise noted below or in the report and where applicable:

- Samples were received at the proper temperature and analyzed as received.
- Sample condition upon receipt is reported on the chain-of-custody attached to this report.
- Results for all solid matrices are reported on a dry weight basis.
- Appropriate calibration and QC criteria were satisfactorily met.
- All applicable holding times for analytes have been met.
- Copies of the chains-of-custody, if received, are attached to this report.

Sample 4090807-01 was leached for TCLP on 09/09/14 at 1600. The TCLP Leachate was created 09/10/14 at 1000.

QC Batch B006902 had an exception for Mercury on the MS and RPD. The LCS and LCSD were acceptable, so the out of control was attributed to matrix.

QC Batch B006921 had exceptions for VOC's on the MS. The LCS and LCSD were acceptable, so the out of control was attributed to matrix.

QC Batch B006957 had an exception for Hexachlorobenzene and Pyridine on the LCS/LCSD RPD. All samples were non-detect for these analytes.

Sample 4090807-01 was leached for TCLP on 09/24/14 at 1556. The TCLP Leachate was created 09/25/14 at 0913.

If you have any questions or comments concerning this report, please do not hesitate to contact us.

Michael W. Palmer
Vice President, Laboratory Operations

Report of Laboratory Analysis

SunLabs Project Number: 4090807

Universal Environmental Solutions

Project Description: Plant Sludge Box

September 29, 2014

SunLabs Sample Number: 4090807-01
Sample Designation: Roll-off/Sludge Box

Matrix: Sludge
Date Collected: 09/08/14 11:30
Date Received: 09/08/14 16:50

Parameters	Method	Units	Results	Dil Factor	MDL	PQL	CAS Number	Date/Time Analyzed	Date/Time Prep
Mercury by EPA 7470						Method Qualifier:			
Mercury	EPA 7470	ug/L	0.96	1	0.14	0.58	7439-97-6	09/11/14 18:15	09/10/14 11:00
RCRA7 Metals by EPA 6010						Method Qualifier:			
Arsenic	EPA 6010	ug/L	72 I	1	25	100	7440-38-2	09/11/14 15:34	09/10/14 11:22
Barium	EPA 6010	ug/L	2100	1	2.6	10	7440-39-3	09/11/14 15:34	09/10/14 11:22
Cadmium	EPA 6010	ug/L	14 I	1	4.6	18	7440-43-9	09/11/14 15:34	09/10/14 11:22
Chromium	EPA 6010	ug/L	230	1	10	40	7440-47-3	09/11/14 15:34	09/10/14 11:22
Lead	EPA 6010	ug/L	310	1	24	95	7439-92-1	09/11/14 15:34	09/10/14 11:22
Selenium	EPA 6010	ug/L	22 U	1	22	90	7782-49-2	09/11/14 15:34	09/10/14 11:22
Silver	EPA 6010	ug/L	10 U	1	10	41	7440-22-4	09/11/14 15:34	09/10/14 11:22
TCLP Metals by EPA 6010						Method Qualifier:			
Barium	EPA 6010	mg/L	0.070 I	1	0.0010	0.10	7440-39-3	09/26/14 19:14	09/25/14 12:41
Chromium	EPA 6010	mg/L	0.0035 U	1	0.0035	0.10	7440-47-3	09/26/14 19:14	09/25/14 12:41
Lead	EPA 6010	mg/L	0.0044 U	1	0.0044	0.10	7439-92-1	09/26/14 19:14	09/25/14 12:41
TCLP Semivolatiles by EPA 8270						Method Qualifier:			
Surrogate: 2-Fluorophenol (0-58)	EPA 8270	%	31.0	1			367-12-4	09/18/14 19:08	09/11/14 17:16
Surrogate: Phenol-d6 (0-38)	EPA 8270	%	22.7	1			13127-88-3	09/18/14 19:08	09/11/14 17:16
Surrogate: Nitrobenzene-d5 (0-118)	EPA 8270	%	68.7	1			4165-60-0	09/18/14 19:08	09/11/14 17:16
Surrogate: 2-Fluorobiphenyl (0-115)	EPA 8270	%	65.9	1			321-60-8	09/18/14 19:08	09/11/14 17:16
Surrogate: 2,4,6-Tribromophenol (0-144)	EPA 8270	%	77.7	1			118-79-6	09/18/14 19:08	09/11/14 17:16
Surrogate: p-Terphenyl-d14 (1-148)	EPA 8270	%	75.5	1			1718-51-0	09/18/14 19:08	09/11/14 17:16
1,4-Dichlorobenzene	EPA 8270	mg/L	0.0050 U	1	0.0012	0.0050	106-46-7	09/18/14 19:08	09/11/14 17:16
2,4,5-Trichlorophenol	EPA 8270	mg/L	0.0050 U	1	0.00085	0.0050	95-95-4	09/18/14 19:08	09/11/14 17:16
2,4,6-Trichlorophenol	EPA 8270	mg/L	0.0050 U	1	0.00073	0.0050	88-06-2	09/18/14 19:08	09/11/14 17:16
2,4-Dinitrotoluene	EPA 8270	mg/L	0.0050 U	1	0.0041	0.0050	121-14-2	09/18/14 19:08	09/11/14 17:16
Hexachlorobenzene	EPA 8270	mg/L	0.0050 U	1	0.00063	0.0050	118-74-1	09/18/14 19:08	09/11/14 17:16
Hexachlorobutadiene	EPA 8270	mg/L	0.0050 U	1	0.00061	0.0050	87-68-3	09/18/14 19:08	09/11/14 17:16
Hexachloroethane	EPA 8270	mg/L	0.0050 U	1	0.00092	0.0050	67-72-1	09/18/14 19:08	09/11/14 17:16
m&p-cresol	EPA 8270	mg/L	0.0050 U	1	0.00077	0.0050		09/18/14 19:08	09/11/14 17:16
Nitrobenzene	EPA 8270	mg/L	0.0050 U	1	0.00073	0.0050	98-95-3	09/18/14 19:08	09/11/14 17:16
o-cresol	EPA 8270	mg/L	0.0050 U	1	0.00064	0.0050	95-48-7	09/18/14 19:08	09/11/14 17:16
Pentachlorophenol	EPA 8270	mg/L	0.020 U	1	0.00067	0.020	87-86-5	09/18/14 19:08	09/11/14 17:16
Pyridine	EPA 8270	mg/L	0.020 U	1	0.0023	0.020	110-86-1	09/18/14 19:08	09/11/14 17:16

Report of Laboratory Analysis

SunLabs

SunLabs Project Number
4090807

Universal Environmental Solutions

Project Description: **Plant Sludge Box**

September 29, 2014

SunLabs Sample Number: **4090807-01**
Sample Designation: **Roll-off/Sludge Box**

Matrix: **Sludge**
Date Collected: **09/08/14 11:30**
Date Received: **09/08/14 16:50**

Parameters	Method	Units	Results	Dil Factor	MDL	PQL	CAS Number	Date/Time Analyzed	Date/Time Prep
TCLP Volatiles by EPA 8260				Method Qualifier:					
Surrogate: 4-Bromofluorobenzene (82-118)	EPA 8260	%	96.9	1			460-00-4	09/11/14 13:19	09/11/14 08:00
Surrogate: Dibromofluoromethane (85-120)	EPA 8260	%	109	1			1868-53-7	09/11/14 13:19	09/11/14 08:00
Surrogate: Toluene-d8 (83-115)	EPA 8260	%	100	1			2037 26-5	09/11/14 13:19	09/11/14 08:00
Benzene	EPA 8260	mg/L	0.092 U	100	0.023	0.092	71-43-2	09/11/14 13:19	09/11/14 08:00
2-Butanone (MEK)	EPA 8260	mg/L	0.84 U	100	0.21	0.84	78-93-3	09/11/14 13:19	09/11/14 08:00
Carbon tetrachloride	EPA 8260	mg/L	0.072 U	100	0.018	0.072	56-23-5	09/11/14 13:19	09/11/14 08:00
Chlorobenzene	EPA 8260	mg/L	0.076 U	100	0.019	0.076	108-90-7	09/11/14 13:19	09/11/14 08:00
Chloroform	EPA 8260	mg/L	0.074 U	100	0.019	0.074	67-66-3	09/11/14 13:19	09/11/14 08:00
1,1-Dichloroethene	EPA 8260	mg/L	0.13 U	100	0.034	0.13	75-35-4	09/11/14 13:19	09/11/14 08:00
1,2-Dichloroethane	EPA 8260	mg/L	0.097 U	100	0.024	0.097	107-06-2	09/11/14 13:19	09/11/14 08:00
1,4-Dichlorobenzene	EPA 8260	mg/L	0.084 U	100	0.021	0.084	106-46-7	09/11/14 13:19	09/11/14 08:00
Tetrachloroethene	EPA 8260	mg/L	0.14 U	100	0.036	0.14	127-18-4	09/11/14 13:19	09/11/14 08:00
Trichloroethene	EPA 8260	mg/L	0.19 U	100	0.048	0.19	79-01-6	09/11/14 13:19	09/11/14 08:00
Vinyl chloride	EPA 8260	mg/L	0.10 U	100	0.025	0.10	75-01-4	09/11/14 13:19	09/11/14 08:00

Footnotes

U	*The compound was analyzed for but not detected.*
J	*The reported value failed to meet the established quality control criteria for either precision or accuracy (see cover letter for explanation)*
I	*The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.*
****	*SunLabs is not currently NELAC certified for this analyte. Unless directed otherwise by client, a NELAC certified sub-contract laboratory has performed this analysis (see cover letter for details).*
LCS / LCSD	*Laboratory Control Sample / Laboratory Control Sample Duplicate*
MB	*Method Blank*
MS / MSD	*Matrix Spike / Matrix Spike Duplicate*
RPD	*Relative Percent Difference*

Quality Control Data

SunLabs

SunLabs Project Number	Universal Environmental Solutions
4090807	Project Description: Plant Sludge Box

Batch No: **B006901**
Test: **RCRA7 6010**

Analyte	Result	Units	Spike Level	Parent Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Blank (B006901-BLK1)			Prepared: 09/10/14 Analyzed: 09/11/14						
Arsenic	5.0 U	ug/L							
Barium	0.52 U	ug/L							
Cadmium	0.93 U	ug/L							
Chromium	2.0 U	ug/L							
Lead	4.7 U	ug/L							
Selenium	4.4 U	ug/L							
Silver	2.1 U	ug/L							
LCS (B006901-BS1)			Prepared: 09/10/14 Analyzed: 09/11/14						
Arsenic	950	ug/L	990		96.0	80-120			
Barium	940	ug/L	990		95.1	80-120			
Cadmium	910	ug/L	990		92.1	80-120			
Chromium	880	ug/L	990		88.5	80-120			
Lead	900	ug/L	990		91.2	80-120			
Selenium	940	ug/L	990		95.3	80-120			
Silver	890	ug/L	990		90.2	80-120			
LCS Dup (B006901-BSD1)			Prepared: 09/10/14 Analyzed: 09/11/14						
Arsenic	890	ug/L	990		89.8	80-120	6.75	20	
Barium	920	ug/L	990		92.7	80-120	2.56	20	
Cadmium	870	ug/L	990		88.0	80-120	4.58	20	
Chromium	830	ug/L	990		84.3	80-120	4.91	20	
Lead	890	ug/L	990		89.8	80-120	1.52	20	
Selenium	910	ug/L	990		91.9	80-120	3.59	20	
Silver	860	ug/L	990		86.8	80-120	4.11	20	
Matrix Spike (B006901-MS1)	Parent Sample: 4090807-01		Prepared: 09/10/14 Analyzed: 09/11/14						
Arsenic	4200	ug/L	5000	72	83.0	75-125			
Barium	6300	ug/L	5000	2100	85.7	75-125			
Cadmium	4200	ug/L	5000	14	83.6	75-125			
Chromium	4100	ug/L	5000	230	77.8	75-125			
Lead	4300	ug/L	5000	310	81.4	75-125			
Selenium	4300	ug/L	5000	ND	87.7	75-125			
Silver	3900	ug/L	5000	ND	78.2	75-125			
Matrix Spike Dup (B006901-MSD1)	Parent Sample: 4090807-01		Prepared: 09/10/14 Analyzed: 09/11/14						
Arsenic	4200	ug/L	5000	72	84.3	75-125	1.48	20	
Barium	6300	ug/L	5000	2100	85.0	75-125	0.567	20	
Cadmium	4100	ug/L	5000	14	82.9	75-125	0.873	20	
Chromium	4100	ug/L	5000	230	77.4	75-125	0.560	20	
Lead	4200	ug/L	5000	310	78.4	75-125	3.41	20	
Selenium	4400	ug/L	5000	ND	89.1	75-125	1.65	20	
Silver	3900	ug/L	5000	ND	78.5	75-125	0.488	20	

Quality Control Data

SunLabs

SunLabs Project Number	Universal Environmental Solutions
4090807	Project Description: Plant Sludge Box

Batch No: B006902
Test: Mercury-W 7470

Analyte	Result	Units	Spike Level	Parent Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Blank (B006902-BLK1)			Prepared: 09/10/14 Analyzed: 09/11/14						
Mercury	0.018 U	ug/L							
LCS (B006902-BS1)			Prepared: 09/10/14 Analyzed: 09/11/14						
Mercury	4.5	ug/L	5.0		90.8	80-120			
LCS Dup (B006902-BSD1)			Prepared: 09/10/14 Analyzed: 09/11/14						
Mercury	4.6	ug/L	5.0		92.4	80-120	1.73	20	
Matrix Spike (B006902-MS1)	Parent Sample: 4090807-01		Prepared: 09/10/14 Analyzed: 09/11/14						
Mercury	20	ug/L	40	0.96	46.7	75-125			J
Matrix Spike Dup (B006902-MSD1)	Parent Sample: 4090807-01		Prepared: 09/10/14 Analyzed: 09/11/14						
Mercury	32	ug/L	40	0.96	76.4	75-125	46.3	20	J

Batch No: B006921
Test: TCLP VOC 8260

Analyte	Result	Units	Spike Level	Parent Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Blank (B006921-BLK1)			Prepared & Analyzed: 09/11/14						
Surrogate: 4-Bromofluorobenzene	48	ug/L	50		95.8	82-118			
Surrogate: Dibromofluoromethane	52	ug/L	50		103	85-120			
Surrogate: Toluene-d8	50	ug/L	50		101	83-115			
Benzene	0.00023 U	mg/L							
2-Butanone (MEK)	0.0021 U	mg/L							
Carbon tetrachloride	0.00018 U	mg/L							
Chlorobenzene	0.00019 U	mg/L							
Chloroform	0.00019 U	mg/L							
1,1-Dichloroethene	0.00034 U	mg/L							
1,2-Dichloroethane	0.00024 U	mg/L							
1,4-Dichlorobenzene	0.00021 U	mg/L							
Tetrachloroethene	0.00036 U	mg/L							
Trichloroethene	0.00048 U	mg/L							
Vinyl chloride	0.00025 U	mg/L							
LCS (B006921-BS1)			Prepared & Analyzed: 09/11/14						
Surrogate: 4-Bromofluorobenzene	50	ug/L	50		99.1	82-118			
Surrogate: Dibromofluoromethane	52	ug/L	50		104	85-120			
Surrogate: Toluene-d8	50	ug/L	50		99.2	83-115			
Benzene	0.022	mg/L	0.020		112	80-120			
2-Butanone (MEK)	0.22	mg/L	0.20		109	53-130			
Carbon tetrachloride	0.019	mg/L	0.020		97.3	75-120			
Chlorobenzene	0.021	mg/L	0.020		103	80-120			
Chloroform	0.022	mg/L	0.020		109	80-120			
1,1-Dichloroethene	0.020	mg/L	0.020		101	80-120			
1,2-Dichloroethane	0.021	mg/L	0.020		106	80-120			
1,4-Dichlorobenzene	0.022	mg/L	0.020		111	69-135			
Tetrachloroethene	0.021	mg/L	0.020		104	80-120			
Trichloroethene	0.021	mg/L	0.020		105	80-112			
Vinyl chloride	0.019	mg/L	0.020		93.6	78-131			

Quality Control Data

SunLabs

SunLabs Project Number	Universal Environmental Solutions
4090807	Project Description: Plant Sludge Box

Batch No: **B006921**
Test: **TCLP VOC 8260**

Analyte	Result	Units	Spike Level	Parent Result	%REC	%REC Limits	RPD	RPD Limit	Flags
LCS Dup (B006921-BSD1)			Prepared & Analyzed: 09/11/14						
Surrogate: 4-Bromofluorobenzene	50	ug/L	50		99.1	82-118			
Surrogate: Dibromofluoromethane	51	ug/L	50		103	85-120			
Surrogate: Toluene-d8	50	ug/L	50		100	83-115			
Benzene	0.022	mg/L	0.020		112	80-120	0.223	20	
2-Butanone (MEK)	0.21	mg/L	0.20		103	53-130	5.83	20	
Carbon tetrachloride	0.020	mg/L	0.020		97.6	75-120	0.308	20	
Chlorobenzene	0.021	mg/L	0.020		104	80-120	1.11	20	
Chloroform	0.022	mg/L	0.020		109	80-120	0.0920	20	
1,1-Dichloroethene	0.020	mg/L	0.020		100	80-120	0.645	20	
1,2-Dichloroethane	0.021	mg/L	0.020		103	80-120	2.87	20	
1,4-Dichlorobenzene	0.022	mg/L	0.020		110	69-135	0.271	20	
Tetrachloroethene	0.021	mg/L	0.020		104	80-120	0.865	20	
Trichloroethene	0.021	mg/L	0.020		104	80-112	0.911	20	
Vinyl chloride	0.018	mg/L	0.020		89.8	78-131	4.09	20	
Matrix Spike (B006921-MS1)	Parent Sample: 4090807-01		Prepared & Analyzed: 09/11/14						
Surrogate: 4-Bromofluorobenzene	49	ug/L	50		98.9	82-118			
Surrogate: Dibromofluoromethane	57	ug/L	50		114	85-120			
Surrogate: Toluene-d8	51	ug/L	50		102	83-115			
Benzene	0.028	mg/L	0.020	ND	140	45-149			
2-Butanone (MEK)	0.26	mg/L	0.20	ND	129	55-143			
Carbon tetrachloride	0.023	mg/L	0.020	ND	116	70-120			
Chlorobenzene	0.022	mg/L	0.020	ND	108	73-120			
Chloroform	0.027	mg/L	0.020	ND	136	77-122			J
1,1-Dichloroethane	0.026	mg/L	0.020	ND	131	63-126			J
1,2-Dichloroethane	0.026	mg/L	0.020	ND	128	81-122			J
1,4-Dichlorobenzene	0.021	mg/L	0.020	ND	106	68-135			
Tetrachloroethene	0.020	mg/L	0.020	ND	98.8	57-141			
Trichloroethene	0.022	mg/L	0.020	ND	112	66-124			
Vinyl chloride	0.022	mg/L	0.020	ND	112	71-142			

Quality Control Data

SunLabs

SunLabs Project Number	Universal Environmental Solutions
4090807	Project Description: Plant Sludge Box

Batch No: **B006957**
Test: **TCLP SVOC 8270**

Analyte	Result	Units	Spike Level	Parent Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Blank (B006957-BLK1)			Prepared: 09/11/14 Analyzed: 09/18/14						
Surrogate: 2-Fluorophenol	0.34	mg/L	1.0		33.9	0-58			
Surrogate: Phenol-d6	0.22	mg/L	1.0		21.8	0-38			
Surrogate: Nitrobenzene-d5	0.75	mg/L	1.0		75.3	0-118			
Surrogate: 2-Fluorobiphenyl	0.72	mg/L	1.0		72.2	0-115			
Surrogate: 2,4,6-Tribromophenol	0.79	mg/L	1.0		78.8	0-144			
Surrogate: p-Terphenyl-d14	1.0	mg/L	1.0		105	1-148			
1,4-Dichlorobenzene	0.0012 U	mg/L							
2,4,5-Trichlorophenol	0.00065 U	mg/L							
2,4,6-Trichlorophenol	0.00073 U	mg/L							
2,4-Dinitrotoluene	0.0041 U	mg/L							
Hexachlorobenzene	0.00063 U	mg/L							
Hexachlorobutadiene	0.00061 U	mg/L							
Hexachloroethane	0.00092 U	mg/L							
m&p-cresol	0.00077 U	mg/L							
Nitrobenzene	0.00073 U	mg/L							
o-cresol	0.00064 U	mg/L							
Pentachlorophenol	0.00067 U	mg/L							
Pyridine	0.0023 U	mg/L							
LCS (B006957-BS1)			Prepared: 09/11/14 Analyzed: 09/18/14						
Surrogate: 2-Fluorophenol	0.32	mg/L	1.0		32.2	0-58			
Surrogate: Phenol-d6	0.24	mg/L	1.0		23.8	0-38			
Surrogate: Nitrobenzene-d5	0.74	mg/L	1.0		74.0	0-118			
Surrogate: 2-Fluorobiphenyl	0.82	mg/L	1.0		81.6	0-115			
Surrogate: 2,4,6-Tribromophenol	0.81	mg/L	1.0		81.4	0-144			
Surrogate: p-Terphenyl-d14	0.97	mg/L	1.0		96.9	1-148			
1,4-Dichlorobenzene	0.24	mg/L	0.50		48.4	10-88			
2,4,5-Trichlorophenol	0.44	mg/L	0.50		87.7	47-113			
2,4,6-Trichlorophenol	0.44	mg/L	0.50		88.5	54-102			
2,4-Dinitrotoluene	0.50	mg/L	0.50		100	51-119			
Hexachlorobenzene	0.25	mg/L	0.50		49.7	47-114			
Hexachlorobutadiene	0.25	mg/L	0.50		49.2	11-85			
Hexachloroethane	0.25	mg/L	0.50		49.7	6-87			
m&p-cresol	0.48	mg/L				4-116			
Nitrobenzene	0.40	mg/L	0.50		80.2	48-101			
o-cresol	0.21	mg/L	0.50		42.1	22-78			
Pentachlorophenol	0.61	mg/L	0.50		123	22-133			
Pyridine	0.11	mg/L	0.50		22.1	20-120			
LCS Dup (B006957-BSD1)			Prepared: 09/11/14 Analyzed: 09/18/14						
Surrogate: 2-Fluorophenol	0.38	mg/L	1.0		37.7	0-58			
Surrogate: Phenol-d6	0.26	mg/L	1.0		25.9	0-38			
Surrogate: Nitrobenzene-d5	0.80	mg/L	1.0		79.8	0-118			
Surrogate: 2-Fluorobiphenyl	0.68	mg/L	1.0		68.0	0-115			
Surrogate: 2,4,6-Tribromophenol	0.78	mg/L	1.0		78.1	0-144			
Surrogate: p-Terphenyl-d14	1.0	mg/L	1.0		99.9	1-148			
1,4-Dichlorobenzene	0.23	mg/L	0.50		45.3	10-88	6.61	20	
2,4,5-Trichlorophenol	0.43	mg/L	0.50		85.3	47-113	2.75	20	
2,4,6-Trichlorophenol	0.43	mg/L	0.50		85.3	54-102	3.68	20	
2,4-Dinitrotoluene	0.49	mg/L	0.50		98.5	51-119	1.55	20	
Hexachlorobenzene	0.44	mg/L	0.50		87.1	47-114	54.7	20	J

Quality Control Data

SunLabs Project Number	Universal Environmental Solutions
4090807	Project Description: Plant Sludge Box

Batch No: **B006957**
Test: **TCLP SVOC 8270**

Analyte	Result	Units	Spike Level	Parent Result	%REC	%REC Limits	RPD	RPD Limit	Flags
LCS Dup (B006957-BSD1)			Prepared: 09/11/14 Analyzed: 09/18/14						
Hexachlorobutadiene	0.22	mg/L	0.50		44.8	11-85	9.28	20	
Hexachloroethane	0.24	mg/L	0.50		48.3	6-87	2.90	20	
m&p-cresol	0.53	mg/L				4-116	10.2	20	
Nitrobenzene	0.42	mg/L	0.50		83.8	48-101	4.39	20	
o-cresol	0.24	mg/L	0.50		48.5	22-78	14.1	20	
Pentachlorophenol	0.54	mg/L	0.50		109	22-133	12.3	20	
Pyridine	0.14	mg/L	0.50		27.5	20-120	21.7	20	J
Matrix Spike (B006957-MS1)	**Parent Sample: 4090807-01**		Prepared: 09/11/14 Analyzed: 09/18/14						
Surrogate: 2-Fluorophenol	0.33	mg/L	1.0		33.5	0-58			
Surrogate: Phenol-d6	0.26	mg/L	1.0		25.6	0-38			
Surrogate: Nitrobenzene-d5	0.75	mg/L	1.0		74.6	0-118			
Surrogate: 2-Fluorobiphenyl	0.83	mg/L	1.0		82.7	0-115			
Surrogate: 2,4,6-Tribromophenol	0.74	mg/L	1.0		74.4	0-144			
Surrogate: p-Terphenyl-d14	0.70	mg/L	1.0		70.0	1-148			
1,4-Dichlorobenzene	0.25	mg/L	0.50	ND	49.4	9-78			
2,4,5-Trichlorophenol	0.46	mg/L	0.50	ND	91.3	28-124			
2,4,6-Trichlorophenol	0.42	mg/L	0.50	ND	83.2	33-112			
2,4-Dinitrotoluene	0.50	mg/L	0.50	ND	99.5	40-119			
Hexachlorobenzene	0.41	mg/L	0.50	ND	81.6	31-119			
Hexachlorobutadiene	0.22	mg/L	0.50	ND	44.7	5-75			
Hexachloroethane	0.27	mg/L	0.50	ND	53.3	0-96			
m&p-cresol	0.41	mg/L		ND		2-118			
Nitrobenzene	0.41	mg/L	0.50	ND	81.7	30-103			
o-cresol	0.13	mg/L	0.50	ND	25.0	16-69			
Pentachlorophenol	0.60	mg/L	0.50	ND	120	17-150			
Pyridine	0.11	mg/L	0.50	ND	22.0	20-150			

Quality Control Data

SunLabs Project Number	Universal Environmental Solutions
4090807	Project Description: Plant Sludge Box

Batch No: **B007169**
Test: **TCLP RCRA7**

Analyte	Result	Units	Spike Level	Parent Result	%REC	%REC Limits	RPD	RPD Limit	Flags
Blank (B007169-BLK1)			Prepared: 09/25/14 Analyzed: 09/26/14						
Barium	0.0010 U	mg/L							
Chromium	0.0035 U	mg/L							
Lead	0.0044 U	mg/L							
LCS (B007169-BS1)			Prepared: 09/25/14 Analyzed: 09/26/14						
Barium	4.6	mg/L	5.0		92.0	80-120			
Chromium	4.4	mg/L	5.0		89.2	80-120			
Lead	4.3	mg/L	5.0		87.3	80-120			
LCS Dup (B007169-BSD1)			Prepared: 09/25/14 Analyzed: 09/26/14						
Barium	4.5	mg/L	5.0		91.2	80-120	0.881	20	
Chromium	4.5	mg/L	5.0		90.9	80-120	1.92	20	
Lead	4.4	mg/L	5.0		88.3	80-120	1.11	20	
Matrix Spike (B007169-MS1)	Parent Sample: 4090807-01		Prepared: 09/25/14 Analyzed: 09/26/14						
Barium	4.5	mg/L	5.0	0.070	90.1	80-120			
Chromium	4.5	mg/L	5.0	ND	90.8	80-120			
Lead	4.2	mg/L	5.0	ND	85.8	80-120			

Samples Associated with QC Batches

QC Batch ID	Method	Sample List
B006894	EPA 1311	4090807-01
B006895	EPA 1311	4090807-01
B006901	EPA 6010	4090807-01
B006902	EPA 7470	4090807-01
B006921	EPA 8260	4090807-01
B006957	EPA 8270	4090807-01
B007151	EPA 1311	4090807-01RE1
B007169	EPA 6010	4090807-01

SunLabs, Inc. Chain of Custody

"No 38170

Client Name: UNIV. ENV. Solutions (U.E.S.)
Contact: ED KINLEY
Address:
Phone / Fax: 813-390-0659
E-Mail:

SunLabs Project # 4090807 "Plant Sludge Box"

Project Name:
Project #: ROSB 090814
PO #:
Alt Bill To:

SunLabs Sample #	Sample Description	Sampled Date	Sampled Time	# of Bottles	Bottle Type	Preservative	Matrix	Analysis / Method Requested: TCLP	RCRA 8	Volatiles	SemiVols
					GA	I	WW				
01	Roll-off/Sludge Box	9/8/14	11:30	3							

Due Date Requested*:

☐ FDEP PreApproval site
☐ ADaPT EDD (PGM:_____)
Facility/Site ID:

Remarks / Comments:
Waste Liquid/Sludge Solids
TCLP VOCs
TCLP SVOCs
Total RCRA8 per Ed
ADD TCLP Ba, Cr, & Pb

Length of Record Retention if other than 5 years.*

Sampler Signature / Date: 9/8/14

Printed Name / Affiliation: Brad Seltzgaber / U.E.S. Client Supervisor

SUNLABS, INC. RESERVES THE RIGHT TO BILL FOR DISPOSAL OF UNUSED/ UNRETURNED SAMPLES AND TO RETURN UNUSED SAMPLES.

Relinquished By:	Relinquished To:	Date:	Time:
Brad Seltzgaber	PB Kinley	9/8/14	13:00
E. Kinley	Chelsea Harris	9/8/14	16:58

Bottle Type Codes:
GV = Glass Vial
GA = Glass Amber
P = Plastic
S = Soil Jar
GVS = Low Level Volatile Kit
T = Tedlar Bag
O = Other (Specify)

Preservative Codes:
H = Hydrochloric Acid + Ice
I = Ice only
N = Nitric Acid
B = Sodium bisulfate + Ice
S = Sulfuric Acid + Ice
VS = NaHSO4, MeOH, + Ice
T = Sodium thiosulfate + Ice
O = Other (Specify)

Matrix Codes:
A = Air
DW = Drinking Water
GW = Ground Water
SE = Sediment
SO = Soil
SW = Surface Water
WS = Waste
WW = Waste Water
W = Water (Blanks)
O = Other (Specify) Sludge
SOL = Solid

Internal Use Only

Temp upon receipt: 12.1 °C

Received on Ice? (Y) / N / NA
Same day

Sample Condition Upon Receipt:

Custody Seals present?	Y / N (NA)
Custody Seals intact?	Y / N (NA)
Shipping Bills attached?	Y / N (NA)
Sample containers intact?	(Y) / N / NA
Samples within holding times?	(Y) / N / NA
Sufficient volume for all analyses?	(Y) / N / NA
Are vials head-space free?	Y / N (NA)
Proper containers and preservatives?	(Y) / N / NA

SunLabs, Inc.
5460 Beaumont Center Blvd., Suite 520, Tampa, Florida 33634
Phone: 813-881-9401 / Fax: 813-354-4661
e-mail: info@SunLabsInc.com www.SunLabsInc.com

Rev 11/11

* See General Terms and Conditions on Reverse

ATTACHMENT 7 – SWPPP

UES is submitting a No Exposure Certification for Exclusion from NEPDES Stormwater Permitting form 62-620.910(17) request. The request is attached below and will be submitted to the FDEP no later than 10/30/14.

Exemption status is based on the facility policy of zero discharge of rainwater on the tank containment pad and no exposure routes for impacted stormwater to navigatable waters as detailed in 40 CFR 122 and 62-762 FAC.

A copy of the NEC is attached below as well as a Site Map showing the stormwater drainage patterns.

NO EXPOSURE CERTIFICATION FOR EXCLUSION FROM NPDES STORMWATER PERMITTING (FORM 62-620.910(17), F.A.C.)

Incorporated by reference in Rule 62-620.100(2)(o)1.b., F.A.C.

Submission of this No Exposure Certification and certification fee constitutes your affirmation that the entity identified in Section II does not require permit authorization for stormwater discharges associated with industrial activity pursuant to paragraph 62-620.100(2)(o), F.A.C., due to the existence of a condition of no exposure.

A condition of no exposure exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to precipitation and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products or waste products. Material handling activities include the storage, loading and unloading, transportation or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in stormwater discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the no exposure exclusion. In addition, the exclusion from permitting is available on a facility-wide basis only and not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the no exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity in Section II is certifying that a condition of no exposure exists at its facility or site and is obligated to comply with the terms and conditions of 62-620.100(2)(o), F.A.C.

ALL INFORMATION MUST BE PROVIDED ON THIS FORM.

Detailed instructions for completing this form and obtaining the No Exposure exclusion are provided on pages 5-7.

I. IDENTIFICATION NUMBER:

Facility ID: FLR000199802

II. APPLICANT INFORMATION:

A. Operator Name: Ed Kinley		B. Operator Status: P
C. Address: 650 Hemlock Street		
D. City: Tampa	E. State: FL	F. Zip Code: 33605
G. Responsible Authority: Ed Kinley		
H. Responsible Authority's Phone No.: (813) 241-9206 ext 183		

1

DEP Form 62-620.910(17)
Effective February 17, 2009

I. Responsible Authority's Fax No.:	(813) 241-9215
J. Responsible Authority's E-mail Address:	ekinkye UESTampa.com

III. FACILITY/SITE LOCATION INFORMATION:

A. Facility Name:	Universal Environmental Solutions, LLC.		
B. Street Address:	1650 Hemlock Street		
C. City: Tampa	D. State: FL	E. Zip Code: 33605	
F. County: Hillsborough	G. Latitude: 27° 56' 17"	Longitude: 82° 26' 25"	
H. Is the facility located on Indian Country Lands? ☐ Yes ☒ No	I. Water Management District: SWF WMD		
J. Facility Contact:	Ed Kinkye		
K. Facility Contact's Phone No.:	(813) 241-9206 ext 183		
L. Facility Contact's Fax No.:	(813) 241-9215		
M. Facility Contact's E-mail Address:	ekinkye@UESTampa.com		

IV. FACILITY ACTIVITY INFORMATION:

A. SIC or Designated Activity Code(s): Primary: 32419	Secondary: 50910
B. Total size of site associated with industrial activity: 1.29 acres	
C. Has a roof or pavement been installed over a formerly exposed pervious area in order to qualify for the no exposure exclusion? ☐ Yes ☒ No	
D. If yes, indicate approximately how much area was paved or roofed over. Completing this question does not disqualify the applicant from the no exposure exclusion.	
____ Less than 1,000 square feet ____ 1,000 square feet to one acre ____ More than one acre	

V. EXPOSURE CHECKLIST:

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) **If you answer "Yes" to any of these questions (1) through (11), you are not eligible for the no exposure exclusion.**	
1. Using, storing or cleaning industrial machinery or equipment and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to stormwater.	☐ Yes ☒ No
2. Materials or residuals on the ground or in stormwater inlets from spills/leaks.	☐ Yes ☒ No
3. Materials or products from past industrial activity.	☐ Yes ☒ No
4. Material handling equipment (except adequately maintained vehicles).	☐ Yes ☒ No
5. Materials or products during loading, unloading or transporting activities.	☐ Yes ☒ No
6. Materials or products stored outdoors [except final products intended for outside use (e.g., new cars) where exposure to storm water does not result in the discharge of pollutants].	☐ Yes ☒ No
7. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks and similar containers.	☐ Yes ☒ No
8. Materials or products handled or stored on roads or railways owned or maintained by the discharger.	☐ Yes ☒ No
9. Waste material [except waste in covered, non-leaking containers (e.g., dumpsters)].	☐ Yes ☒ No
10. Application or disposal of process wastewater (unless otherwise permitted).	☐ Yes ☒ No
11. Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater outflow.	☐ Yes ☒ No

VI. CERTIFICATION[1]:

I certify under penalty of law that I have read and understand the eligibility requirements as set out in 62-620.100(2)(o), F.A.C., and this form, for claiming a condition of "no exposure" and obtaining an exclusion from NPDES stormwater permitting.

I certify under penalty of law that there are no discharges of stormwater contaminated by exposure to industrial activities or materials from the industrial facility or site identified in this document [except as allowed under paragraph 62-620.100(2)(o)].

I understand that I am obligated to submit a no exposure certification form once every five years to the Department of Environmental Protection and to the operator of the local municipal separate storm sewer system (MS4) into which the facility discharges (where applicable). I understand that I must allow the Department of Environmental Protection, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure. I understand that I must obtain coverage under a permit authorized by 403.0885, F.S. prior to any point source discharge of stormwater associated with industrial activity from the facility or at any such time I anticipate that the conditions of no exposure shall no longer apply to the facility. I further understand that the Department may determine that stormwater discharge from the facility is the cause of, or contributes to, a violation of an applicable water quality standard, including designated use, and require that I obtain a permit for the discharge at which time I would no longer be eligible for the no exposure exclusion.

Additionally, 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.**

Responsible Authority Name and Official Title (Type or Print):
ED KINLEY (President)

E. Kinley
Responsible Authority Signature:

10/16/2014
Date Signed:

[1] Signatory requirements are contained in Rule 62-620.305, F.A.C.

DEP Form 62-620.910(17)
Effective February 17, 2009

SEAVY & ASSOCIATES, INC.
2606 South 86th Street, Suite B
Tampa, FL 33619

DRAWING TITLE: STORM WATER FLOW MAP

PROJECT TITLE: INDUSTRIAL WASTEWATER PRE-TREATMENT PLANT

CLIENT: HENDRY CORPORATION
1680 HEMLOCK STREET
TAMPA, FL 33605

Keith Cooke P.E.
P.E. No. 49817
CERTIFICATE OF AUTHORIZATION NO. 9528
PHONE (813)917-9267
FAX (813)630-1607

BY	REVISIONS

DESIGNED BY K.C.
DRAWN BY R.M.
CHECKED BY J.S.
DATE 8-15-14
SCALE AS SHOWN
PROJECT NO. 3119.001.001
SHEET 1 of 1
1

ATTACHMENT 8 – CONTINGENCY PLAN / SPCC PLAN

SPILL PREVENTION CONTROL AND COUNTER MEASURE PLAN

DEVELOPED FOR

Universal Environmental Solutions, LLC

Universal Environmental Solutions, LLC
1650 Hemlock St.
Tampa Florida 33605

Developed by

S&A SEAVY & ASSOCIATES, INC.

October 2014
Revision 0

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

TABLE OF CONTENTS

Date of Origination October 15, 2014	Page 1 of 33	Issue Number 1
Date of Issue: October 15, 2014		

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

Figures

Appendices

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

PREFACE

General Applicability:

Universal Environmental Solutions, LLC (UES) is a facility that encompasses an approximate 1.5 acre portion of a 31.48 acre parcel of land owned by Hendry Corporation as depicted in Figure 1. The UES Tampa FL. Facility maintains administrative offices and the Bilge Oily Water Pre-Treatment Facility onsite. The UES site is comprised of a estimates 4,890 square foot building housing a inside Pre-Treatment Process system, a concrete containment area adjacent to the building and a truck unloading area to the west and north of the containment pad. The containment area to the north of the pre-treatment building is an impervious concrete structure that contains various pre-process storage and fuel storage tanks. The facility's main bilge oily water storage consists of 8 tanks located in the outside containment area, 7 tanks located inside of the building within a concrete containment area and a triple walled pipeline providing recovered oily bilge water transport from Berth 247 to the outside containment pad area process tanks.

The facility is non-transportation related onshore facility engaged in Pre-Treatment of Bilge Oily Water, and recycling fuel and due to their location could reasonably be expected to discharge oil in harmful quantities into navigable waters of the United States. According to 40 CFR 112.1(b) the facility is required to prepare and implement a Spill Prevention Control and Countermeasure Plan (SPCC) prepared in accordance with 40 CFR 112.7, 62 FAC 761 and 62 FAC 770.

Purpose:

This SPCC Plan deals with the accidental discharge of oils and fuels into the environment, the measures to be taken to prevent a "spill event" and the countermeasures to be taken in the event of a spill.

The objectives of this plan are designed to complement existing laws, regulations, rules, standards, fire prevention and pollution prevention rules, so as to form a comprehensive program to minimize the potential for oil discharges.

Scope:

The plan addresses spills of oil and fuel products at the facility including bilge oily water, recovered waste oils, and used and virgin fuels.

Responsibility:

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

a) The Facility Operator / Owner, is the Spill Prevention Control Administrator at the facility and is accountable for oil spill prevention. Responsibilities include:

- Ensuring procedures outlined in the plan are implemented
- Communicating issues to management
- Providing required training

b) The Professional Engineer (PE) is responsible for reviewing and ensuring that the spill controls are designed in accordance with sound engineering principles. The PE also certifies that the plan complies with the guidelines noted in 40 CFR 112.7.

The approving management is ultimately responsibly for the SPCC Plan and has the authority to commit necessary resources to ensure the implementation of the plan and protection of U.S. waterways.

Facility Information:

Facility Name:	Universal Environmental Solutions, LLC (UES)
Facility Operator/Owner:	Ed Kinley, Universal Environmental Solutions, LLC
Facility Mailing Address:	P.O. Box 76105, Tampa FL, 33675
Location of Facility:	**The** facility is located at 1650 Hemlock St., Tampa FL. 33605
Date of Facility Operation:	The facility first occupied the building in March 2014 and began present operations shortly thereafter as a bilge oily water pre-treatment facility.
Facility Capacity:	The facility has a maximum daily onsite capacity of 285,000 gallons of bilge oily water, recovered waste oils, and used and virgin fuels
Facility Description:	The UES Pre-Treatment Facility is located on an acre parcel of land, adjacent to the Sparkman Channel. The property is shared with other firms conducting various ship repair and maintenance activities. A Site map has been included as Figure-1 and shows the UES Facility Operations and limits of operations. The UES facility operates Monday through Friday (weekends on occasion), 10 hours per day to treat bilge oily water. Bilge Oily water at the facility is primarily processed through and stored in Three 69,000 gallon tanks (Tanks #1-#3), and one 45,000 gallon tank (Tank #4). The used recovered oil from process is collected in a 10,000 gallon polyethylene tank (Tank #5). The used and

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

virgin diesel fuel is stored in two steel 5,000 gallon tanks (Tank#6 and Tank#7), and the used and virgin gasoline is stored in one steel 5,000 gallon tank (Tank #8). Tanks #1 - #8 are located within the containment area north of the facility treatment building.

The containment area is an impervious concrete structure that provides containment around tanks #1 - #8 which contain the bilge oily water, recovered waste oils, and used and virgin fuels, as showed in Figure 2. The Containment pad is 85.34' x 77.91' x 2'6" with a capacity of 125,000 gallons. It has sufficient freeboard to allow for precipitation (15% or 4" for the 25 year and 50 year rain events). The expansion joints are filled with an impervious two part epoxy resin. Concrete sheet flow is directed to the collection sump in the tank farm. All rain water and spilled materials are collected and pumped back through the Pre-Treatment system for disposal to the Publicly Owned Treatment Works (POTW). Rain water is not authorized to return to ground level. Surface drainage is engineered so spilled materials inside the containment area of the tank farm will drain to a low point collection sump for return to storage tank farm and pre-treatment process.

The loading and unloading area(s) for tank trucks provides a connection box to capture hose connect / disconnect spills. The connection box / manifold are fitted with two flanges which are capped. The connection box / manifolds are covered with a hinged lid to prevent rainfall accumulation. Any noticeable free liquids accumulated in the box is absorbed by the plant operator in the daily / routine maintenance. All unloading activities are supervised by pre-treatment plant personnel. In the event of a hose failure by a delivery tank truck, the valve from the truck is immediately closed. Any spill residue will be absorbed by spill kits at the facility. Under this scenario less than 25 gallons will spill. An incident that will be managed internally and not require notification.

A subgrade pipeline carries the bilge oily water from the Berth 247 area dock to the west wall of the containment area. The pipeline is 800' feet long and is a 6" welded HDPE. The 6' HDPE diameter pipe is triple walled within a 10" diameter HDPE secondary pipe. The HDPE pipes are contained inside an 15" abandoned storm water pipe. That has been repurposed to

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

contain the potential leaks within to pipeline.

The interior of the building contains the Dissolved Air Floation (DAF) containment area. The DAF containment area floor has a one foot high containment wall around the surrounding plant operations that involve impacted bilge oily water. The pre-treatment operation tanks have a total capacity of 9,000 gallons. The DAF Containment area has an 11,250 gallon capacity. The following process tanks (tanks #9 - #15) are housed within the Pre-Treatment building containment area.

Tank #9 – Steel DAF Treatment Vessel 3,000 gallon Bilge Oily Water.
Tank #10 – Steel Sludge Decant Tank 1,000 gallon Bilge Oily Water.
Tank #11 – Polyethylene Slop Tank 1,000 gallon Bilge Oily Water.
Tank #12 – Polyethylene De-cant Tank 1,000 gallon System Effluent.
Tank #13 – Polyethylene 1,000 gallon Sodium Hydroxide.
Tank #14 – Polyethylene 1,500 gallon Flocculent.
Tank #15 – Polyethylene 1,000 gallon Coagulant.

Spill kits are located at the facility, which include "oil dry" and absorbent pads. Additionally, the company has 500' of oil response boon ready for immediate deployment if any catastrophic spill happens. These inventories are checked monthly to replenish any used materials.

The Sparkman Channel is the nearest open water body to the facility, located approximately 800 feet to the west. The Sparkman Channel flow is influenced by the tide from the Hillsborough Bay to the south approximately 6 miles. The storm water at the facility is collected by the existing facility storm water system with the closest inlets to the containment area are approximately 50 feet to the west of the outside containment area in the truck unloading area.

A site vicinity map depicting drainage patterns of the area surrounding the facility is provided as Figure 3.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION I

PLAN CERTIFICATION AND MANAGEMENT APPROVAL

A) Plan Certification

I hereby certify under penalty of law that I have examined the facility and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete. To the best of my knowledge and belief, the information contained in this plan is true, complete, and accurate. Further, I attest that this plan has been prepared in accordance with good engineering practices.

Keith A. Coats, P.E. FL PE No 48917
Professional Engineer
Seavy & Associates, Inc.
Certificate of Authorization # 9528
2608 South 86th St Ste B
Tampa, Florida 33619
813-917-9267

Signature of Registered Professional Engineer — Date

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

B) Management Approval

The objective of this plan is to maintain the operations of the UES facility in compliance with all appropriate environmental regulations and to avoid pollution of the environment.

Scope:

This Spill Prevention, Control and Countermeasure Plan (SPCC Plan) deals with the accidental discharge of oils and other substances which could cause an adverse impact to the environment. It also is concerned with control measures to be taken to prevent spills and the countermeasures to be taken in the event of a spill.

Recertification

This SPCC Plan must be amended and recertified whenever there is a change that materially affects the facility's potential to discharge to a waterway. A complete review and recertification of the Plan will be performed at least once every five years from the prior date of certification, making necessary changes, including incorporation of more effective prevention and control technology which will significantly reduce the likelihood of a spill event.

Commitment:

A copy of the SPCC plan will be maintained at the facility during the times it is manned and is available to the UES facility personnel during normal working hours. A review and evaluation of the SPCC will also be conducted and certified by a PE, pursuant to 40 CFR 112.5 (a) & (b) and 112.7, during the following occasions:

a) At least every five years
b) Whenever there is a change in the facility design, operation or maintenance, Which materially affects the facility's potential for the discharge of oil into or upon navigable waters of the US or adjoining shorelines.

To this end, management is committed to allow the expenditures required in manpower and resources to be effective in this regard.

Signed: _____
Ed Kinley, Facility Operator/Owner/Manager

Date: _____

Date of Origination October 15, 2014	Page **8 of 33**	Issue Number 1
Date of Issue: October 15, 2014		

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION II

HISTORY OF SPILLS

Based on a review of the facility's operating records, there has not been any reportable oil spills at the UES facility from the startup date of the facility

Should the UES facility experience a reportable spill in the future, the details concerning the nature, extent, and cleanup of the spill are required to be included using the form included in **Appendix A**, (Discharge Report Form).

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION III

Possible Oil / Fuel Spills

A. Oil Discharges - Petroleum Based:

1. Tank Truck and Unloading Area

Location: The bilge oily water collection box is located on the west containment wall.
The fuel connection box is located on the north containment wall.
The recovered waste oil connection box is located on the North wall.

Capacity: The truck connection box's have 50 gallon containment capacity.

Use: The tank truck connection boxes are used to contain the connection point from truck discharge to system intake.

Condition of Storage: The tank truck connection boxes were observed to be in good condition during the March 2014 site inspection.

Spill Potential: Spillage could occur as a result of a failed gasket, discharge pipe leak, or from the cam lock connection located on the discharge of the procudt delivery trucks.

Fate of Spills: Spills outside the containment area will drain to ground surface and flow toward the storm water drainage box and allow possible discharged into the Storm water system. The rate of the spill will be dependent upon the number seals / pipe connections leaking. The spill rate is estimated to vary from <1 gallon per minute to 100 gallons per minute.

Spill Containment/Prevention: The tank truck connection boxes are used to contain the connection point from truck discharge to system intake, allowing prevention of spill to ground surface. The storm water drainage box is outfitted with a sealed cover that is installed prior to offloading operations. The sealed cover is put in place to prevent and deter any spills from entering the storm water in the event of a truck connection failure. In the event of a connection failure all valves will be closed and any

spill will mitigated using the asorbant pads, booms and will be cleaned up with the use of the Spill kit. Inspections of the tanks connection boxes, storm water drain cover, and spill containment system is completed weekly and documented in Appendix B, weekly check list.

Trained facility personnel monitor the tanks and piping on a routine basis. UES workers handling materials are trained in proper handling and procedures to follow in the event of a spill. The UES facility is equipped with spill containment equipment and pumps. Spill containment equipment includes booms, absorbents, oil dry and mats to cover required sewer inlets in the event of a release. In the event of a release outside of the spill containment, the spilled material will be contained as outlined in **Section IV**.

2. Bilge Oily Water Tanks

Location: Four bilge oily water holding tanks are located in the containment tank farm pad immediately to the north of the pre-treatment facility building.

Capacity: Tank #1 - #3 – 69,300 gallon bilge oily water holding tanks. Tank #4 – 48,600 gallon bilge oily water holding tank.

Use: The tanks are used to hold the bilge oily water that is to be treated by the DAF system.

Condition of Storage: The outdoor holding tanks were observed to be in good condition during the March 2014 site inspection.

Spill Potential: Spillage could occur as a result of a failed gasket, discharge pipe leak, or overfilling of tanks.

Fate of Spills: Spills within the containment area from failed gaskets, discharge pipe leak, or overfilling of tanks will drain to the low point sump and be transferred to a process holding tank in good working condition. The rate of the spill will be dependent upon the number seals / pipe connections leaking. The spill rate is estimated to vary from <1 gallon per minute to 200 gallons per minute.

Spill Containment/Prevention: The four tanks are completely contained within the containment pad preventing any leaks to discharge to ground

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

level. The four tanks are equipment with high level alarms to prevent tanks from overflowing. The high level sensors are wired to the PLC alarm system. Alarm sounds at 95% full notifying the plant operator to prevent overfill. Inspections of the holding tanks and spill containment system is completed weekly and documented in **Appendix B**, weekly check list. Trained facility personnel monitor the tanks and piping on a routine basis. UES workers handling materials are trained in proper handling and procedures to follow in the event of a spill. The UES facility is equipped with spill containment equipment and pumps. Spill containment equipment includes booms, absorbents, oil dry and mats to cover required sewer inlets in the event of a release. In the event of a release outside of the spill containment, the spilled material will be contained as outlined in **Section IV**.

3. **Polyethylene Waste Recovered Oil Storage Tank**

Location: Polyethylene waste recovered oil storage tank is located in the containment tank farm pad immediately to the north of the treatment facility building.

Capacity: Tank #5 – 10,000 gallon polyethylene used recovered oil storage tank.

Use: The polyethylene tank is used to hold used recovered oil.

Condition of Storage: The outdoor holding tank was observed to be in good condition during the March 2014 site inspection.

Spill Potential: Spillage could occur as a result of a failed gasket or discharge pipe leak.

Fate of Spills: Spills within the containment area will drain to the low point sump and be transferred to a process holding tank in good working condition. The rate of the spill will be dependent upon the number seals / pipe connections leaking. The spill rate is estimated to vary from <1 gallon per minute to 50 gallons per minute.

Spill Containment/Prevention: The polyethylene storage tank is completely contained within the containment pad preventing any leaks to discharge to ground level. Inspections of the holding tanks and spill

containment system is completed weekly and documented in Appendix B, weekly check list.

Trained facility personnel monitor the tanks and piping on a routine basis. UES workers handling materials are trained in proper handling and procedures to follow in the event of a spill. The UES facility is equipped with spill containment equipment and pumps. Spill containment equipment includes booms, absorbents, oil dry and mats to cover required sewer inlets in the event of a release. In the event of a release outside of the spill containment, the spilled material will be contained as outlined in **Section IV**.

4. **Used and Virgin Fuel Tanks**

Location: The three fuel storage tanks are located in the containment tank farm pad immediately to the north of the treatment facility building.

Capacity: Tank #6 & #7 – 5,000 gallon Diesel Storage Tanks
Tank #8 – 5,000 gallon Gasoline Storage Tank

Use: The three tanks are used to hold used and virgin diesel and gasoline fuels.

Condition of Storage: The outdoor holding tank was observed to be in good condition during the March 2014 site inspection.

Spill Potential: Spillage could occur as a result of a failed gasket, discharge pipe leak, or overfilling of tanks.

Fate of Spills: Spills within the containment area from failed gaskets, discharge pipe leak, or overfilling of tanks will drain to the low point sump and be transferred to a holding tank in good working condition. The rate of the spill will be dependent upon the number seals / pipe connections leaking. The spill rate is estimated to vary from <1 gallon per minute to 50 gallons per minute.

Spill Containment/Prevention: The three tanks are completely contained within the containment pad preventing any leaks to discharge to ground level. To prevent tank overflowing tanks are equipped with high level sensors that are wired to the PLC alarm system. Alarm sounds at 95% full notifying the plant operator to

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

prevent overfill. Inspections of the fuel tanks and spill containment system is completed weekly and documented in Appendix B, weekly check list.

Trained facility personnel monitor the tanks and piping on a routine basis. UES workers handling materials are trained in proper handling and procedures to follow in the event of a spill. The UES facility is equipped with spill containment equipment and pumps. Spill containment equipment includes booms, absorbents, oil dry and mats to cover required sewer inlets in the event of a release. In the event of a release outside of the spill containment, the spilled material will be contained as outlined in **Section IV**.

5. **Fixed Storage (Pre-Treatment Facility Interior)**

Location: The seven interior storage tanks are located in the interior containment area of the treatment facility building.

Capacity:
Tank #9 – 3,000 gallon Steel DAF Vessel
Tank #10 – 1,000 gallon Steel Sludge De-cant Tank
Tank #11 – 1,000 gallon Poly Recovered Oil Tank
Tank #12 – 1,000 gallon Poly De-cant Tank System Effluent
Tank #13 – 1,000 gallon Poly Sodium Hydroxide Tank
Tank #14 – 1,500 gallon Poly Flocculent Tank
Tank #15 – 1,000 gallon poly Coagulant Tank

Use: The Seven tanks are used to hold used bilge oily water, system effluent discharge treated water, recovery oil products, sodium hydroxide, flocculent, and coagulant.

Condition of Storage: The inside holding tanks were observed to be in good condition during the March 2014 site inspection.

Spill Potential: Spillage could occur as a result of a failed gasket or discharge pipe leak.

Fate of Spills: Spills within the containment area will drain to the floor where they will be cleaned using a vacuum truck or pump, absorbent pads, and oil dry. The rate of the spill will be dependent upon the number seals / pipe connections leaking. The spill rate is estimated to vary from <1 gallon per minute to 50 gallons per minute.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS

Document Title
Spill Prevention Control and Countermeasure Plan

Spill Containment/Prevention: The seven inside tanks are completely contained within the inside containment pad preventing any leaks to discharge to ground level. Inspections of the holding tanks and spill containment system is completed weekly and documented in Appendix B, weekly check list.
Trained facility personnel monitor the tanks and piping on a routine basis. UES workers handling materials are trained in proper handling and procedures to follow in the event of a spill. The UES facility is equipped with spill containment equipment and pumps. Spill containment equipment includes booms, absorbents, oil dry and mats to cover required sewer inlets in the event of a release. In the event of a release outside of the spill containment, the spilled material will be contained as outlined in **Section IV**.

6. **Underground Pipeline**

Location: The underground pipe line is located to approximately 2 feet from the west wall of the outside containment area next to the connection box / manifold. The pipe line runs west for approximately 30 feet then turns to the south and runs for approximately 250 feet then turns back west along the property fence line in an abandoned storm water pipe for approximately 520 feet toward berth 247 dock.

Capacity: 1 – 800 foot 6" pipeline total capacity is 6,000 gallons.

Use: The pipeline is used to transfer bilge oily water from the cleaning process aboard the barge or ship to the holding/ processing tanks on the outside containment pad during ship cleaning events.

Condition of Storage: The underground pipeline was observed to be in good condition during the March 2014 site inspection.

Spill Potential: Spillage could occur as a result of a failed gasket, failed pipe joint or improper connection to the pipeline.

Fate of Spills: Spills from the pipe line would drain out to the ground near berth 247 and/ or the storm water drainage collection box located west of Pre-Treatment Facility. Possibly allowing Bilge oily water to enter storm water collection system. Spills that could occure from a failed joint will enter the secondairy 10" HDPE pipe. Liquid spilled into secondairy pipe could exit from the intake or discharge side openings,

where the interstial alarm sensor monitors for the presence of liquid. Spilled liquids could discharge to ground surface. The rate of the spill will be dependent upon the number seals / pipe connections leaking. The spill rate is estimated to vary from <1 gallon per minute to 400 gallons per minute.

Spill Containment/Prevention: The pipe line has a back flow preventer to keep any fluid in the pipe from being able to backflow out of the pipe to the ground level. Spills that could occure from a failed joint will enter the secondairy pipe that is equipped with a interstial sensor that monitores for the presence of liquid. Plant operator monitors sensor during pipeline activities. In the event that liquid is escaping from the secondairy pipe the pipeline use would stop all valves leading to and from the pipeline would be closed and the intake and discharge openings would be caped and sealed untill pipeline is repaired. A spill kit containing 500 feet of boom is kept near the berth 247 connection points during pipeline operations along with absorbent pads, oil dry, shovels, and drums in the event of a release. Inspections of the pipeline system is completed before and after any use and documented in **Appendix B**, weekly check list.

Trained facility personnel monitor the pipeline on a routine basis. UES workers handling materials are trained in proper handling and procedures to follow in the event of a spill. In the event of a release, the spilled material will be contained as outlined in **Section IV**.

7. **Sludge Roll-off Box**

Location: The sludge Roll-off Box Is located to the west of the Pre-Treatment Facility building.

Capacity: Tank #16 – 22 yard Capacity Liquid tight Roll-off Box

Use: The Sludge Roll-off Box is used to collect waste sludge generated from the Pre-Treatment process for disposal transportation.

Condition of Storage: The Sludge Roll-off Box was observed to be in good condition during the March 2014 site inspection.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

Spill Potential: Spillage could occur as a result of a failed gasket or improper connection either at the building discharge point or the Roll-off intake connection.

Fate of Spills: Spills from the connection points are contained over an impervious concrete containment area with the ability to spray out to ground surface. The rate of the spill will be dependent upon the number seals / pipe connections leaking. The spill rate is estimated to vary from <1 gallon per minute to 30 gallons per minute.

Spill Containment/Prevention: The connection points at both ends have valves that would be shut and the pump producing the sludge would be turned off to stop the sludge waste spillage in the event of a release. The roll-off is located on a inpervious concrete containment area that would capture spilled liquid that drains to a low point sump, from where it would be pumped back to the Pre-Treatment system and any remained spill liquid would be cleaned up using the spill kits. Any liquid that spray to ground level would be cleaned up using the spill kits and shovels and be placed in a 55 gallon drum for disposal. Inspections of the Sludge Roll-off is completed before and after any use and documented in **Appendix B**, weekly check list.

Trained facility personnel monitor the Sludge Roll-off on a routine basis. UES workers handling materials are trained in proper handling and procedures to follow in the event of a spill. In the event of a release, the spilled material will be contained as outlined in **Section IV**.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION IV

COUNTERMEASURES TO BE TAKEN IN THE EVENT OF A SPILL

A. **General:**

In the event of a spill, unauthorized discharge or release, or any other environmentally significant incident, immediate action must be taken to contain, mitigate or remediate the spilled material. An incident is environmentally significant if it can adversely impact the land, water or air environment; adjacent properties; or could result in exceeding the reportable quantity of 25 gallons on pervious surface and/or greater than 100 gallons on impervious surface and/or creates sheen in storm sewer.

The UES Facility Operator/Owner/Manager will be responsible for directing spill response activities. The following response actions are listed in the order in which they should be initiated, although some actions may be disregarded depending upon the severity of the spill incident. The Facility Operator/Owner/Manager should assign tasks to various personnel so that several actions can be completed concurrently. For example, the Facility Operator/Owner/Manager may assign others to contain the spill while he/she calls to provide the proper notifications.

1. Determine the threat of ignition or other hazardous condition.
2. As necessary, warn all facility personnel to extinguish any open flame and to maintain a safe distance from the spill site.
3. Attend to any injured personnel.
4. If necessary, call the local fire department by dialing 911.
5. If necessary, arrange for emergency medical services (see **Section V** of this Plan).
6. Contain or mitigate the spill as much as possible.
7. Provide all proper notifications (see **Section V** of this Plan).
8. Initiate clean up of spill. Contact the Facility Operator/Owner/Manager to implement spill cleanup; implementation includes soil removal and testing to meet Florida requirements within 30 days.
9. Prepare and provide any post incident reports, certifications or notifications

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

Emergency response kits shall be used for the containment and absorption of oil-based products in the event of a spill or leak. Oil dry and/or dry earth will be used to absorb spilled caustic and other non-petroleum based materials. Spill responders handling incidents which pose not only an environment threat, but could also affect human health, should also recognize the regulations within 29 CFR 1910.120(Q) (HAZWOPER).

Emergency response kits are located throughout the facility; locations are depicted in **Appendix C**, Emergency Response Kit Locations.

B. **Specific:**

Waste oils, corrosives and non-petroleum based materials shall be kept from entering the storm sewer system. The following actions will be taken during a spill event:

a. Minimize the magnitude of the spill by stopping the source of the leak and/or closing any valves. In the event of a gas formation, fire and/or strong odor, clear area downwind and perform all response actions upwind.

b. Take immediate action to protect sewer inlet by isolating the inlet using sewer inlet covers located in emergency response storage container near the containment pad and inside the treatment building, identified as Spill Kit numbers 1 and 2, respectively.

c. Take immediate action to remove spilled material from storm sewer system and between spill source and storm inlet. Use spill pads or absorbent socks to contain/remove oil spills. Contact the onsite vacuum truck to remove any spilled liquids. Use sand/dry earth/oil dry to contain/remove oil spills from corrosive or other non-oil based material.

d. Report the spill to the Facility Operator/Owner/Manager.

e. Call the outside contractor listed in **Section V** for assistance in the clean up and disposal of the spilled materials.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION V

NOTIFICATION AND REPORTING

A. Emergency Medical Services

If emergency medical services are necessary, immediately notify 911 and stabilize the injured person prior to performing spill response actions.

B. On-Site Release

If spilled petroleum product has been released to an impervious surface in an amount less than 100 gallons and/or to a pervious surface in an amount less than 25 gallons and/or did not create sheen on surface water, immediately notify:

a ED Kinley– Facility Operator/Owner/Manager (813) 390-0659

If spilled petroleum product has been released to an impervious surface in an amount greater than 100 gallons and/or to a pervious surface in an amount greater than 25 gallons and/or created sheen on surface water, immediately notify the following contacts listed below and prepare the applicable reports listed in subsection D. **The State Warning Point will not be required to be notified if the spill is classified a "Deminimis discharge" as defined in 62 FAC 780.200.**

a. ED Kinley– Facility Operator/Owner/Manager (813) 390-0659

b. State Warning Point (800) 320-0519 (w/n 24 hours)

C. Off-Site Release

If spilled petroleum product has been released offsite or into sewer inlets in any quantity immediately call for advice regarding notifications and response actions:

SWS Environmental
Tel (813) 241-0282

Universal Environmental Solutions, LLC
Tel (813) 241-9206

If spilled petroleum product has been released to an impervious surface in an amount greater than 100 gallons and/or to a pervious surface in an amount greater than 25 gallons and/or created sheen on surface water, immediately notify the following contacts listed below and prepare the applicable reports listed in subsection D. **The State Warning Point will not be required to be notified if the spill is classified a "Deminimis discharge" as defined in 62 FAC 780.200.**

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

a.	ED Kinley–Facility Operator/Owner/Manager	(813) 390-0659
b.	State Warning Point	(800) 320-0519 (w/n 24 hours)
c.	National Response Center (NRC) 2100 2nd Street, SW Washington, DC 20593	(800) 424-8802 (w/n 24 hours)

Plan to provide the following information:

1) **The name, address and telephone number of the person making the Telephone report;**
2) **The date, time, and location of the spill or discharge;**
3) **A specific description or identification of the oil, petroleum product, Hazardous substances or other substances discharged or spilled;**
4) **An estimate of the quantity discharged or spilled;**
5) **The duration of the incident;**
6) **The name of the surface water or a description of the waters in the state affected or threatened by the discharge or spill;**
7) **The source of the discharge or spill;**
8) **A description of the extent of actual or potential water pollution or Harmful impacts to the environment and an identification of any Environmentally sensitive areas or natural resources at risk;**
9) **If different from paragraph (1) of this subsection, the names, addresses, And telephone numbers of the responsible person and the contact Person at the location of the discharge or spill; A description of any Actions that have been taken, are being taken, and will be taken to Contain and respond to the discharge or spill;**
10) **Any known or anticipated health risks;**
11) **The identity of any governmental representatives, including Local authorities or third parties, responding to the discharge or spill;**
12) **Any other information that may be significant to the response action.**

If the quantity of petroleum product released to offsite waters is an imminent threat to the environment And/or public health, immediately notify, in addition to the above:

a.	Local Emergency Planning Committee	Dial 911 (24 hours)

Date of Origination October 15, 2014	Page **21 of 33**	Issue Number 1
Date of Issue: October 15, 2014		

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

D. **Reporting**

In the event of a spill exceeding 25 gallons or meets criteria of C above, complete the Accident Investigation Report included as **Appendix D** and submit to the UES Facility Operator/Owner/Manager.

> A reportable spill includes a petroleum product release to an impervious surface in an amount greater than 100 gallons and/or to a pervious surface in an amount greater than 25 gallons and/or discharge" as defined in 62 FAC 780.200, a report must be made to the local county Environmental Management Department within 24 hours of the classification determination. A blank Discharge Report Form is provided as **Appendix A.**

If a release of oil occurs in excess of 1,000 US gallons in a single discharge as described in 40 CFR 112.1 (b), or discharged more than 42 US gallons in each of two discharges as described in 40 CFR 112.1 (b), occurring within any twelve month period, submit information as described in 40 CFR 112.4 (a) to the Regional Administrator within 60 days.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION VI

FACILITY DRAINAGE DESCRIPTION

The storm water collection and drainage patterns surrounding the facility are depicted on Figure 3. Storm water from the roof of the facility building is discharged to the concrete drainage swale on the north side of the pretreatment building between the building and the containment pad. Stormwater that reaches the ground surface flows to the storm sewer collection system. Storm water around the pretreatment building, driveway, offloading area, parking lot and storage area flows toward the stormwater collection box located in the truck unloading area. The subgrade collection box flows underground to the south via 2 – 12" Advance Dranage System (ADS) pipes running north to south. The 12" ADS pipes empty into the exising 15" stormwater drain that runs west to east on the south side of the property. The stormwater drain flows into a offsite pond via a open channel discharge swale at the termination pointof the 15" concrete storm water pipe on the south side of the property. Site surface water located outside of the pretreatment area flows to the south and east and discharges to the stormwater collection pond located on the south side of the property. The stormwater collected in the pond overflows into the adjacent wetland area to the west of the pond. The wetland area provides filtration and settling of the stormwater. The treated stormwater flows out of the wetland and into the Sparkman channel. Stormwater that can be affected by the oily bilge water pre-treatment operations cannot directly reach the Sparkman Channel without passing through the stormwater pond and stormwater settling area.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION VII

INSPECTION, TESTING AND RECORDS

Reportable spills will be recorded in the forms provided as **Appendix A**, copies will be maintained with this document as **Appendix A**.

Weekly inspections of the bilge oily water tanks, recovered waste oil tank, used and virgin fuel tanks, system effluent tank, sodium hydroxide tank, flocculent tank, and coagulant tank will be recorded in the form provided in **Appendix E** and maintained as part of **Appendix E**. Integrity testing of the 5,000 gallon fuel tanks and associated supports/foundation are to be conducted every 10 years or after any tank repairs, in addition to routine visual inspections, as required by 40 CFR 112.8(c)(6). The container testing will include a technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. Normal business records of the integrity testing will be maintained at the facility.

Records associated with the disposal of used spill kit material and recovered oil from spills will be maintained as **Appendix F**, (Disposal records). Records associated with the SPCC training will be kept with training files for the Emergency Spill Response Team.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION VIII

EMERGENCY SITUATIONS

In the event of a spill, fire, or other situation, which places facility personnel or the surrounding community in jeopardy, the facility's SPCC Plan will be implemented as needed.

In the event of an oil spill, the facility's Facility Operator/Owner/Manager or designated appointee will be contacted and will decide which additional agencies require notification. If an event has caused injury to any person or threatens the local community, the facility will be required to notify local contacts (including the fire department, an ambulance, the police department, LEPC and/or the community coordinator).

The UES facility personnel will not attempt to extinguish fires or handle hazardous materials and/or oil-based materials either routinely or during a spill cleanup unless the correct safety equipment (fire extinguishers, goggles, gloves, etc.) is on-hand and the necessary training programs have been attended.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION IX
SECURITY

The UES facility has the following security measures in-place for the storage of oil products when the facility is not in production:

Fencing
There is fencing and two gates to control entrance or egress from the Pre-Treatment area. The building is secured with a perimeter fence and requires a key to enter facility during nonworking hours.

Production Hours
The UES facility is operated Monday through Friday (weekends on occasion), 10 hours per day. The Facility Operator/Owner/Manager is the central contact in case of emergencies. There is a 24 hour 7 days a week security guard on duty. UES owned lights are located throughout the property. The facility is locked during non-operating hours.

Surveillance
One UES owned camera is located on the northwest corner of the Pre-Treatment building overlooking the the two entrance gates that are monitored by the onsite security personnel. The security personnel are familiar with this SPCC Plan and have a copy on file should a spill be identified during walk rounds and inspections.

Alarms
Audible and visual alarms are installed within the process system PLC and are operating 24hours a day 7 days a week.The audible and visual alarm will indicate tank high tank level conditions (90%) in tanks 1 through 8. The security personnel are trained to call the SPC administrator in the event of an alarm condition.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION X

TRAINING

A. Spill Prevention Procedures

Operating personnel, upon hiring, are to be properly trained in the managing/handling of oily mixtures and the operation/maintenance of equipment employed to prevent or contain spills. Operating personnel also are to receive instruction regarding applicable spill control rules, regulations and practices including those found in this plan. A record of this training is maintained on site.

B. Spill Prevention Control Administration

The UES Facility Operator/Owner/Manager acts as the Spill Prevention and Control Administrator (SPCA) and is responsible for administration of the SPCC program and actions/events related to spill prevention and control. The SPC Administrator reports directly to the Plant Director of the facility who holds overall responsibility for matters related to spill prevention and control.

C. Spill Prevention Awareness Meetings

The SPC Administrator schedules and conducts spill prevention awareness meetings at intervals frequent enough to assure adequate understanding of the SPCC plan but at a minimum of once per year. These sessions are conducted periodically during the regularly scheduled worker safety and environmental meetings. Highlighted at these meetings are known spill events or failures, malfunctioning components and recently developed precautionary measures. A record of the awareness meetings is maintained on site. This training for the facility will address components of the SPCC plan. The topics to be covered are as follows:

- an overview of 40 CFR 112
- materials handling and safety practices
- spill notification procedures (who will do what and when)
- operation and maintenance of spill prevention equipment
- location, contents and use of emergency response kits
- inspections of oil storage areas and exterior sewer inlets
- preventive maintenance / inspections
- mock spill drills

Copies of training records will be kept for at least three years from the date of initial training.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION XI

REMOVAL AND DISPOSAL

A. **Removal and Pick-Up:**

Small spills of used oil and fuel shall be covered with sand and/or other absorbent materials and then picked up with shovels. Place all debris in 55-gal drums and store in the waste area with covers ready for disposal.

In the event the spill is classified as a "Deminimis discharge" (62 FAC 780.20) remove spilled materials and dispose. Large spills of oil may require outside assistance for pick up and removal. For assistance, refer to **Section V. (C)** of this SPCC Plan.

Waste oil shall be picked up for disposal only by approved oil handlers.

Small or large spills of oil shall be picked up, if possible, through containment of the spill using materials in the spill kits and having it pumped into an empty tanker or empty drums with covers for disposal. The remainder of the spill, not capable of being pumped, shall be contained with suitable absorbent materials and picked up using shovels. The debris shall be placed in drums with covers and stored in the waste area for disposal.

B. **Disposal:**

All spilled substances and/or contaminated debris shall be transported and disposed of by an approved licensed waste disposal facility. Records of disposal shall be kept as Appendix F. For assistance in obtaining an approved waste disposal facility, contact the Facility Operator/Owner/Manager (see **Section V**).

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION XII

RESTORATION OF THE ENVIRONMENT

In the event of a spill or release of oil products to the environment, the environment will be restored to a condition similar to that provided for the UES facility prior to the spill. All oil products will be removed and disposed of according to applicable regulations.

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION XIII

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA

(Attachment C-II, 40 CFR 112)

Attachment C-II – Certification of the Applicability of the Substantial Harm Criteria
Facility Name: Universal Environmental Solutions. – Tampa Fl.
Facility Address: 1650 Hemlock St. Tampa, FL 33605

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   YES XXXXXXXXXX _____ NO_____

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

   YES _____ NO____XXXXXXXX

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment CIII to this appendix or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

   YES _____ NO____XXXXXXXX

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

   YES _____ NO____XXXXXXXX

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater or equal to 10,000 gallons within the last 5 years?

   YES _____ NO____XXXXXXXX

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature: _____

Name (please type or print): _____

Title: _____

Date: _____

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

SECTION XIV

SPCC RULE CROSS REFERENCE

Final SPCC Rule	***Old SPCC Rule***	***Description of Section***	***UES Tampa FL SPCC Section***
§ 112.7	§ 112.7	General requirements for SPCC Plans for all facilities and all oil types.	ALL
§ 112.7(a)	§ 112.7	General requirements; discussion of facility's conformance with rule requirements; deviations from Plan requirements; facility characteristics that must be described in the Plan; spill reporting information in the Plan; emergency procedures.	III, VII, IX, XII
§ 112.7(b)	§ 112.7(b)	Fault analysis.	III
§ 112.7(c)	§ 112.7(c)	Secondary containment.	III
§ 112.7(d)	§ 112.7(d)	Contingency planning.	Attachment P of IP
§ 112.7(e)	§ 112.7(e)(8)	Inspections, tests, and records.	VII
§ 112.7(f)	§ 112.7(e)(10)	Employee training and discharge prevention procedures.	III and X
§ 112.7(g)	§ 112.7(e)(9)	Security (excluding oil production facilities).	IX
§ 112.7(h)	§ 112.7(e)(4)	Loading/unloading (excluding offshore facilities).	N/A
§ 112.7(i)	n/a	Brittle fracture evaluation requirements.	N/A
§ 112.7(j)	§ 112.7(e)	Conformance with State requirements.	N/A
§ 112.8 § 112.12	§ 112.7(e)(1)	Requirements for onshore facilities (excluding production facilities).	III, VII
§ 112.8(a) § 112.12(a)	n/a	General and specific requirements.	III, VII
§ 112.8(b) § 112.12(b)	§ 112.7(e)(1)	Facility drainage.	Attachment A of IP
§ 112.8(c) § 112.12(c)	§ 112.7(e)(2)	Bulk storage containers.	VII
§ 112.8(d) § 112.12(d)	§ 112.7(e)(3)	Facility transfer operations, pumping, and facility process.	III, VII
§ 112.9 § 112.13	§ 112.7(e)(5)	Requirements for onshore production facilities.	N/A
§ 112.9(a) § 112.13(a)	n/a	General and specific requirements.	N/A
§ 112.9(b) § 112.13(b)	§ 112.7(e)(5)(ii)	Oil production facility drainage.	N/A
§ 112.9(c) § 112.13(c)	§ 112.7(e)(5)(iii)	Oil production facility bulk storage containers.	N/A
§ 112.9(d) § 112.13(d)	§ 112.7(e)(5)(iv)	Facility transfer operations, oil production facility.	N/A
§ 112.10 § 112.14	§ 112.7(e)(6)	Requirements for onshore oil drilling and work over facilities.	N/A
§ 112.10(a) § 112.14(a)	n/a	General and specific requirements.	N/A

Universal Environmental Solutions, LLC		Document Number	Type Code	Owner Code EHS
Document Title **Spill Prevention Control and Countermeasure Plan**				

§ 112.10(b) § 112.14(b)	§ 112.7(e)(6)(i)	Mobile facilities.	N/A
§ 112.10(c) § 112.14(c)	§ 112.7(c)(6)(ii)	Secondary containment - catchment basins or diversion structures.	N/A
§ 112.10(d) § 112.14(d)	§ 112.7(c)(6)(iii)	Blowout prevention (BOP).	N/A
§ 112.11 § 112.15	§ 112.7(e)(7)	Requirements for offshore oil drilling, production, or work over facilities.	N/A
§ 112.11(a) § 112.15(a)	n/a	General and specific requirements.	N/A
§ 112.11(b) § 112.15(b)	§ 112.7(e)(7)(ii)	Facility drainage.	N/A
§ 112.11(c) § 112.15(c)	§ 112.7(e)(7)(iii)	Sump systems.	N/A
§ 112.11(d) § 112.15(d)	§ 112.7(e)(7)(iv)	Discharge prevention systems for separators and treaters.	N/A
§ 112.11(e) § 112.15(e)	§ 112.7(e)(7)(v)	Atmospheric storage or surge containers; alarms.	N/A
§ 112.11(f) § 112.15(f)	§ 112.7(e)(7)(vi)	Pressure containers; alarm systems.	N/A
§ 112.11(g) § 112.15(g)	§ 112.7(e)(7)(V)	Corrosion protection.	N/A
§ 112.11(h) § 112.15(h)	§ 112.7(e)(7)(Vi)	Pollution prevention system procedures.	N/A
§ 112.11(i) § 112.15(i)	§ 112.7(e)(7)(ix)	Pollution prevention systems; testing and inspection.	N/A
§ 112.11(j) § 112.15(j)	§ 112.7(e)(7)(x)	Surface and subsurface well shut-in valves and devices.	N/A
§ 112.11(k) § 112.15(k)	§ 112.7(e)(7)(xi)	Blowout prevention.	N/A
§ 112.11(l) § 112.15(l)	§ 112.7(e)(7)(XIII)	Manifolds.	N/A
§ 112.11(m) § 112.15(m)	§ 112.7(e)(7)(xv)	Flowlines, pressure sensing devices.	N/A
§ 112.11(n) § 112.15(n)	§ 112.7(e)(7)(xvi)	Piping, corrosion protection.	N/A
§ 112.11(o) § 112.15(o)	§ 112.7(e)(7)(xV)	Sub-marine piping; environmental stresses.	N/A
§ 112.11(p)	§ 112.7(e)(7)(xVi)	Inspections of sub-marine piping.	N/A

Figures

Universal Environmental Solutions, LLC

SITE PLAN LEGEND

TEMPORARY CONSTRUCTION SILT FENCE	OHP	OVERHEAD ELECTRIC	PROPOSED WATER
PROJECT LIMITS	CP	CULVERT PIPE	PROPOSED DRAINAGE PIPE
PROPERTY LINE	CLF	CHAIN LINK FENCE	PROPOSED CHECK VALVE
EASEMENT LINE	RR	RAILROAD TRACK	PROPOSED SHUT-OFF VALVE
SAN	EXISTING SANITARY SEWER		VERTICAL PIPE
W	EXISTING WATER		PUMP
UE	UNDERGROUND ELECTRIC		8" DOUBLE WALL PIPE
		PROPOSED SANITARY MANHOLE	
		PROPOSED FORCE MAIN	
		PROPOSED SAN. SEWER	

B.O.S.	BOTTOM OF STRUCTURE	FRP	FIBERGLASS REINFORCED PLASTIC	SAN.	SANITARY
B.F.P.	BACKFLOW PREVENTER	L.D.S.	LEAKAGE DETECTION STATION	ST	STORAGE TANK
CMP	CORRUGATED METAL PIPE	MH.	MANHOLE	SU	BILGE WATER SUMP (8,000 GAL)
CONC.	CONCRETE	OT	OIL TANK (2,500 GAL.)	TECO	TAMPA ELECTRICAL COMPANY
EXIST.	EXISTING	PE	POLYETHYLENE	TYP.	TYPICAL
ESMT.	EASEMENT	PO	PUMP OUT	VV	VALVE VAULT
F.F.E.	FINISHED FLOOR ELEVATION	PROP.	PROPOSED	W.M.	WATER MAIN
F.M.	FORCE MAIN	R.W.L.	RAIN WATER LEADER		

GENERAL NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES.
2. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH TECO ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
4. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY OF POWER LINES.
5. CONTRACTOR SHALL RESTORE ANY PIPE, CONDUIT AND DIRECT BURY CABLE DAMAGED DURING CONSTRUCTION.
6. EXISTING IMPROVEMENTS SHALL REMAIN UNLESS OTHERWISE NOTED.
7. PROPOSED WATER AND SANITARY SEWER LINES SHALL MAINTAIN A MINIMUM 3-FOOT COVER UNLESS OTHERWISE NOTED. UTILITY CROSSINGS SHALL CONFORM TO LOCAL AND STATE REQUIREMENTS. SHOULD CONFLICTING INFORMATION OCCUR, THE STRICTER OF THE TWO SHALL GOVERN.
8. THE FACILITY HAS BEEN DESIGNED TO HANDLE BILGE WATER THAT HAS A FLASH POINT GREATER THAN 210 DEGREES FAHRENHEIT (I.E. IS CONSIDERED A CLASS III B COMBUSTIBLE LIQUID). WASTEWATER THAT IS DESTINED FOR THE PLANT THAT MAY OR IS CHARACTERIZED WITH A LOWER FLASH POINT SHALL NOT BE ALLOWED TO ENTER THIS FACILITY AND SHALL BE DIVERTED FOR PRE-TREATMENT ELSEWHERE.

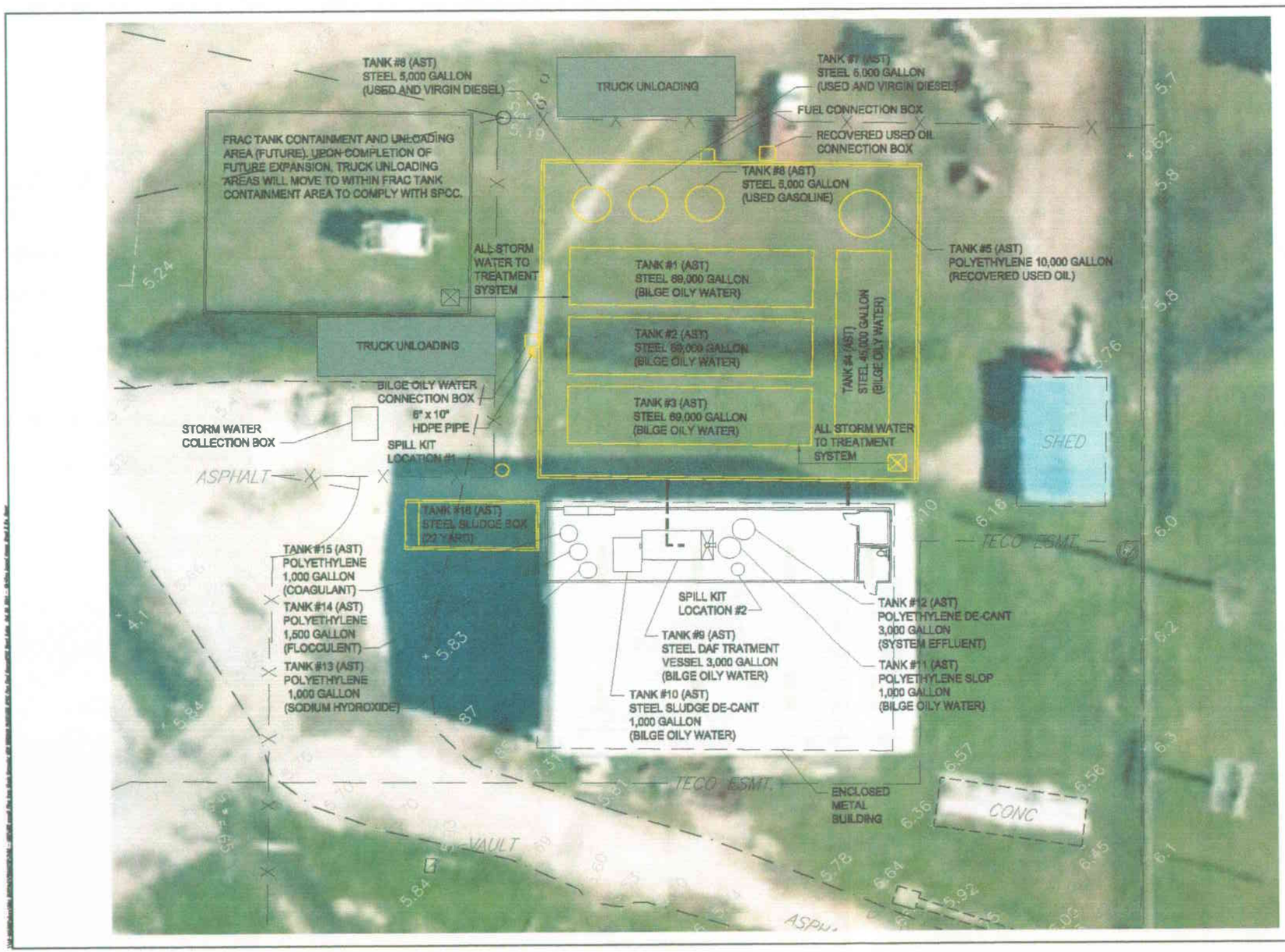
S&A
SEAY & ASSOCIATES, INC.
2606 South 86th Street, Suite B
Tampa, FL 33619
0 9

DRAWING TITLE: SITE MAP
PROJECT TITLE: INDUSTRIAL WASTEWATER PRE-TREATMENT PLANT
CLIENT: HENDRY CORPORATION
1620 HEMLOCK STREET
TAMPA, FL 33605

Keith Cedar P.E.
P.E. No. 49817
CERTIFICATE OF AUTHORIZATION NO. 9528
PHONE (813)917-9287
FAX (813)836-1807

BY	REVISIONS

DESIGNED BY K.C.
DRAWN BY B.M.
CHECKED BY J.S.
DATE 8-15-14
SCALE AS SHOWN
PROJECT NO. 3119.001.001
SHEET 1 of 3
1



SAVY & ASSOCIATES, INC.
2606 South 86th Street, Suite B
Tampa, FL 33619

DRAWING TITLE: TANK LOCATION MAP

PROJECT TITLE: INDUSTRIAL WASTEWATER PRE-TREATMENT PLANT

CLIENT: HENDRY CORPORATION
1680 HEMLOCK STREET
TAMPA, FL 33605

Keith Cocks P.E.
P.E. No. 49817
CERTIFICATE OF AUTHORIZATION NO. 9528
PHONE (813)817-9287
FAX (813)630-1807

BY	REVISIONS

DESIGNED BY K.C.
DRAWN BY R.N.
CHECKED BY K.C.
DATE 8-15-14
SCALE AS SHOWN
PROJECT NO. 3119.001.001
SHEET 2 of 3
2

SEAVY & ASSOCIATES, INC.
2606 South 39th Street, Suite B
Tampa, FL 33619

DRAWING TITLE: STORM WATER FLOW MAP

PROJECT TITLE: INDUSTRIAL WASTEWATER PRE-TREATMENT PLANT

CLIENT: HENDRY CORPORATION
1650 HEMLOCK STREET
TAMPA, FL 33605

Keith Costa P.E.
P.E. No. 49917
CERTIFICATE OF AUTHORIZATION NO. 9329
PHONE (813)917-9267
FAX (813)630-1807

BY	REVISIONS

DESIGNED BY K.C.
DRAWN BY B.M.
CHECKED BY J.S.
DATE 8-15-14
SCALE AS SHOWN
PROJECT NO. 3119.001.001
SHEET 3 of 3
3

APPENDICIES

Appendix A

Discharge Report Form

Discharge Reporting Form

DEP Form # 62-761.900(1)
Form Title Discharge Reporting Form
Effective Date _____

PLEASE PRINT OR TYPE

Instructions are on the reverse side. Please complete all applicable blanks

1. Facility ID Number (if registered): _____ **2. Date of form completion:** _____

3. General information
Facility name: _____
Facility Owner or Operator: _____
Facility Contact Person _____ Telephone number: ( ) _____ County: _____
Facility Mailing address: _____
Location of discharge (facility street address): _____
Latitude and Longitude of discharge (If known.) _____

4. Date of receipt of test results or discovery of confirmed discharge: _____ month/day/year

5. Estimated number of gallons discharged: _____

6. Discharge affected: [ ] Air [ ] Soil [ ] Ground water [ ] Drinking water well(s) [ ] Shoreline [ ] Surface water (water body name) _____

7. Method of discovery (check all that apply)

[ ] Liquid detector (automatic or manual)	[ ] Internal inspection	[ ] Closure/Closure Assessment
[ ] Vapor detector (automatic or manual)	[ ] Inventory control	[ ] Groundwater analytical samples
[ ] Tightness test	[ ] Monitoring wells	[ ] Soil analytical tests or samples
[ ] Pressure test	[ ] Automatic tank gauging	[ ] Visual observation
[ ] Statistical Inventory Reconciliation	[ ] Manual tank gauging	[ ] Other _____

8. Type of regulated substance discharged: (check one)

[ ] Unknown	[ ] Used/waste oil	[ ] Jet fuel	[ ] Heating oil	[ ] New/lube oil
[ ] Gasoline	[ ] Aviation gas	[ ] Diesel	[ ] Kerosine	[ ] Mineral acid

[ ] Hazardous substance - includes CERCLA substances from USTs above reportable quantities, pesticides, ammonia, chlorine, and derivatives (write in name or Chemical Abstract Service (CAS) number) _____
[ ] Other _____

9. Discharge originated from a: (check all that apply)

[ ] Dispensing system	[ ] Pipe	[ ] Barge	[ ] Pipeline	[ ] Vehicle
[ ] Tank	[ ] Fitting	[ ] Tanker ship	[ ] Railroad tankcar	[ ] Airplane
[ ] Unknown	[ ] Valve failure	[ ] Other Vessel	[ ] Tank truck	[ ] Drum

[ ] Other _____

10. Cause of the discharge: (check all that apply)

[ ] Loose connection	[ ] Puncture	[ ] Spill	[ ] Collision	[ ] Corrosion
[ ] Fire/explosion	[ ] Overfill	[ ] Human error	[ ] Vehicle Accident	[ ] Installation failure

[ ] Other _____

11. Actions taken in response to the discharge: _____

12. Comments: _____

13. Agencies notified (as applicable):

[ ] State Warning Point	[ ] National Response Center	[ ] Fire Department.	[ ] County Tanks Program	[ ] DEP (district/person)
1-800-320-0519	*1-800-424-8802*	_____	_____	_____

14. To the best of my knowledge and belief all information submitted on this form is true, accurate, and complete.

_____ _____
Printed Name of Owner, Operator or Authorized Representative — Signature of Owner, Operator or Authorized Representative.

Appendix B

Weekly Check List

Universal Environmental Solutions, LLC
Pre-Treatment Facility
Tampa Florida

Document Title

Appendix B Weekly Check List

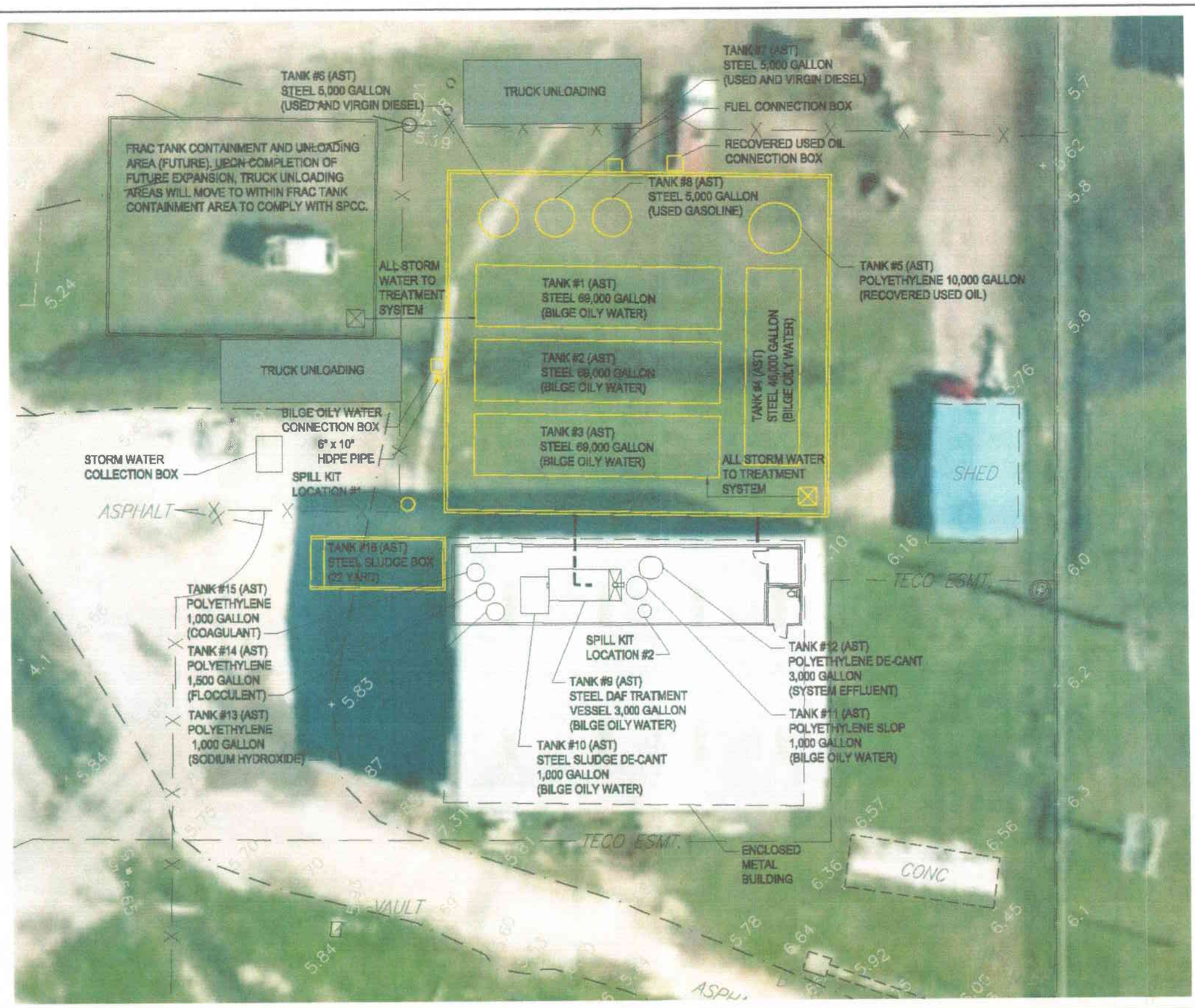
Date: _____
Time: _____
Weather conditions: _____
Inspector: _____

X = Satisfactory
NA = Not Applicable
O = Repair or Adjustment
C = Comment under Remarks/Recommendations

Inspection Line item	Result of Inspection	Remarks/Recommendations
Tank Farm Containment Area		
Any Noticeable oil sheen on runoff		
Containment area drainage valves closed and locked		
Treatment system working properly		
Effluent from system inspected		
No visible oil sheen in containment area		
No standing water in containment area		
Valves in working order		
Sump free of bilge oily water		
Above Ground Storage Tanks (AST's)		
Tank condition(good, no rust, corrosion, pitting)		
Bolts, Rivits, or seams not damaged		
Tank Foundation intact		
Level gauges and alarms working properly		
Any obstructions		
Valves, flanges, and gaskets free from leaks		
Containment walls intact		
Tank and ground surfaces checked for signs of leakage		
Conduct annual leak Test (Next Test Due_____)		
DAF Treatment System		
Inspect for the presence of oil in oil section		
Any obstructions		
Valves, flanges, and gaskets free from leaks		
Tank and ground surfaces checked for signs of leakage		
Hydraulic skimmer motor and skimmer in good condition		
Bolts, Rivits, or seams not damaged		
Pipes		
Buried Pipelins not exposed		
Out of service pipes capped		
Manways opened to detect prence of bilge oily water		
No leaks at valves, flanges, or fittings		
No sign of corrosion damage to pipelines, supports, brackets		
Truck Loading/Unloading Areas		
Warning signs posted		
Truck hoses free of leaks		
Connection / manifold boxes free of liquids		
Connection are capped if not in use		
Valves in working order and shut when not in use		
Security		
Gates have locks in working order		
AST's locked when not in use		
Starter controls for pumps locked when not in use		
Lighting is working properly		
Fences and gates intact		
Training		
Training records are in order (Monthly Check)		
Spill prevention brefing held (Monthly Check)		
Miscellaneous Monthly		
Spill kits inventory replenishment		
First aid kits replenishment		

Appendix C

Emergency Response Kit Locations



SEAVY & ASSOCIATES, INC.
2608 South 86th Street, Suite B
Tampa, FL 33619

DRAWING TITLE: EMERGENCY RESPONSE SPILL KIT LOCATIONS

PROJECT TITLE: INDUSTRIAL WASTEWATER PRE-TREATMENT PLANT

CLIENT: HENDRY CORPORATION
1650 HEMLOCK STREET
TAMPA, FL 33605

Keith Coats P.E.
P.E. No. 42917
CERTIFICATE OF
AUTHORIZATION NO. 8528
PHONE (813)317-9267
FAX (813)630-1607

BY	REVISIONS

DESIGNED BY K.C.
DRAWN BY D.M.
CHECKED BY K.C.
DATE 8-15-14
SCALE AS SHOWN
PROJECT NO. 3119.001.001
SHEET 1 of 1

Appendix C

Appendix D

Accident Investigation Report

Appendix D

Accident Investigation Report

Facility: Universal Environmental Solutions, LLC 1650 Hemlock St. / Tampa FL 33605

Date and time of discharge:

Name, title and phone number of person completing this form:

Type of material discharged:

Estimated total quantity of material discharged (weight or volume basis):

Source, cause and duration of material discharged:

Brief description of the discharge:

Description of all affected media (estimated extent of contamination to land, air and/or water):

Describe actions used to stop, remove and mitigate the effects of the discharge:

Is or was site evacuation needed?

Individuals and/or organizations already contacted:

Signature of person completing this form and date: _____

Appendix E

Weekly Tank Inspection Form

Universal Environmental Solutions, LLC

Universal Environmental Solutions, LLC
Pre-Treatment Facility
Tampa Florida

Appendix F Weekly Tank/ piping Inspection Form

Tank Number and Capacity	Visible leaks on tanks, Tank Seams, connections, (Stains or valves	Visible leaks on piping, piping seams, connections, (Stains, flanges, threaded connection, pumps or valves	Overfill equipment in good operating condition	Evidence of corrosion on tanks, piping and valves	Excessive settlement of structures	malfunctioning equipment (no monitoring)	Concrete surfaces and ground free of any evidence of new leakage or spillage	Vent pipes secured and with proper caps (open vent: diesel / fuel pressurized vent)	Electrical Connections secured
Silge City Water Tanks									
Tank # 1 69,000 gallon									
Tank #2 69,000 gallon									
Tank # 3 69,000 gallon									
Tank #4 45,000 gallon									
Polyethylene Recovered Used Oil Storage Tank									
Tank #5 10,000 gallon									
Used and Virgin Fuel Tanks									
Tank # 6 5,000 gallon Diesel									
Tank # 7 5,000 gallon Diesel									
Tank #8 5,000 gallon Gasoline									
Fixed Storage (Pre-Treatment Facility Interior)									
Tank #9 3,000 gallon DAF Steel Vessel									
Tank # 10 1,000 gallon Steel Sludge De-cant Tank									
Tank #11 1,000 gallon Polyethylene Slop Tank									
Tank #12 1,000 gallon Polyethylene De-cant Tank System Effluent									
Tank #13 1,000 gallon Polyethylene Sodium Hydroxide Tank									
Tank #14 1,500 gallon Polyethylene Flocculent Tank									
Tank #15 1,000 gallon Polyethylene Coagulant Tank									
Tank #16 22 yard Steel Roll-off (Sealed Hazard tight)									

Appendix F

Disposal Records

ATTACHMENT 9 – UNIT MANAGEMENT PLAN

9.0 Unit Management Plan for Used Oil Tanks

This attachment describes the management, Inspection and certification of used oil process and storage tanks. Tanks that do not process used oils or have used oil storage are covered under Attachment 9 SPCC Plan of the permit submission.

9.1 Unit Description for Tanks

The UES Pre-Treatment Facility is located on an acre parcel of land, adjacent to the Sparkman Channel. The property is shared with other firms conducting various ship repair and maintenance activities. A Site map has been included in **Attachment 1 - Figure-3** and shows the UES Facility Operations and limits of operations. The UES facility operates Monday through Friday (weekends on occasion), 10 hours per day to treat bilge oily water. Bilge Oily water at the facility is primarily processed through and stored in Three 69,000 gallon tanks (Tanks #1-#3), and one 45,000 gallon tank (Tank #4). The used recovered oil from process is collected in a 10,000 gallon polyethylene tank (Tank #5). The used and virgin diesel fuel is stored in two steel 5,000 gallon tanks (Tank#6 and Tank#7), and the used and virgin gasoline is stored in one steel 5,000 gallon tank (Tank #8). Tanks #1 - #8 are located within the containment area north of the facility treatment building. Tanks # 1 through 4 are considered flow through structures and exempt under 40 CFR 122.

The containment area is an impervious concrete structure that provides containment around tanks #1 - #8 which contain the bilge oily water, recovered waste oils, and used and virgin fuels, as showed in Attachment 1 - Figure-3. The Containment pad is 85.34' x 77.91' x 2'6" with a capacity of 125,000 gallons. It has sufficient freeboard to allow for precipitation (15% or 4" for the 25 year and 50 year rain events). The expansion joints are filled with an impervious two part epoxy resin. Concrete sheet flow is directed to the collection sump in the tank farm. All rain water and spilled materials are collected and pumped back through the Pre-Treatment system for disposal to the POTW. Rain water is not authorized to return to ground level. Surface drainage is engineered so spilled materials inside the containment area of the tank farm will drain to a low point collection sump for return to storage tank farm and pre-treatment process.

The interior of the building contains the DAF containment area. The DAF containment area floor has a one foot high containment wall around the surrounding all plant operations that involve impacted bilge oily water. The pre-treatment operation tanks have a total capacity of 9,000 gallons. The DAF Containment area has an 11,250 gallon capacity. The following process tanks (tanks #9 - #15) are housed within the DAF containment area inside of the building inside containment area and are not exposed to rainwater:

Tank #9 – Steel DAF Treatment Vessel 3,000 gallon Bilge Oily Water.

Tank #10 – Steel Sludge Decant Tank 1,000 gallon Bilge Oily Water.

Tank #11 – Polyethylene Slop Tank 1,000 gallon Bilge Oily Water.

9.2 Inspection, Testing and Monitoring Schedules

Weekly inspections of the bilge oily water tanks, recovered waste oil tank, used and virgin fuel tanks, system effluent tank, sodium hydroxide tank, flocculent tank, and coagulant tank will be recorded in the form included in this document under **Section 6.3** Inspection and Maintenance Forms and maintained as

part of Appendix E. Integrity testing of the 5,000 gallon fuel tanks and associated supports/foundation are to be conducted every 10 years or after any tank repairs, in addition to routine visual inspections, as required by 40 CFR 112.8(c)(6). The container testing will include a technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. Normal business records of the integrity testing will be maintained at the facility.
Spill kits are located at the facility, which include "oil dry" and absorbent pads. Additionally, the company has 500' of oil response boon ready for immediate deployment if any catastrophic spill happens. These inventories are checked monthly to replenish any used materials.
The facility maintains an SPCC Plan for the Pretreatment Facility that is included in UES permit submission as **Attachment** 6. Records associated with the SPCC training will be kept with training files for the Emergency Spill Response Team.

9.3 Tank Certification

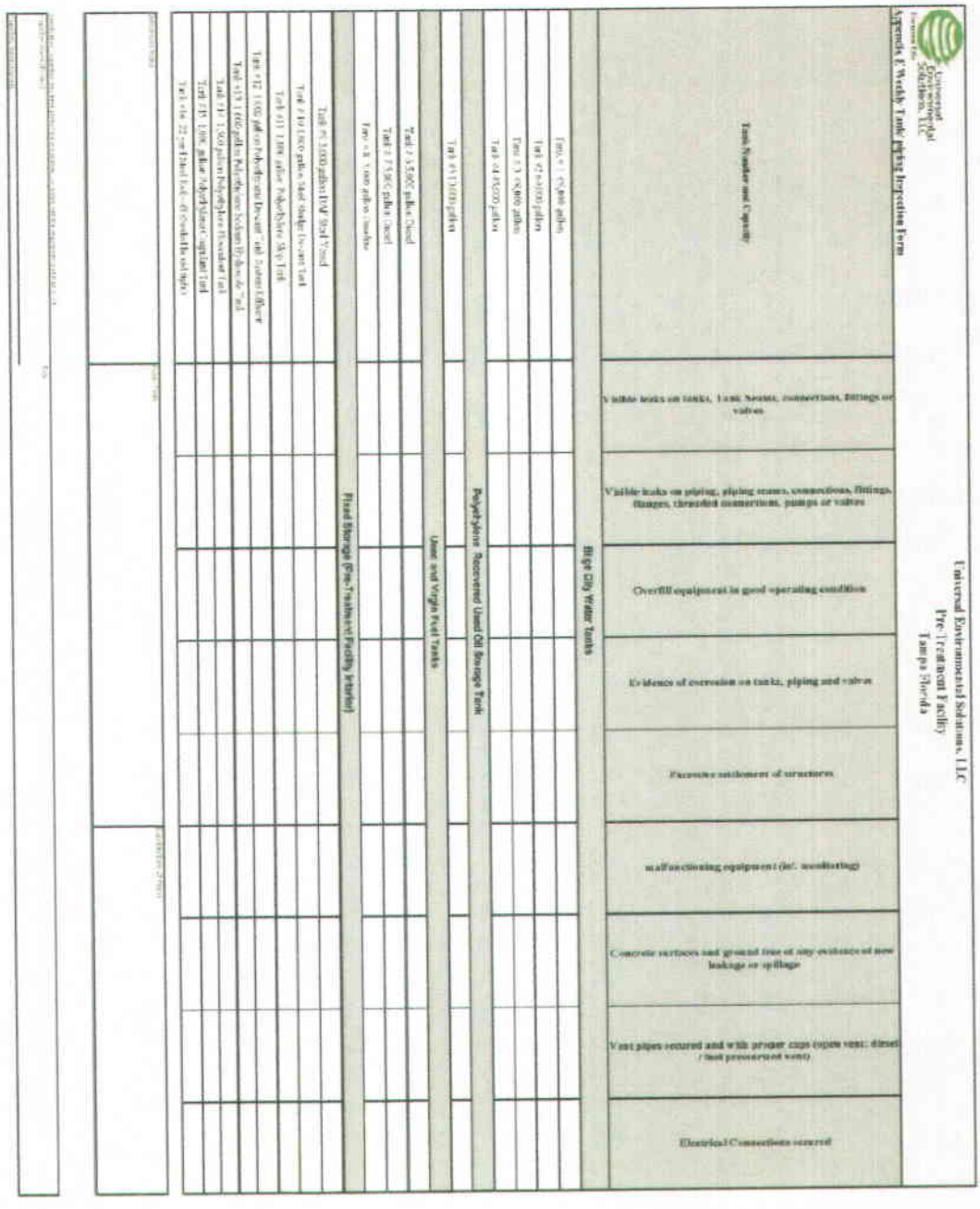
Used oil is stored in a 10,000 gallon polypropylene tank, four process flow through tanks on the containment pad are used for processing of the oily water waste the tank containment pad outside. Used fuels are stored in 3-5,000 gallon tanks on the tank containment pad outside. The storage tanks are identified above as Tank #6,#7 and #8. Four process tanks are designed to handle process flow.

The 10,000 gallon polypropylene tank designed for used oil storage has not been registered due to materials of construction. An exemption request is to be prepared and submitted to the Storage Tanks division of storage tanks the Florida Department of Environmental Protection. A copy of the exemption request is included in this attachment (October 20, 2014).

This section is to be completed by October 20, 2014. A copy of the exemption letter and the PE certification for the four process tanks will be included. Attached below is the Exemption request form 62-620.910(17) FAC.

9.4 Forms

9.4.1 Weekly Tank and Piping Inspection Form



Universal Environmental Solutions, LLC
Pre-Treatment Facility
Tampa Florida

Appendix E Weekly Tank and Piping Inspection Form

Tank Number and Capacity	Visible leaks on tanks, Tank Seams, connections, fittings or valves	Visible leaks on piping, piping seams, connections, fittings, flanges, threaded connections, pumps or valves	Overfill equipment in good operating condition	Evidence of corrosion on tanks, piping and valves	Excessive settlement of structures	malfunctioning equipment (inc. monitoring)	Concrete surfaces and ground free of any evidence of new leakage or spillage	Vent pipes secured and with proper caps (open vent, diesel / inert pressurized vent)	Electrical Connections secured
Bilge Oily Water Tanks									
Tank 1 - 15,000 gallon									
Tank 2 - 10,000 gallon									
Tank 3 - 10,000 gallon									
Tank 4 - 15,000 gallon									
Polyethylene Recovered Used Oil Storage Tank									
Tank 5 - 15,000 gallon									
Used and Virgin Fuel Tanks									
*Tank 1 - 5,000 gallon Diesel									
Tank 2 - 5,000 gallon Diesel									
Tank 3 - 5,000 gallon Gasoline									
Fixed Storage (Pre-Treatment Facility Interior)									
Tank #1 - 1,000 gallon HDPE Steel Diesel									
Tank #2 - 1,000 gallon Used Sludge Oil Storage Tank									
Tank #3 - 1,000 gallon Polyethylene Skip Tank									
Tank #4 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #5 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #6 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #7 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #8 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #9 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #10 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #11 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #12 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #13 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #14 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #15 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #16 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #17 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #18 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #19 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #20 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #21 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									
Tank #22 - 1,000 gallon Polyethylene Recovered Used Oil Storage Tank									

9.4.2 Weekly Tank Checklist

Universal Environmental Solutions, LLC
Pre-Treatment Facility
Tampa Florida

Document Title

Appendix B Weekly Check List

Date: _____
Time: _____
Weather conditions: _____
Inspector: _____

X = Satisfactory
NA – Not Applicable
O = Repair or Adjustment
C = Comment under Remarks/Recommendations

Inspection Line item	Result of Inspection	Remarks/Recommendations
Tank Farm Containment Area		
Any Noticeable oil sheen on runoff		
Containment area drainage valves closed and locked		
Treatment system working properly		
Effluent from system inspected		
No visible oil sheen in containment area		
No standing water in containment area		
Valves in working order		
Sump free of bilge oily water		
Above Ground Storage Tanks (AST's)		
Tank condition(good, no rust, corrosion, pitting)		
Bolts, Rivits, or seams not damaged		
Tank Foundation intact		
Level gauges and alarms working properly		
Any obstructions		
Valves, flanges, and gaskets free from leaks		
Containment walls intact		
Tank and ground surfaces checked for signs of leakage		
Conduct annual leak Test (Next Test Due _____)		
DAF Treatment System		
Inspect for the presence of oil in oil section		
Any obstructions		
Valves, flanges, and gaskets free from leaks		
Tank and ground surfaces checked for signs of leakage		
Hydraulic skimmer motor and skimmer in good condition		
Bolts, Rivits, or seams not damaged		
Pipes		
Buried Pipelins not exposed		
Out of service pipes capped		
Manways opened to detect prence of bilge oily water		
No leaks at valves, flanges, or fittings		
No sign of corrosion damage to pipelines, supports, brackets		
Truck Loading/Unloading Areas		
Warning signs posted		
Truck hoses free of leaks		
Connection / manifold boxes free of liquids		
Connection are capped if not in use		
Valves in working order and shut when not in use		
Security		
Gates have locks in working order		
AST's locked when not in use		
Starter controls for pumps locked when not in use		
Lighting is working properly		
Fences and gates intact		
Training		
Training records are in order (Monthly Check)		
Spill prevention brefing held (Monthly Check)		
Miscellaneous Monthly		
Spill kits inventory replenishment		
First aid kits replenishment		

9.5 Tank Certification

To comply with the requirements of the permit and 62-762 all tanks within the facility containment area over 550 gallons must meet standards detailed in the Approved Equipment List 62-762.500 FAC.

9.5.1 Tank Certification

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STORAGE TANK REGISTRATION PLACARD
2014-2015

STCM ACCOUNT: 70300
FACILITY ID: 9814309
FACILITY: UNIVERSAL ENVIRONMENTAL SOLUTIONS
1650 HEMLOCK ST
TAMPA FL 33605 HILLSBOROUGH COUNTY
FACILITY TYPE: Industrial Plant

PLACARD NO: 448303
PLACARD ISSUED: 09/19/2014
PLACARD EXPIRES: 06/30/2015

TANK SYSTEMS REGISTERED: 3

ACCOUNT OWNER: UNIVERSAL ENVIRO SOLUTIONS
1650 HEMLOCK ST
TAMPA FL 33605

HASH: TLWYM6QLMMW6Q6

The Storage Tank Registration placard must be posted at the facility.
It must be placed out of the weather and in plain view of inspectors entering the facility.

Under Section 376.3077, Florida Statutes, it is unlawful to deposit motor fuel into a stationary storage tank system that requires registration unless proof of valid registration is displayed at the facility.

Acceptance of this placard constitutes agreement to operate the registered tanks in compliance with applicable Statutes and Department Rules.

DEPARTMENT OF ENVIRONMENTAL PROTECTION IS ON THE INTERNET

The Web address for DEP is http://www.dep.state.fl.us

You can access the Storage Tank Website by using http//www.dep.state.fl.us/waste/categories/tanks.
Look under the HIGHLIGHTS section to find the links to storage tank rules, forms, database reports and program information.

CONTACT TANK REGISTRATION BY:

EMAIL - TankRegistration@dep.state.fl.us
PHONE - (850) 245-8839

UNIVERSAL ENVIRONMENTAL SOLUTIONS

September 29, 2014

Ms. Kimberly Curran

FDEP Office
Division of Waste Management
MS #4500
2600 Blair Stone Road, Tallahassee, Florida 32399-2400

Re: Alternative Equipment Approval Request - UES Oil Processing Facility 10K Polypropylene Tank Use

Dear Ms. Curran:

This letter is being submitted to request a variance above ground storage tank at the UES bilge oily water processing facility located at 1650 Hemlock St Tampa FL. UES has constructed a process facility that is design to pretreat non-hazardous oily water wastes from barge cleaning operations and petroleum contact waters produced from industrial activities. To comply with the requirements of the permit and 62-762 all tanks within the facility containment area over 550 gallons must meet standards detailed in the Approved Equipment List 62-762.500 FAC and the Approved Equipment list for above ground storage tanks.

The process utilized at the facility to pretreat the oily water wastes generated is dissolved air floatation (DAF). The DAF system uses sodium hydroxide, sulfuric acid and sodium hypochlorite dosing to separate the emulsified oils from the wastewater and neutralization the wastewater prior to disposal. Three waste streams are created during the process; wastewater which is disposed to the local POTW, sludge waste which is collected in a sealed roll-off onsite and used non-hazardous waste oil which is presently collected in a 10K polyethylene tank located within the 125,000 gallon tank containment pad. Tank location has been provided on site map. The waste/used oils contain small amounts of the process chemicals and can be stored onsite for up to a year before quantities are great enough for recycling pickups. The waste/used oil stored contains trace amounts of dosing chemicals.

Design and selection of the waste/used oil tank incorporated the use of the pretreatment dosing chemicals. The selection of the standard steel tanks were deemed unsafe due to the effects of the chemicals store most effective material utilized for long term storage of waste/used oils with trace amounts of sodium Hydroxide, sulfuric acid. The selection for a polypropylene was based on the attached materials of compatibility chart, know used oils containment designs and best management practices. The polypropylene tank and design provided the safest and most effective long term storage capabilities for the storage of waste/used oils with trace amounts of sodium Hydroxide, sulfuric acid.

UNIVERSAL ENVIRONMENTAL SOLUTIONS

A Florida State certified P.E. certification recommending the combination of these waste/used oil and dosing chemicals and use for long term storage of these recycled waste/oils from the pretreatment process is attached below. UES would like to request a variance under 62-762-851 FAC to utilize the polypropylene instead of the recommended steel or fiberglass tanks approved by the agency.

The polypropylene tank has been equipped with an overflow alarm and anti siphon valve and is housed within a secondary containment area capable of containing more than 100% of the 10,000 gallon capacity. The above ground polypropylene tank complies with all other tank requirements detailed under rules 62.760 and 62.762 FAC.

Kindest Regards,

E. Kinley

Ed Kinley

President

Attachments:

P.E. Certification

Site Map

Material Compatibility

UNIVERSAL ENVIRONMENTAL SOLUTIONS

POLYPROETHYLENE STORAGE TANK USE CERTIFICATION FOR WASTE/USED OIL AND DOSING CHEMICALS APPROVAL

I hereby certify under penalty of law that I have examined the facility and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete. To the best of my knowledge and belief, the information contained in this plan is true, complete, and accurate. Further, I attest that this plan has been prepared in accordance with good engineering practices.

Michael Keith Coats

~~Keith A. Coats, P.E.~~ FL PE No.48917

Professional Engineer

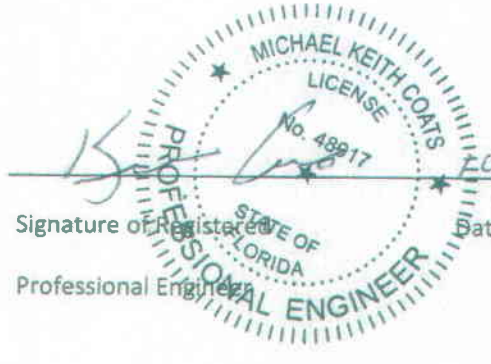
Seavy & Associates, Inc.

Certificate of Authorization # 9528

2608 South 86th St. Ste B

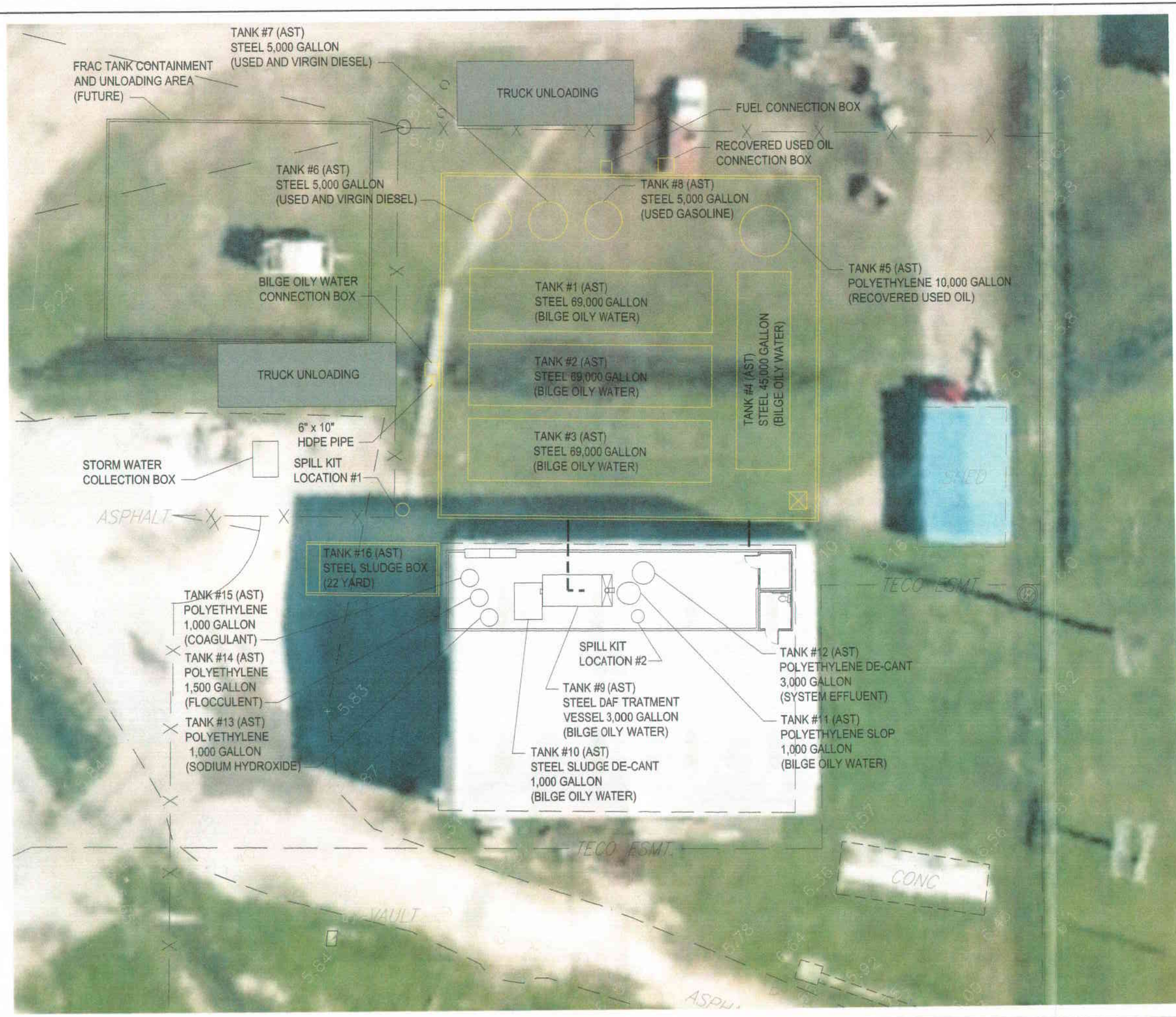
Tampa, Florida 33619

813-917-9267



Signature of Registered Professional Engineer

Date: 10/30/14



N

0 10 20
SCALE IN FEET

SEAVY & ASSOCIATES, INC.
2608 South 86th Street, Suite B
Tampa, FL 33619

DRAWING TITLE: TANK LOCATION MAP

PROJECT TITLE: INDUSTRIAL WASTEWATER PRE-TREATMENT PLANT

CLIENT: HENDRY CORPORATION
1650 HEMLOCK STREET
TAMPA, FL 33605

Keith Coats P.E.
P.E. No. 48917
CERTIFICATE OF
AUTHORIZATION NO. 9528
PHONE (813)917-9267
FAX (813)630-1607

BY	REVISIONS

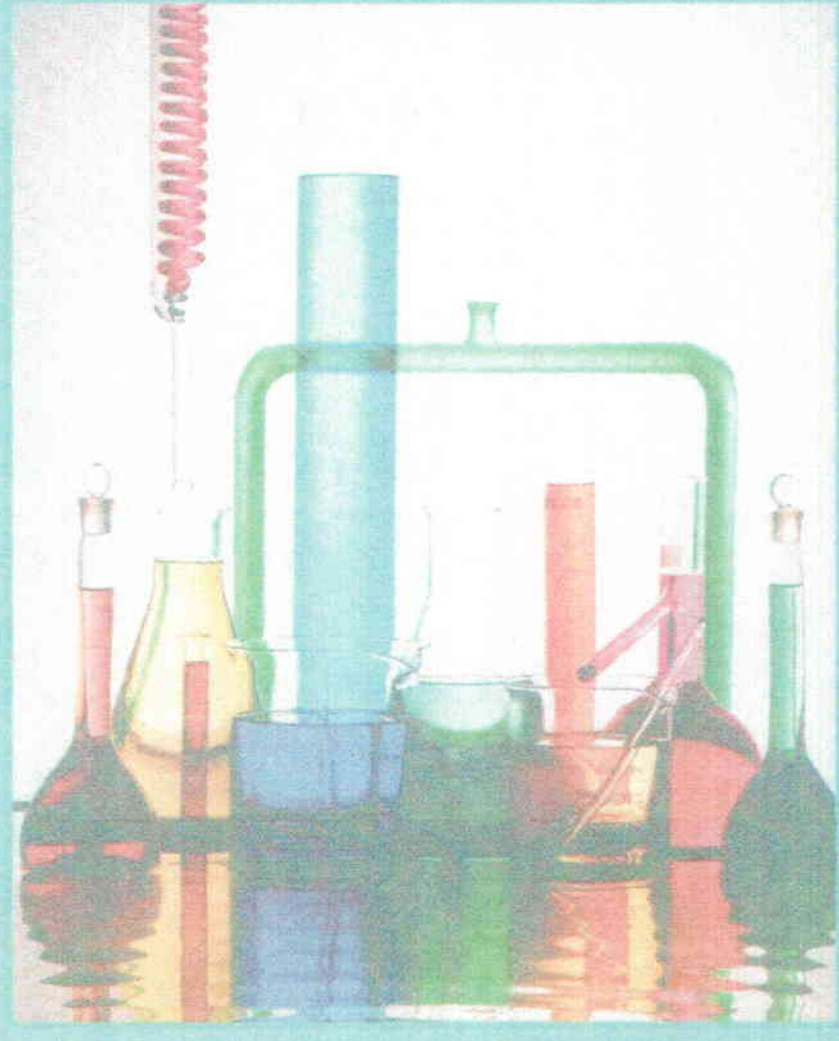
DESIGNED BY K.C.
DRAWN BY R.M.
CHECKED BY J.S.
DATE 8-15-14
SCALE AS SHOWN
PROJECT NO. 3119.001.001
SHEET 1 of 1

1

Your Pipeline To Quality

Chemline

Chemical Resistance Guide



CHEMLINE
Plastics Limited

Materials of Construction

CHEMLINE Plastics Limited

Thermoplastics

PVC (Polyvinyl Chloride)
The most economical and largest selection of Chemline valves are moulded from PVC. It offers excellent mechanical and chemical resistance properties at low cost. The working temperature range of PVC valves is **0 to 60°C (30 to 140°F)**.

PVC used for Chemline valves is identified by cell classification number **11564-A** as per ASTM Standard D 1784. The suffix "A" refers to the highest chemical resistance rating. Most other PVC valves as well as pipe and fittings have only a "B" chemical resistance rating.

The special PVC "A" compound used in Chemline valves resists attack of most acids, strong alkalais, salts and many other chemicals. High chemical resistance of this material allows its application on aggressive services such as 98% H_2SO_4, dry chlorine and low pressure wet chlorine gas. PVC is attacked by chlorinated hydrocarbons, ketones, esters and some aromatic compounds. It can be used on solutions containing up to 1000 ppm solvents.

Chemline PVC valves are non-toxic. They meet CSA standard B137.0 for toxicity.

They are resistant to damaging effects of sunlight and weathering, thus painting is not necessary.

CPVC (Chlorinated Polyvinyl Chloride)
CPVC is very similar to PVC in mechanical properties and chemical resistance. It is suitable for applications from **0 to 95°C (30 to 200°F)**.

The special CPVC compound used for Chemline valves is classified as **23567-A** as per ASTM D 1784. The suffix "A" denotes conformance to the highest chemical resistance rating. The compound is non-toxic, conforming to CSA toxicity standard B137.0.

CPVC valves have proven to be an excellent choice for applications at temperatures too high for PVC or when an extra margin of safety is required.

PP (Polypropylene)
PP is light weight and high in chemical resistance. Valves are suitable for service from **-20 to 90°C (-5° to 195°F)**. PP is unaffected by alkalais, salts, organic solvents and most acids, particularly hydrochloric and phosphoric acid. It is unsuitable on strong acids, chlorinated hydrocarbons, aromatic compounds and high concentrations of free chlorine.

PP is very inert thus popular for high purity applications such as deionized water, etc. The material comes normally opaqued by addition of grey-beige pigment to prevent ultraviolet light penetration. Natural translucent material without pigment will degrade if exposed to UV light (sun light). Chemline offers PP pipe, fittings and valves in pigmented and unpigmented PP, both approved by the FDA for contact with food.

PVDF (Polyvinylidene Fluoride)
PVDF is superior to other valve thermoplastics in chemical resistance and abrasion resistance. It has remarkable strength over the largest working temperature range.

The working temperature range of PVDF valves is **-40 to 120°C (-40 to 250°F)**.

PVDF's impact strength is over twice that of PVC. The valves are extremely durable under mechanical abuse even at -40°F. They also offer the highest abrasion resistance of thermoplastic valves.

PVDF has excellent chemical resistance against halogens such as chlorine and bromine, strong acids such as hydrofluoric and nitric acids, organic solvents and oils. PVDF is not resistant to hot bases.

It is also non toxic and imparts no odours or tastes into the fluid. Our PVDF conforms with USDA Title 21, P121.2593 requirements for contact with food.

Gas permeability of PVDF is extremely low. A patented PVDF gas permeability barrier is available on Type 14 and DV Series Diaphragm Valves. It is a backing to the Teflon® diaphragm and has proven to increase the life of diaphragm valves on chlorine and strong acid services.

Teflon® PTFE (Polytetrafluoroethylene)
PTFE is almost totally insoluble and chemically inert. It has high temperature resistance. Teflon® PTFE ball seats, because of natural lubricity, require no lubrication. Teflon® PTFE diaphragms and flange gaskets are used in the most severe chemical resistance applications.

Elastomers

EPDM (Ethylene Propylene Terpolymer)
EPDM is a synthetic rubber used as the standard seal material for most Chemline valves. It is the most economical choice of elastomer and has excellent chemical resistance on the great majority of applications including acids, alkalais, salts and many others at temperatures up to 90°C. EPDM is weak on organic compounds and cannot be used on oils and fats.

Chemline valves seals of EPDM meet CSA standard B137.0 for non-toxicity.

Viton® (Fluorocarbon Rubber, abv. FPM)
Viton® is more expensive than EPDM so is used as an alternate elastomer when required. It has excellent resistance to mineral acids, oils and many aliphatic and aromatic hydrocarbons. Viton® is weak on sodium hydroxide.

CPE (Chlorinated Polyethylene)
CPE is superior to all other elastomers on sodium hypochlorite. It resists hypochlorite up to full strength (13%). Ball valves supplied with CPE seals are very price competitive on this service.

NITRILE (Acrylonitrile-Butadiene Copolymer, abv. NBR)
Nitrile is also know as Buna-N. It has high chemical resistance to oil and petroleums but is weak on oxidizing media i.e. acids. Nitrile has excellent abrasion resistance and is less expensive than Viton® for butterfly valve seats.

Chemical Resistance

CHEMLINE Plastics Limited

Codes

- (A) **Excellent** = Recommended
- (B) **Good** = Recommended
- (C) Fair (limited life)
- (X) **Not Recommended**

Corrosion resistance data given in this publication are based on laboratory tests conducted by the manufacturers of the materials covered and are indicative only of the conditions under which the tests were made. The information may be considered as a basis for recommendation but not as a guarantee. Materials should be tested in actual service to determine suitability for a particular purpose.

Consult Chemline for ratings on other materials not shown in this book such as **Hypalon** or **Neoprene** seals, or **Polyamide** or **Polysulfone** flow meter tubes.

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Acetaldehyde CH_3CHO	Pure	20	68	X	X	A	X	A	C	A	X
		40	104			A		A	C	A	
		60	140			B		A	X	B	
		80	176					A			
		100	212					A			
		120	248					A			
Acetaldehyde (Aqueous) CH_3CHO	40	20	68	X	X	A	X	A	B	A	X
		40	104			A		A	B	A	
		60	140			A		A	C	A	
		80	176			B		A	X	B	
		100	212					A			
		120	248					A			
Acetamide CH_3CONH_2	Satu	20	68			A		A	A	A	A
		40	104					A	A	A	A
		60	140					A			
		80	176					A			
		100	212					A			
		120	248								
Acetic Acid CH_3COOH	10	20	68	A	A	A	A	A	B	A	B
		40	104	A	A	A	A	A	B	A	
		60	140	A	A	A	A	A	C	B	
		80	176		A	A	A	A	X		
		100	212				A	A			
		120	248				B	A			
Acetic Acid CH_3COOH	20	20	68	A	A	A	A	A	B	A	X
		40	104	A	A	A	A	A	C	A	
		60	140	A	B	A	A	A	C	B	
		80	176		C	B	B	A	X		
		100	212				B	A			
		120	248				B	A			
Acetic Acid CH_3COOH	50	20	68	A	A	A	A	A	C	B	X
		40	104	A	B	A	A	A	X		
		60	140	B	C	A	A	A			
		80	176		X		B	A			
		100	212				B	A			
		120	248					A			

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Acetic Acid CH_3COOH	80	20	68	A	B	A	A	A	X	C	X
		40	104	B	C	A	A	A			
		60	140	C	X	C	B	A			
		80	176				C	A			
		100	212					A			
		120	248					A			
Acetic Acid (Glacial) CH_3COOH	99	20	68	X	X	A	A	A	X	X	X
		40	104			B	A	A			
		60	140			C	B	A			
		80	176					A			
		100	212					A			
		120	248					A			
Acetic Anhydride $(CH_3CO)_2O$	Pure	20	68	X	X	B	B	A	X	C	X
		40	104			C	C	A		X	
		60	140			X	X	A			
		80	176					A			
		100	212					A			
		120	248					A			
Acetone CH_3COCH_3	Pure	20	68	X	X	A	X	A	X	A	X
		40	104			A		A		B	
		60	140			C		A			
		80	176					A			
		100	212					A			
		120	248					A			
Acetone (Aqueous) CH_3COCH_3	10 ppm	20	68	A	A	A	A	A	A	A	B
		40	104	A	A	A	A	A	B	A	C
		60	140	B	B	A	A	A		A	
		80	176			A	B	A		B	
		100	212				B	A			
		120	248				B	A			
Acetonitrile CH_3CN		20	68			B	A	A		A	C
		40	104				A	A			
		60	140				C	A			
		80	176				X				
		100	212								
		120	248								
Acetophenone $C_6H_5COCH_3$		20	68				A	C	A	C	A	X
		40	104				B	C	A	X	A	
		60	140				C	X	A		A	
		80	176				X		A		B	
		100	212						A			
		120	248						A			
Acetyl Acetone $CH_3COCH_2COCH_3$		20	68	X	X			X	A		
		40	104						A		
		60	140						A		
		80	176								
		100	212								
		120	248								
Acetyl Bromide CH_3COBr		20	68					A	A		
		40	104					A	A		
		60	140					A	A		
		80	176					B	A		
		100	212						A		
		120	248						A		
Acetyl Chloride CH_3COCl		20	68				A	A	A	X	X	X
		40	104				A	B	A			
		60	140				C	C	A			
		80	176				X	X	A			
		100	212						A			
		120	248									
Acetylene C_2H_2		20	68	A	X	A	A	A	A	C	A
		40	104			A	A	A	A	C	A
		60	140			A	A	A	A	X	B
		80	176			B	A	A	A		
		100	212					A	B		
		120	248					B			

CHEMLINE Plastics Limited

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Nitroethane $CH_3CH_2NO_2$	Pure	20	68				A	A	X	A	X
		40	104					A			
		60	140					A			
		80	175					A			
		100	212								
		120	248								
Nitrogen Dioxide NO_2		20	68	A		A	A	A	A	A	A
		40	104				A	A			
		60	140				A	A			
		80	176				A	A			
		100	212					A			
		120	248					A			
Nitromethane CH_3NO_2	Pure	20	68				A	A		B	X
		40	104				A	A			
		60	140					A			
		80	176					A			
		100	212								
		120	248								
Nitrotoluene $C_6H_5CH_3NO_2$	Pure	20	68	X	X	A	A	A	C	X	C
		40	104			A	A	A			X
		60	140				A	A			
		80	176					A			
		100	212					A			
		120	248								
Nitrous Acid HNO_2	10	20	68			C	A	A	A	B	X
		40	104			X	A	A			
		60	140				A	A			
		80	176				A	A			
		100	212								
		120	248								
Nitrous Oxide N_2O		20	68	A		A	A	A	A	A	
		40	104	A		A	A	A	A	A	
		60	140	A		A	A	A	A	A	
		80	176			A	A	A	A	B	
		100	212				A	A	B		
		120	248				B	A	B		
Octane C_8H_{18}		20	68				A	A	A	X	A
		40	104				A	A			
		60	140				A	A			
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Octane $CH_3(CH_2)_5CH=CH_2$	Pure	20	68				A	A	A	X	A
		40	104				A	A			
		60	140				A	A			
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Oil - Heavy		20	68	B	B	X	A	A	B	X	B
		40	104				A	A	B		B
		60	140				A	A			
		80	176					A			
		100	212					A			
		120	248					A			
Oil - Light (Incl Diesal Fuels)		20	68	A		A	A	A	A	X	A
		40	104				A	A	A		
		60	140				A	A	A		
		80	176				A	A			
		100	212				A	A			
		120	248					A			
Oil - Lubricating (ASTM 1)		20	68	A		B	A	A	A	X	A
		40	104	A		C	A	A	A		B
		60	140	A		X	A	A	A		
		80	176				A	A	A		
		100	212				A	A	A		
		120	248				A	A			

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Oil - Lubricating (ASTM 2 and 3)		20	68	A		B	A	A	A	X	A
		40	104	A		C	A	A	A		B
		60	140	A		X	A	A	A		
		80	176				A	A	A		
		100	212				A	A	B		
		120	248				A	A			
Oil - Sulfonated		20	68	A		A	A	A	A	A	A
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Oil - Machine, Mineral, Motor		20	68	A		A	A	A	A	X	A
		40	104	A		B	A	A	A		A
		60	140	A		C	A	A	A		B
		80	176				A	A			
		100	212				A	A			
		120	248								
Oil - Petroleum (Crude Oil)		20	68	B		B	A	A	A	X	A
		40	104				A	A			
		60	140				A	A			
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Oleic Acid $CH(CH_2)_7CH_3$ $\|$ $CH(CH_2)_7COOH$		20	68	A	B	A	A	A	A	X	X
		40	104	A	B	A	A	A	A		
		60	140	A	B	A	A	A	A		
		80	176			A	A	A	A		
		100	212				A	A	A		
		120	248				B	A	B		
Oleum (fuming sulphuric acid) $H_2SO_4+SO_3$		20	68	X	X	X	X	A	X	X	X
		40	104								
		60	140								
		80	176								
		100	212								
		120	248								
Olive Oil		20	68	A	A	A	A	A	A	B	A
		40	104	A	A	A	A	A	A		A
		60	140	A	A	A	A	A	A		A
		80	176		A	A	A	A	A		A
		100	212				A	A			
		120	248				A	A			
Organic Phosphorus Series Insecticide (Sumition®)		20	68	X	X	A	A	A	A	A	C
		40	104			A	A	A	A	A	
		60	140			B	A	A	A	A	
		80	176				A	A			
		100	212				B	A			
		120	248				B	A			
Oxalic Acid HOOCCOOH	20	20	68	A	A	A	A	A	B	A	B
		40	104	A	A	A	A	A		A	
		60	140	A	A	A	A	A			
		80	176		A	A	B	A			
		100	212				C	A			
		120	248					A			
Oxalic Acid HOOCCOOH	50	20	68	A	A	A	A	A	B	A	B
		40	104	A	A	A	A	A		A	
		60	140	A	A	A	B	A			
		80	176		A	A	C	A			
		100	212					A			
		120	248					A			
Oxygen Gas O_2		20	68	A	A	A	A	A	A	A	B
		40	104	A			A	A	A	A	
		60	140	A			A	A	A	A	
		80	176				A	A	A	A	
		100	212					A			
		120	248					A			

CHEMLINE Plastics Limited

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	
Sodium Hydroxide (Caustic Soda) NaOH	50	20	68	A	B	A	A	A	X	A	CPE
		40	104	A	B	A	B	A		A	
		60	140	A	C	A	C	A		A	
		80	176		X	A	X	A		A	
		100	212					A			
		120	248					A			
Sodium Hypochlorite (Bleach) NaOCl	3	20	68	A	A	B	A*	A	A	B	A
		40	104	A	A	B	A*	A	B	B	A
		60	140	B	B	B	A*	A	C	C	A
		80	176								B
		100	212								
		120	248								
Sodium Hypochlorite (Bleach) NaOCl	5	20	68	A	A	B	A*	A	A	B	A
		40	104	A	A	B	A*	A	B	B	A
		60	140	B	B	C	B*	A	C	C	A
		80	176								B
		100	212								
		120	248								
Sodium Hypochlorite (Bleach) NaOCl	7	20	68	A	A	B	A*	A	A	B	A
		40	104	A	A	C	A*	A	B	C	A
		60	140	B	B	C	B*	A	C	C	B
		80	176								C
		100	212								X
		120	248								
Sodium Hypochlorite (Bleach) NaOCl	10	20	68	A	A	B	A*	A	A	X	A
		40	104	A	A	C	A*	A			B
		60	140	B	B	C	B*	A			B
		80	176								C
		100	212								X
		120	248								
Sodium Hypochlorite (Bleach) NaOCl	13	20	68	A	A	B	A*	A	A	X	A
		40	104	A	A	C	A*	A			B
		60	140	B	B		B*	A			C
		80	176								X
		100	212								
		120	248								
Sodium Iodide NaI		20	68	A		A	A	A	A	A	NITRILE
		40	104	A		A	A	A	A	A	
		60	140				B	A	A	A	
		80	176					A			
		100	212								
		120	248								
Sodium Metasilicate Na_2SiO_3		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	A
		100	212				A	A	A		
		120	248				A	A			
Sodium Nitrate $NaNO_3$	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	B
		100	212				A	A	A		
		120	248				A	A			
Sodium Nitrite $NaNO_2$	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	B	B	A	A	A	A	A	A
		80	176		B	A	A	A	A	A	B
		100	212				A	A	A		
		120	248				A	A			
Sodium Palmitate $NaC_{15}H_{31}COO$	5	20	68			A	A	A			
		40	104				A	A			
		60	140				A	A			
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Sodium Perborate $NaBO_3 \cdot 4H_2O$		20	68			A	A	A	A	A	A
		40	104			A	A	A	A	A	
		60	140			A	A	A	A	A	
		80	176			A	A	A			
		100	212				A	A			
		120	248				A	A			
Sodium Perchlorate $NaClO_4$		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A		
		60	140	B	B	A	A	A	A		
		80	176		B	B	A	A	A		
		100	212				A	A			
		120	248				A	A			
Sodium Peroxide Na_2O_2		20	68	A	A	A	A	A	A	A	B
		40	104	A	A	A	A	A	A		
		60	140	B	B	A	A	A	A		
		80	176		B	A	A	A	A		
		100	212				A	A			
		120	248				A	A			
Sodium Persulfate $Na_2S_2O_8$	Satu	20	68	A	A	A	A	A	A	A	X
		40	104	A		A	A	A	A	A	
		60	140	B		A	A	A	A	A	
		80	176				A	A	A	A	
		100	212				A	A	A		
		120	248					A			
Sodium Phosphate (Acidic) Na_3PO_4		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		B		A	A	A	A	A
		100	212				A	A	A		
		120	248				A	A			
Sodium Phosphate (Alkaline) Na_3PO_4		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		B	A	A	A	A	A	A
		100	212				A	A	A		
		120	248				A	A			
Sodium Phosphate (Neutral) Na_3PO_4		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		B	A	A	A	A	A	A
		100	212				A	A	A		
		120	248				A	A			
Sodium Silicofluoride Na_2SiF_6		20	68	A	A	A	A	A	A	A	
		40	104	A	A	A	A	A	A	A	
		60	140	B	A	A	A	A	A	A	
		80	176			A	A	A			
		100	212				A	A			
		120	248				B	A			
Sodium Sulfate Na_2SO_4	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	B
		100	212				A	A	A		
		120	248				A	A			
Sodium Sulfide Na_2S		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	B
		100	212				A	A	B		
		120	248				A	A			
Sodium Sulfite Na_2SO_3		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	B	B	
		100	212				A	A			
		120	248				A	A			

* Moulded PVDF material is suitable for Sodium Hypochlorite; however, fusion welded joints may fail prematurely.

CHEMLINE Plastics Limited

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Silver Sulfate Ag_2SO_4		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	B
		100	212				A	A	A		
		120	248				A	A			
Sodium Acetate CH_3COONa	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A		A	
		60	140	A	A	A	A	A		A	
		80	176		A	A	A	A		A	
		100	212				A	A			
		120	248				A	A			
Sodium Alum $NaAl(SO_4)_2 \cdot 12H_2O$	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	B
		100	212				A	A	A		
		120	248				A	A			
Sodium Benzoate C_6H_5COONa		20	68	A	A	A	A	A			
		40	104	A	A	A	A	A			
		60	140	A	A	A	A	A			
		80	176			A	A	A			
		100	212				A	A			
		120	248				A	A			
Sodium Bicarbonate $NaHCO_3$		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176			A	A	A	A	A	
		100	212				A	A	A		
		120	248				A	A			
Sodium Bichromate $Na_2Cr_2O_7$	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	B	A	A	A	A	A
		80	176		B	B	A	A	A	A	B
		100	212				A	A	A		
		120	248				A	A			
Sodium Bisulfate $NaHSO_4$		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		B	B	A	A	A	A	A
		100	212				A	A	A		
		120	248				A	A			
Sodium Bisulfite $NaHSO_3$		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		B	B	A	A	A	A	A
		100	212				A	A	A		
		120	248				A	A			
Sodium Bromate $NaBrO_3$		20	68	A		A	A	A	A	A	X
		40	104				A	A	A	A	
		60	140				A	A	A	A	
		80	176				A	A			
		100	212				A	A			
		120	248					A			
Sodium Bromide NaBr	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A			
		100	212				A	A			
		120	248				A	A			
Sodium Carbonate Na_2CO_3		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	
		100	212				A	A	A		
		120	248				A	A			
Sodium Chlorate $NaClO_3$	Satu	20	68	A	A	A	A	A	A	A	C
		40	104	A	A	A	A	A	A	A	
		60	140	A	B	B	A	A	A	A	
		80	176		B	B	A	A	B	A	
		100	212				A	A	B		
		120	248				A	A			
Sodium Chloride (Brine) NaCl		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	A
		60	140	A	A	A	A	A	A	A	A
		80	176		A	A	A	A	A	A	A
		100	212				A	A	A		
		120	248								
Sodium Chlorite $NaClO_2$	25	20	68	X	X		A	A	B	E	X
		40	104				B	B			
		60	140								
		80	176								
		100	212								
		120	248								
Sodium Cyanide (Aqueous) NaCN		20	68	A	A	A	A	A	A	A	
		40	104	A	A	A	A	A	A	A	
		60	140	A	A	A	A	A	A	A	
		80	176		B	B	A	A	A	A	
		100	212				A	A	B		
		120	248				A	A			
Sodium Dithionite $Na_2S_2O_4$	10	20	68	A		A	A	A	A	A	X
		40	104	A		A	A	A	A	A	
		60	140			A	A	A	A	A	
		80	176					A			
		100	212					A			
		120	248								
Sodium Ferricyanide $Na_3(Fe(CN)_6) \cdot H_2O$	Satu	20	68	A	A	A	A	A	B	A	A
		40	104	A	A	A	A	A	A	A	
		60	140	A	A	A	A	A	A	A	
		80	176		B	B	A	A			
		100	212				A	A			
		120	248				A	A			
Sodium Ferrocyanide $Na_4(Fe(CN)_6) \cdot 10H_2O$	Satu	20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	
		60	140	A	A	A	A	A	A	A	
		80	176		B	B	A	A			
		100	212				A	A			
		120	248				A	A			
Sodium Fluoride NaF		20	68	A	A	A	A	A	A	A	A
		40	104	A	A	A	A	A	A	A	
		60	140	A	A	A	A	A	A	A	
		80	176			A	A	A			
		100	212			A	A	A			
		120	248				A	A			
Sodium Hydroxide (Caustic Soda) NaOH	10	20	68	A	C	A	B	A	C	A	A
		40	104	A	X	A	B	A	C	A	A
		60	140	A	X	A	B	A	X	A	A
		80	176		X	B	C	A		A	A
		100	212				C	A			
		120	248					A			
Sodium Hydroxide (Caustic Soda) NaOH	15	20	68	A	B	A	A	A	C	A	A
		40	104	A	C	A	A	A	C	A	A
		60	140	A	C	A	B	A	X	A	A
		80	176		X	B	C	A		A	A
		100	212				X	A			
		120	248					A			
Sodium Hydroxide (Caustic Soda) NaOH	30	20	68	A	B	A	A	A	C	A	A
		40	104	A	B	A	A	A	X	A	A
		60	140	A	C	A	B	A		A	A
		80	176		X	A	C	A		A	A
		100	212				X	A			
		120	248					A			

CHEMLINE Plastics Limited

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Chromic Acid	220	20	68	A	A	X	A	A	X	X	
		40	104	B	B		A	A			
Chromium Sulfate	1	60	140	B	B		A	A			
		80	176		B		A	A			
Sodium Silicofluroide	12 g/l	100	212				A	A			
		120	248				A	A			
Chromic Acid	350	20	68	A	A	X	A	A	X	X	
		40	104	B	B		A	A			
Sodium Silicofluroide	17	60	140	C	C		A	A			
		80	176				A	A			
Oxalix Acid	1 g/l	100	212				A	B			
		120	248				A	B			
Nitric Acid	15 (1:1)	20	68	A	A	A	A	A			
		40	104	A	A	A	A	A			
Hydrofluoric Acid	3	60	140	B	B	B	A	A			
		80	176	X	X		A	A			
		100	212				A	A			
		120	248				A	A			
Nitric Acid	15 (1:1)	20	68	A	A	A	A	A	A	A	
		40	104	A	A	A	A	A	A	B	
Hydrofluoric Acid	5	60	140	B	C	X	A	A	B		
		80	176	X	X		A	A	B		
		100	212				A	A	C		
		120	248				B	A	X		
Nitric Acid	15 (1:1)	20	68	A	B	B	A	A			
		40	104	B	C	B	A	A			
Hydrofluoric Acid	10	60	140	B	C		A	A			
		80	176	X	X		A	A			
		100	212				B	A			
		120	248				B	A			
Nitric Acid	15 (1:1)	20	68	A	B	B	A	A			
		40	104	B	C	B	A	A			
Hydrofluoric Acid	15	60	140	B	C		A	A			
		80	176	X	X		A	A			
		100	212				B	A			
		120	248				B	A			
Nitric Acid	5 (1:1)	20	68	A	A	A	A	A			
		40	104	B	B	B	A	A			
Hydrofluoric Acid	20	60	140	B	B	B	A	A			
		80	176	X	B	C	A	A			
		100	212				B	A			
		120	248				B	A			
Nitric Acid	50 100g	20	68	B	B	B	A	A			
		40	104	X	X	X	A	A			
Sulfuric Acid	50 100g	60	140				A	A			
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Sulfuric Acid	2 (1:1)	20	68	A	A	X	A	A	A	B	
		40	104	A	A		A	A	B		
Chromic Acid	1	60	140	B	B		A	A	C		
		80	176		B		A	A	X		
		100	212		C		A	A			
		120	248				A	A			
Sulfuric Acid	10 (1:1)	20	68	A	B	X	A	A	A	B	
		40	104	B	B		A	A	B		
Chromic Acid	10	60	140	C	X		A	A	C		
		80	176				A	A			
		100	212				A	A			
		120	248				A	A			
Sulfuric Acid	18 (1:1)	20	68	A	B	X	A	A	B	C	
		40	104	B	B		A	A	C		
Chromic Acid	25	60	140	C	X		A	A	X		
		80	176				A	A			
		100	212				A	A			
		120	248				B	A			

Chemical	Concentration (%)	Temp. °C	Temp. °F	PVC	CPVC	PP	PVDF	TEFLON	VITON	EPDM	NITRILE
Sulfuric Acid	4	20	68	B	B	X	A	A	X	X	
		40	104	B	B		A	A			
Chromic Acid	400 g/l	60	140		B		A	A			
		80	176		C		A	A			
		100	212				A	A			
		120	248				B	A			
Sulfuric Acid	15	20	68	A	A	X	A	A	A	B	
		40	104	A	A		A	A	A	B	
Chromic Acid	5	60	140	B	B		A	A	B	C	
		80	176				A	A	C	X	
Phosphoric Acid	80 parts	100	212				A	A	X		
		120	248				A	A			
Sulfuric Acid	2	20	68	A	A	X	A	A	A	X	
		40	104	A	A		A	A	B		
Chromic Acid	10	60	140	B	B		A	A	C		
		80	176		B		A	A	X		
Water	80 parts	100	212				A	A			
		120	248				A	A			
Sulfuric Acid	0.7	20	68	A	A	X	A	A	X	X	
		40	104	A	A		A	A			
Chromic Acid	250	60	140	B	B		A	A			
		80	176		B		A	A			
Sodium Silicofluoride	1 g/l	100	212				A	A			
		120	248				A	A			
Sulfuric Acid	20 (1:1)	20	68	A	A	X	A	A	A	A	
		40	104	B	B		A	A	B	B	
Hydrofluoric Acid	10	60	140	B	B		A	A	C	C	
		80	176		C		A	A			
		100	212				A	A			
		120	248				B	A			
Sulfuric Acid	25 (1:1)	20	68	A	A	X	A	A			
		40	104	B	B		A	A			
Hydrofluoric Acid	15	60	140	B	B		A	A			
		80	176	X	X		A	A			
		100	212				B	A			
		120	248				B	A			
Sulfuric Acid	75	20	68	A	A	B	A	A			
		40	104	A	A	B	A	A			
Nitric Acid	5	60	140	B	B	C	A	A			
		80	176		B		A	A			
Chlorine Gas	Trace	100	212					A			
		120	248					A			
Sulfuric Acid	75 (1:1)	20	68	A	A	A	A	A	A	A	
		40	104	A	A	B	A	A	B	A	
Sulfurous Acid	4	60	140	A	A	B	A	A	C	B	
		80	176		B	B	A	A	X	C	
		100	212				A	A			
		120	248				A	A			
Sulfuric Acid	150	20	68	A	A	A	A	A	A	A	
		40	104	A	A	A	A	A	A	A	
Spelter	80	60	140	A	A	A	A	A	A	A	
		80	176		B	B	A	A	B	B	
Manganese Sulfate	2 g/l	100	212				A	A			
		120	248				A	A			
Sodium Sulfade	225	20	68	A	A	A	A	A	A	A	B
		40	104	A	A	A	A	A	A	A	
Sulfuric Acid	225	60	140		A	A	A	A	A	A	
		80	176		B	B	B	B	A		
Formaldehyde	50 g/l	100	212				B	B	A		
		120	248								
Sulfuric Acid	88 (1:1)	20	68				A	A			
		40	104				A	A			
Phosphoric Acid	80	60	140				C	B			
		80	176								
		100	212								
		120	248								

ATTACHMENT 10 – CLOSURE PLAN

The administrative rules promulgated pursuant to Rule Chapter 62-710 of the Florida Administrative Code (F.A.C) and Title 40 of the Code of Federal Regulations (CFR), Part 279.(h), Subpart G, establishes requirements for the closure and, if necessary, postclosure care of oil processing and hazardous waste management facilities. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

The information provided was used to prepare the closure and postclosure care cost estimate provided in **Section 10**, "Closure and Postclosure Care Cost Estimates."

10.1 Closure Performance Standard

[40 CFR 279.54(h)]

This Closure Plan is designed to ensure that the facility will be closed in a manner that achieves the following:

a. Minimizes the need for further maintenance; and
b. Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, postclosure escape of nonhazardous wastes, waste and reclaimed oil constituents, leachate, contaminated runoff, or waste decomposition byproducts to the groundwater, surface water, or atmosphere; and, as applicable.
c. Complies with the unit-specific closure requirements for each of the following units:

10.2 Unit-Specific Information (See Attachment 1 - Figure 1.1.2 for locations)

Table 10.2-1 Waste Management Unit Information:

Unit Designation	Max Inventory	Closure Date	Dispose or Recycle
Containment Pad Area	3 – 69,300 Gal Primary Treatment Tanks		R
	1- 48,600 Gal Primary Treatment Tank		R
	1- 10,000 Gal Used Oil Tank		D
	3- 5,000 Used and Virgin		R
Pre-treatment Building	1-1,000 Gal Settling Tank		D
Containment Area	1-1,000 Gal Recycled Oil Tank		D
	1- 1,000 Gal Sludge/Settled Solid Tank		R

	1- 1,000 Gal Flocculant Tank 1- 1,000 Gal Sodium Hydroxide Tank 1-1,000 Coagulant Tank		D D
Lab Area	Non-hazardous Reagents		D
Bulk Storage Area	Various Non-hazardous Drums and Totes		D
Frac and Roll-off /Truck Unloading Containment Area	2- 21,000 Gal Frac Tanks 1- 10 Yard Roll-Off for Sludge Disposal Containment		R R
Pipeline Area	800' 6"x10"x15" Triple contained HDPE Primary and Secondary with concrete pipe protection.		

10.3 Closure Schedule

Has not determined when the facility will close and does not anticipate completing final closure of the entire facility prior to expiration of the facility's used oil processing operating license.

Closure Activity	**Schedule**
Initiate Closure; Cease Acceptance of Waste	Immediate
Process all equipment, piping and tanks in containment p and Pre-treatment building containment area systems.	1 Week
Transfer all other waste off-site for disposal/recycling	1 Weeks
Transfer bulk wastes off-site to authorized disposal streams	1 Week
Process all liquids in containment pad tanks and pre-treatment building tanks	1 Week
Decontaminate equipment , pumps, piping and tanks on containment pad	2 Weeks
Decontaminate and Remove Equipment in Lab Room	1 Day
Decontaminate bulk storage area and pre-treatment area building containment area	2 Days
Decontaminate Surfaces in Pre-treatment Building, Containment Pad, Bulk Storage Area Bulk Storage Area and Containment Pad.	1 Week

Decontaminate and remove pumps, piping and all other equipment at facility.	4 Weeks
Sample Containment Area floors, Bulk Storage Area, Roll-Off, Sludge and Roll Off Truck Unloading Areas.	2 Weeks
Obtain P. E. Certification of Closure Performance	5 Days
Prepare and Submit Closure Report to DEP	4 Weeks

10.3.1 Notification and Time Allowed for Closure - Final closure activities will be initiated within 90 days of receipt of the final volume of hazardous wastes and completed within 180 days of receipt of the final volume of waste. The tasks and estimated time required for partial closure shall follow the schedule specified in **Section 10.3**. The DEP will be notified by the UES facility 60 days before final closure begins. Final closure will be certified by the UES owner and an independent, qualified, registered professional engineer of the state of Florida.

10.3.2 Extensions for Closure Time - In the event that an extension for closure for the facility or any unit is necessary, the UES facility will request an extension in accordance with the requirements of 40 CFR §279.54(h).

10.4 Unit-Specific Closure Procedures

Unit-specific closure procedures are provided for each unit identified in **Section 10.2** of this document.

10.4.1 Closure of Concrete Containment Pad Areas and Bulk Storage Area - This section describes the procedures for closure of *all Containment Pad Areas and Bulk Storage Area.* The general closure requirement and specific closure procedures are discussed below.

10.4.1.A. General Closure Requirement - At closure, waste residues will be removed from the containment area systems and the bulk storage area. Remaining equipment contaminated with waste or waste residues will be decontaminated and removed.

10.4.1.B. Specific Closure Procedures - Specific procedures for inventory management, unit inspection, decontamination, sampling and analysis, and additional waste management are discussed below.

10.4.1.B.1 Inventory and Remedial Waste Management Procedures - A physical inventory check of all containers and equipment , tanks, piping, pumps in the Containment Pad will be completed and verified with the Preview system. All fuel and oil type wastes will be blended into the appropriate Tank Systems for transportation off-site for energy recovery. All remaining wastes will be shipped off-site for disposal and/or recycling.

10.4.1.B.2 Unit Inspection Procedures - A detailed inspection of each containment pad area and bulk storage area and wall will be completed. The inspection will document the location of spills, contamination and migration pathways. A similar inspection of the exterior walls of each containment pad will also be documented.

10.4.1.B.3 Decontamination Procedures - After inventory removal, the containment area and bulk storage area floors will be decontaminated. A surface cleaning technique (hydroblasting) will be used to decontaminate the surfaces of the concrete floors. The wash water and debris from the treatment is collected and separated. The solid material is drummed for incineration or landfilling, and the water is recycled or collected for eventual bulk transportation to a permitted facility for proper management. All waste shall be properly manifested, labeled, and shipped as required by non-hazardous and hazardous waste regulations. These cleaning methods require a 3-man crew, high pressure pumps, and wash water holding tanks. Personnel operating the treatment equipment require additional personal protection equipment due to the inherent hazards in this cleaning method. Where appropriate, temporary run-off controls will be constructed to contain wash water.

Following the surface treatment, a sample of the final water rinsate will be collected for analysis and comparison to the performance standards. In addition, concrete cores will be collected from the floors of the container management units. The samples will be collected at the density specified in the MDEQ guidance document, "Guidance Document for Verification of Soil Remediation", treating each unit as a "small site". Based on the square footage of each containment unit, the following numbers of sample locations are planned:

Concrete Pad Management Unit	Approximate Area (sq. ft.)	Number of Samples
Containment Pad Area	6,08	5
Pre-treatment Building Containment Area	2,000	3
Bulk Storage Area	4,60	4

10.4.1.B.4 Sampling and Analysis Procedures - Sampling will be biased toward visibly stained locations, since these locations should represent the greatest possibility for discovering residual contamination. These cores will be analyzed for volatile organic compounds and semi-volatile organic compounds to demonstrate that the concrete has been decontaminated. The coring and sampling requires specialized equipment and a 2-man crew.

Soil samples will also be collected from beneath each of the concrete core locations using a stainless steel hand auger that will be decontaminated between sample locations. One sample will be collected from each location at the 0-1 foot depth below the concrete surface and transferred directly into appropriate containers and stored in ice packed coolers for transportation to the laboratory.

10.4.1.B.5 Additional Waste Management Procedures - Decontamination waste sand materials that cannot be decontaminated will be characterized, containerized and shipped off-site for disposal and/or recycling.

10.4.1.B.6 Other Control Procedures - Prior to initiating decontamination procedures, the site will be 'prepped' to maintain run- on and run-off control. The facility connection to the City of Tampa POTW sewer collection system will be closed to prevent unintended contaminated liquids to enter the system. All portable equipment to be decontaminated will be moved to an existing containment pad areas prior to initiating the decontamination process to prevent run-off of rinseates. Plastic sheeting or other suitable barrier will be erected along the containment wall where necessary to contain any overspray within the secondary containment structure.
All portable/dismantled decontaminated equipment/structures will be moved to a containment area away from the decontamination areas to prevent run-on of contaminated liquid. All sheeting will be containerized and transported off-site as a non-hazardous waste. All barriers utilized will be decontaminated and transported off-site to a metal recycler or solid waste disposal facility.
The groundwater monitoring wells will be sampled prior to initiating the closure activities and following completion of all closure activities. The samples will be tested as per the Facility's approved groundwater monitoring program.

10.4.2 Closure of Roll Off and Truck Unloading Areas, Pre-treatment Building Laboratory and Pipeline Area- This section describes the procedures for closure of laboratory area. The general closure requirement and specific closure procedures are discussed below.

10.4.2.A. General Closure Requirement - At closure of the Lab and the Unloading and Roll Off Areas at the UES facility will remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated soils, and structures and equipment contaminated with waste.

10.4.2.B. Specific Closure Procedures - Specific procedures for inventory management, unit inspection, decontamination, sampling and analysis, and additional waste management are discussed below.

10.4.2.B.1 Inventory and Remedial Waste Management Procedures - All flowable wastes the Roll Off will be transported off-site for energy recovery or incineration.

10.4.2.B.2 Unit Inspection Procedures - A detailed inspection of the laboratory floor will be completed. The inspection will document the location of spills, contamination and migration pathways. A similar inspection of the roll off pad and truck unloading areas will also be documented.

10.4.2.B.3 Decontamination Procedures - The roll off and associated piping will then be flushed with appropriate compatible cleaning solutions to reduce any liquid, solid or clinging waste residues. The resulting residues will either be collected into containment area and sent to a suitably permitted recycling facility, or transported off site to authorized facilities for reclamation, treatment and/or disposal at other authorized facilities.
decontamination. The remaining components of the piping system will then either be decontaminated on site utilizing methods described in Table 1 of 40 CFR 268.45, Laboratory equipment not opened will be reused, laboratory equipment open or with containers that have been compromised will be placed into containers and transported offsite to an authorized facility for reclamation, treatment and/or disposal.

Waste residues will be removed from roll-off by flushing and steam cleaning. Steam cleaning is a proven technique for decontaminating surfaces and mobilizing heavier liquids.

10.4.B.4 Sampling and Analysis Procedures - Sampling will be biased toward visibly stained locations in the laboratory, roll off pad and unloading areas.

Concrete wipe samples will also be collected from areas that appear stained. The samples will be and transferred directly into appropriate containers and stored in ice packed coolers for transportation to the laboratory. Soil samples for VOC analysis will be preserved in the field with methanol per DEP and EPA Methods. The soil samples will be analyzed for volatile organic compounds and semi-volatile organic compounds (SVOCs) and RCRA metals. The results will be compared to the Cleanup Criteria. Any soils determined to be contaminated will be removed and transported offsite to a treatment or disposal facility licensed to accept wastes described by the waste codes of the source of the contamination.

Lab and Soils Management Unit	Approximate Area (sq. ft.)	Number of Samples
Roll Off and Truck Unloading Areas	1,200	2
Pre-treatment Building Laboratory Area	200	1
Pipeline Area	800 linear Feet	5

10.5 Certification of Closure

Within 60 days of completion of closure UES will submitted the Director, by registered mail, a certification that the facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification will be signed by UES and by an independent registered professional engineer. Documentation supporting the independent registered engineer's certification will be furnished to the Director in accordance with FAC requirement including:

1. The results of all sampling and analysis;
2. Sampling and analysis procedures;
3. A map showing the location where samples were obtained;
4. Any statistical evaluations of sampling data;
5. A summary of waste types and quantities removed from the site and the destination of these wastes; and
6. If soil has been excavated, the final depth and elevation of the excavation and a description of the fill material used.

The UES facility will maintain financial assurance for closure until the Director releases the UES facility from the financial assurance requirements for closure under
The certification must be worded as follows:

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 gather and evaluate 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 be 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.

10.6 Postclosure Notices Filed

The applicant must provide documentation that the postclosure notices required under 40 CFR §265.310 have been filed for hazardous waste disposal units that have been closed at the facility.

10.7 POSTCLOSURE PLAN

10.7.1 Applicability - Not applicable: Hazardous waste is not being stored at the facility. In addition waste will not be left behind at closure. A survey plat, postclosure care, postclosure certifications, and other notices are not required.

10.8 Applicability - Not applicable

Hazardous waste is not being stored at the facility. In addition waste will not be left behind at closure. A survey plat, postclosure care, postclosure certifications, and other notices are not required.

10.9 Closure Cost Estimate

Attached is the Used Oil Processing Facility Closing Cost Estimate Form and contractors cost estimate and proposal.

☒ **(b) Recalculated Cost Estimates (complete items IV and V)**

IV. RECALCULATIONS OF CLOSING COSTS

For the time period in the facility's operation when the extent and manner of its operation makes closing **most expensive.**

Third Party Estimate/Quote must be provided for each item.
Costs must be for a third party providing all materials and labor.

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1. Decontamination and Disposal Note: These costs must be broken down by individual waste stream. If contamination is found, the cost estimate must be recalculated to include remediation costs.				
a. Used Oil Tanks, containers, piping, equipment and secondary containment decontamination	Tanks	5	$5,000.00	$25,000.00
waste characterization	Tanks	5	$600.00	$3,000.00
disposal	Gallon	266500	$.25/gal	$66,625.00
b. Wash Water waste characterization	Lump Sum	1	$600.00	$600.00
disposal	Gallon	22,000	$.25/gal	$5,500.00
c. Sludges/Sediment waste characterization	Lump Sum	1	$600.00	$600.00
disposal	Gallon	5,000	$1.00	$5000.00
d. Used Oil Filter Management waste characterization	Lump Sum	1	$600.00	$600.00
disposal	Tons	5	$100.00	$500.00
e. Petroleum Contaminated Water (PCW), tanks, containers, piping, equipement and secondary containment waste characterization	Tanks	3	$650.00	$1,950.00
disposal	Gallon	15,000	$.25/gal	$3,750.00
f. Mobilization Costs	Lump Sum	1	$5,000.00	$5,000.00
g. Other Tank(s) Removal	8	$10,000.00	$80,000.00	$80,000.00
Subtotal (1) Decontamination/Disposal:				$197,975.00

Florida Department of Environmental Protection

Bob Martinez Center • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

DEP Form #62-710.901(7)
Form Title Used Oil Processing Facility Closing Cost Estimate Form
Effective Date 4-23-13
Incorporated in Rule 62-710.800(6)(b)

Used Oil Processing Facility Closing Cost Estimate Form

Date: _____ Date of DEP Approval: _____ (DEP use only)

I. GENERAL INFORMATION: Latitude: 27.9380646 Longitude: -82.4711458 EPA ID Number: FLR000199802

Facility Name: Universal Environmental Solutions, LLC Permit Number: _____

Facility Address: 1650 Hemlock St. / Tampa FL. 33605

Mailing Address: P.O. BOX #76105 / Tampa FL. 33675

Contact Person's Name: Ed Kinley Phone Number: (813) 241-9206 x 183

E-mail: Ekinley@uestampa.com Fax Number: (813) 241-9215

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check Type)

_____ Letter of Credit* _____ Performance Bond* X Guarantee Bond*

_____ Insurance Certificate _____ Financial Test _____ Trust Fund Agreement

*Indicate mechanisms that require use of a Standby Trust Fund Agreement

III. ESTIMATE ADJUSTMENT: (check and use either box a or b, below)

Rule 62-710.800(6)(c), Florida Administrative Code, sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closing in current dollars. Estimates are due annually between January 1 and March 1. Select one of the methods of cost estimate adjustment below.

☐ **(a) Inflation Factor Adjustment**

Inflation adjustment using an inflation factor may only be made when a Department approved closing cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste Financial Coordinator at (850) 245-8732 or be found online at http://www.dep.state.fl.us/waste/categories/swfr/

This adjustment is based on the Department approved closing cost estimate dated: _____

Latest DEP approved Closing Cost Estimate	X	Current Year Inflation Factor	=	Inflation Adjusted Annual Closing Cost Estimate
_____		_____		_____

Signature: _____ Phone: _____

Name and Title: _____ E-mail: _____

If you have questions concerning this form, please contact the Used Oil Permitting Coordinator at the address below, by phone at (850) 245-8781, or by e-mail at: Bheem.Kothur@dep.state.fl.us

Please mail this completed cost estimate to:

Used Oil Permitting Coordinator
Florida Department of Environmental Protection
2600 Blair Stone Road MS 4560
Tallahassee, FL 32399-2400

Please e-mail or mail a copy of the cost estimate to:

Solid.Waste.Financial.Coordinator@dep.state.fl.us
or
Solid Waste Financial Coordinator - FDEP
2600 Blair Stone Road MS 4565
Tallahassee, FL 32399-2400

2. Engineering (On-site Inspections and Quality Assurance are to be included in this item).

a. Closure sampling and analysis plan implementation as described in the permit application — $9000.00

b. Closure Certification Report — $5000.00

Subtotal (2) Professional Services: $14,000.00

Subtotal of (1) and (2) Above: $211,975.00

3. Contingency (10% of the Subtotal) $21,197.50

TOTAL CLOSING COST: $233,172.50

V. CERTIFICATION BY ENGINEER and OWNER/OPERATOR

This is to certify that the Closing Cost Estimates pertaining to the engineering features of the this used oil processing facility have been examined by me and found to conform to engineering principals applicable to such facilities. In my professional judgment, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing of the facility, and comply with the requirements of Florida Administrative Code (F.A.C.) Rule 62-710 and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Closing Cost Estimates shall be submitted to the Department **annually** between January 1 and March 1 of each year and revised, adjusted and updated as required by Rule 62-710.800(6)(c), F.A.C.

Signature of Engineer	Signature of Owner/Operator
Engineer's Name and Title (please print or type)	Owner/Operator's Name and Title (please print or type)
Florida Registration Number (please print or type)	Owner/Operator's Telephone Number
Engineer's Mailing Address	Owner/Operator's E-mail Address
Engineer's Telephone Number	
Engineer's E-mail Address	

Plant Closure Estimate Worksheet

1 a. USED OIL TANKS (includes all four AST process tanks + one dedicated Used Oil tank) = 266,500 gallons

- Assumes all five tanks are full....266,500 gallons X .25 per gallon T & D
- Analysis of each tank (Metals / Volatiles / Semi –Volatiles)
- Decontamination...five tanks X $5,000.00 per

1b. WASH WATER

- Assumes contractor will generate 5,000 gallons per tank of rinseate in the four process tanks + 2,000 gallons of rinseate in the Used Oil tank = 22,000 gallons of Non Hazardous "wash water".
- One laboratory test (Metals / Volatiles / Semi – Volatiles) of bulk "wash water"

1c. SLUDGES / SEDIMENT

- Assumes 1,250 gallons of non processible tank bottom sludge in each of the four process tanks = 5,000 gallons

1d. USED OIL FILTERS

- Assumes 5 tons for Non Hazardous Incineration (City of Tampa – McKay Bay)
- One laboratory test (Metals / Volatiles / Semi – Volatiles)

1e. PCW TANKS & PIPING

- Assumes all three Diesel & Gasoline tanks are full (15,000 gallons total)
- One laboratory test (Metals / Volatiles / Semi – Volatiles / Flash)

1f. MOBILIZATION

- Assumes local environmental services contractor and delivery of equipment to perform closure activities.

1g. OTHER

- Assumes removal of: (4) Empty Process tanks / (1) Used Oil tank / (3) PCW tanks

SEAVY & ASSOCIATES, INC.

October 16, 2014

Mr. Ed Kinley
Gulf Marine Repair Inc.
1650 Hemlock Street
Tampa, Florida 33605

Re: Used Oil Processing Facility Closing Cost Estimate

Dear Mr. Kinley:

As requested, Seavy & Associates, Inc. (S&A) has prepared this proposal to provide labor, equipment, and materials for closure of the Used Oil Processing Facility. The scope of work and cost estimate is included with this proposal.

Task 1 – Used oil Tanks, Containers, Piping, Equipment, and Secondary Containment Decontamination

- The tanks will have samples collected for a waste characterization for disposal.
- S&A will contract a certified used oil disposal facility to remove and dispose of any oil liquids from the tanks.
- The tanks will be pressure washed utilizing a hot water pressure washer and degreaser to decontaminate tanks, containers, piping, equipment, and secondary containment.
- Utilizing a roll-off piping, containers, and equipment will be disposed.

Task 2 – Wash Water

- After cleaning of the tanks is completed, the tanks wash water will be sampled for a waste Characterization.
- S&A will contract a certified disposal facility to remove and dispose of the wash water generated from the tank cleaning.

Task 3 – Sludge's/Sediment

- After the Tanks have been emptied of oil, before cleaning, any sludge/sediment remaining in the tanks will be sampled for a waste characterization.
- S&A will contract a certified disposal facility to remove and dispose of any sludge/sediment left in the tanks.

Task 4 – Used Oil Filter Management

- Samples will be collected from the used oil filters to generate a waste characterization.
- S&A will contract a certified disposal facility to collect and dispose of the used oil filter material.

Task 5 – Petroleum Contaminated Water (PCW), Tanks, Containers, Piping, Equipment and Secondary Containment.

- After cleaning of the tanks is completed, the tanks wash water will be sampled for a waste Characterization.

- S&A will contract a certified disposal facility to remove and dispose of the wash water generated from the tank cleaning.

Task 6 – Mobilization

- S&A Will Mobilize all needed tools, equipment, and supplies and set up a decontamination area prior to starting closure activities.

Task 7 – Tank(s) Removal

- S&A will utilize a crane to load clean tanks onto flatbed trucks for recycling/disposal of tanks.

Task 8 – Closure Sampling and Analysis Plan Implementation.

- S&A will develop a sampling plan based on the UES used oil processing facility closing cost estimate form.
- Samples will be collected and analyzed by a NELAC Certified Laboratory. The analytical data will be used to create waste characterization forms to allow for proper disposal as outline through task's 1-5.

Task 9 – Closure Certification Report

- S&A will create the Closure Certification Report upon completion of all closure activities.

If you have questions or need additional information, please do not hesitate to contact me at 813-917-9267.

Very truly yours,
SEAVY & ASSOCIATES, INC.

Jim Seavy,
President

Universal Environmental Solutions, LLC
Seavy & Associates, Inc. is authorized to initiate service per this Proposal, General Assumptions, Exhibit A as of _____, 2014.

By:_____

Title:_____

Date:_____

Attachments:
Exhibit A: Cost Breakdown Sheet

[redacted]

Project: UES Pre-Treatment Closure
ESTIMATE BY: JMS
DATE: 15-Oct-14

CLIENT: Universal Environmental Solutions
LOCATION: UES, Tampa

TASK 1: Used oil tanks, containers, piping, equipment and secondary containment decontamination
TASK 2: Wash water disposal
TASK 3: Sludges/Sediment disposal
TASK 4: Used oil Filter management
TASK 5: Petroleum contaminated water, Tanks, containers, piping, equipment and secondary Containment Disposa

TASK 6: Mobilization Costs
TASK 7: Tank Removal
TASK 8: Closure sampling and analysis plan implementation
TASK 9: Closure certification report

Assumptions:

PERSONNEL LEVEL	BILLING RATE	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5	TASK 6	TASK 7	TASK 8	TASK 9		TOTAL HOURS	TOTAL LABOR COST
Officer P.E	$121	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	10.0	0.0	18.0	$2174
Technial Associate/Engineer	$86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	12.0	$1035
Electrician	$108	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	$
Supervisor	$66	40.0	8.0	8.0	8.0	8.0	8.0	8.0	0.0	0.0	0.0	88.0	$5768
Operator	$60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	$
Technician/Admin	$52	100.0	6.0	0.0	0.0	0.0	16.0	16.0	16.0	20.0	0.0	174.0	$9005
CADD	$67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	16.0	$1067
											0.0	0.0	$
											0.0	0.0	$
											0.0	0.0	$
TOTAL LABOR HOURS		140.0	14.0	8.0	8.0	8.0	24.0	24.0	24.0	58.0	0.0	308.0	
TOTAL LABOR COST		$7,797	$835	$524	$524	$524	$1,352	$1,352	$1,794	$4,345	$0	$19,049	$19,049

TASK 1: Used oil tanks, containers, piping, equipment and secondary containment decontamination
TASK 2: Wash water disposal
TASK 3: Sludges/Sediment disposal
TASK 4: Used oil Filter management
TASK 5: Petroleum contaminated water, Tanks, containers, piping, equipment and secondary Containment Disposa

TASK 6: Mobilization Costs
TASK 7: Tank Removal
TASK 8: Closure sampling and analysis plan implementation
TASK 9: Closure certification report

Markup: 15%

DIRECT EXPENSE DESCRIPTION	UNIT	UNIT COST	0 TASK 1	0 TASK 2	0 TASK 3	0 TASK 4	0 TASK 5	0 TASK 6	0 TASK 7	0 TASK 8	TASK 9	TASK 10	TOTAL UNITS	TOTAL DIRECT COST	15% MARKUP + DIRECT COST
Crane for Tank Install	Per Day - 4 Hr Min	$1,560.00	0	0	0	0	0	0	1	0	0	0	1	1,560	1,794
Misc Directs/Phone/CC/Eq Delivery/Misc	Lump Sum	2% of Labor	2% of Labor	2% of Labor	2% of Labor	2% of Labor	2% of Labor	2% of Labor	2% of Labor	2% of Labor	2% of Labor	2% of Labor	0	381	438
Mileage	Mil	$0.63	244	0	0	0	0	0	0	0	0	0	244	154	177
Tool Truck	Day	$50.00	5	0	0	0	0	0	0	0	0	0	5	250	288
pressure Washer	Day	$150.00	6	0	0	0	0	0	0	0	0	0	6	900	1,035
Degreaser	Per	$58.00	20	0	0	0	0	0	0	0	0	0	20	1,160	1,334
Pump	Day	$100.00	5	0	0	0	0	0	0	0	0	0	5	500	575
Used oil/Wash Water Disposal	Per	$0.25	266500	22000	0	0	0	0	0	0	0	0	288500	72,125	82,944
Waste Characterization	Per	$600.00	5	1	1	1	0	0	0	0	0	0	5	150	173
Health and safety fluids	Day	$30.00	5	0	0	0	0	0	0	0	0	0	5000	5,000	5,750
Sludge/Sediment Disposal	per	$1.00	0	0	5000	0	0	0	0	0	0	0	5	500	575
Used oil Filter Disposal	Ton	$100.00	0	0	0	5	0	0	0	0	0	0	3	1,950	2,243
PCW Waste Characterization	Per	$650.00	0	0	0	0	3	0	0	0	0	0	15000	3,750	4,313
PCW Water Disposal	Per	$0.25	0	0	0	0	15000	0	0	0	0	0	1	4,345	4,997
Mobilization cost	Lump Sum	$4,345.00	0	0	0	0	0	1	0	0	0	0	8	68,000	78,200
Tank Removal	Per	$8,500.00	0	0	0	0	0	0	8	0	0	0	1	6,225	7,159
Closure sampling and anaysis implementation	Lump	$6,225.00	0	0	0	0	0	0	0	1	0	0	2100	462	531
Report Repro	Sheet	$0.22	0	0	0	0	0	0	0	0	2100	0	1	350	403
Roll-off	Per	$350.00	1	0	0	0	0	0	0	0	0	0	0	0	0
	Per Quote	$0.00	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lump	$0.00	0	0	0	0	0	0	0	0	0	0			
	Per	$0.00	0	0	0.0	0.0	0	0	0	0	0	0			
TOTAL DIRECT COST			$84,232	$7,034	$6,452	$1,377	$6,367	$5,028	$80,025	$7,200	$431	$0			$192,927
TOTAL TASK COST (LABOR + DIRECTS)			$92,029	$7,869	$6,976	$1,901	$7,091	$6,380	$81,378	$8,994	$4,976	$0			$211,975

ATTACHMENT 11 –EMPLOYEE TRAINING PLAN

A. Program Intent

- Federal (U.S. EPA) program for proper onsite management and handling of oil, prevention of spills, and proper spill response if spills occur. The U. S. EPA could inspect facility for compliance with the site SPCC Plan.
- Provide compliance with Oil Processing Permit requirements for the UES oil processing plant located at 1650 Hemlock Ave Tampa FL.
- "Oil" includes petroleum-based materials (gasoline, diesel fuel, kerosene, fuel oil, motor oil, hydraulic fluid, used oil, transformer oil, etc.), as well as vegetable oil, in a container having a capacity of 55 gallons or more.

B. SPCC Plan

Developed for implementation by site personnel. Facility copy must be maintained/updated by facility's SPCC Coordinator. Copy is available for review by all employees at any time.

C. Training -Who, When, What

Who: All facility employees involved in handling and management of any oil.

When: Minimum initial and annual refresher for all employees involved in oil handling.
- Within two weeks of hire for new employees involved in oil handling.
- If/when facility oil handling changes (so the SPCC Plan must be dated).

What: Initial: Entire SPCC Plan
Annual Update: Known spill events or failures, malfunctioning components
Ongoing: Facility changes, recently developed precautionary measures

D. SPCC Coordinator

Responsible for SPCC Plan implementation and oil spill prevention at the facility; see that person if ever any question or concern.

E. General Facility Layout, Site Plan and Drainage Systems

Ensure understanding of general facility operations, overall facility layout, drainage discharge locations, sensitive receiving water bodies, etc.

Attachment 1 Figure 1.1.2 summarizes the facility locations for oil handling.

F. Facility's Specific Oil Handling Inventory

Applies to containers with a capacity of 55 gallons or more, and transfers to/from them:
Stationary and mobile aboveground storage tanks (ASTs)
Underground storage tanks (USTs)
Drum and "tote" tank storage and handling

Also applies to:
Gauges, alarms, and leak detection systems
Piping systems
Oil-filled electrical, operating, and manufacturing equipment
Oil unloading/loading areas
Additional oil storage or handling activities

G. Containment and/or Diversionary Structures or Equipment to Prevent a Discharge

Specific facility measures provided, as per the SPCC Plan
Important because spilled oil will flow in accordance with drainage paths
Intent of program is to keep oil out of water, out of stormwater and drainage
Review operation and maintenance of all equipment intended to prevent discharges

H. Facility Drainage (Section 6.0 – Figure 3 Stormwater Drainage Plan)

Management of drainage from diked areas
Drainage from undiked areas
Potential impact on surface waters (including wetlands)

I. Facility Transfer Operations. Pumping and In-plant Processes (Attachment 6.0 SPCC Plan Section VI and Figure 3 Stormwater Drainage Plan)

Operation and maintenance measures to prevent discharges

J. Truck Unloading/loading Areas

Spills from inbound/outbound transfers, including direction of flow Unloading/loading must be visually monitored by facility personnel at all times Immediate response must be made to any spills, per the Plan's spill response procedures

K. Inspections and Tests (Attachment 6 - SPCC Plan Appendix B and E)

Comprehensive visual inspection monthly, with documentation prompt completion of required repairs, with documentation Periodic integrity testing of tanks

L. Security

General facility security measures, and localized M easures for individual oil handling areas. The facility limits are fences and entry can only be approved by the plant operator or facility owner. The UES pretreatment facility is located within a secure area that requires security gate clearance to enter.

M. Spill Response Procedures

Need to watch for, report, and clean up spills
Spill response equipment, inventory, minimum amount to be always maintained, replenishment of use materials, etc.
Review understanding of spill equipment, intent and how to use/deploy it; supplement with construction equipment if necessary, etc.
Spill reporting requirements to Federal and State agencies

N. Additional State Requirements

Petroleum Bulk Storage Program
Used oil requirements

O. Miscellaneous

Describe and review past discharges, reasons or causes, procedures to prevent recurrence, etc.
Describe and review any other equipment failures, malfunctioning components and any recently developed precautionary measures relative to oil handling and spill control

P. General Rules

Do not wait for problems or spills to occur. Keep eyes open, anticipate problems and take precautionary measures to prevent incidents. Report all identified or suspected concerns.

Q. Any Questions?

Facility: UES Bilge Oily Water Processing Facility, Tampa Florida 33619

1. SPCC Plan Personnel Training topics

   Operation and maintenance of equipment to prevent discharges
   Discharge procedure protocols
   Applicable pollution control, laws, rules and regulations
   General facility operations
   Contents of the facility SPCC Plan

2. Discharge Prevention Briefings

   Known discharges and failures
   Malfunctioning components
   Any recently developed precautionary measures

Training/Briefings Date: _____

Training/Briefings Presented By: _____ Attendees:

Name	Signature	ID Number