

September 18, 2012

Via [bheem.kothur@dep.state.fl.us](mailto:bheem.kothur@dep.state.fl.us)

And UPS Mail

Bheem Kothur, P.E.  
Hazardous Waste Regulation  
Florida Dept. of Environmental Protection  
Mail Station #4550  
2600 Bair Stone Road  
Tallahassee, FL 332399-2400

Subject: Used Oil / Solid Waste Processing Permit Renewal Application  
Triumvirate Environmental – Florida  
3670 SW 46<sup>th</sup> Avenue, Davie, Broward County;  
EPA ID Number FLD 981 018 773

Dear Mr. Kothur,

On behalf of Triumvirate Environmental Florida (TEIFL) this is the renewal application for Used Oil/ Solid Waste Processing Facility permits. As discussed by phone with Mr. Kothur Triumvirate Environmental Florida (TEIFL) is actively pursuing a Professional Engineer to certify the renewal application and TEIFL will submit that portion of the application as soon as possible. Enclosed with this letter are the following documents:

1. \$3,000 checks made payable to Florida Dept. of Environmental Protection. As previously discussed by phone the fee is based on a \$2,000 renewal fee for the used oil portion and a \$1,000 for the solid waste portion of the permit.
2. Two (2) copies of a completed permit application and we are forwarding a separate copy to the West Palm Beach District office.

We hope that you will find this application satisfactory. If you have any questions please contact me at 954/583.3795 or Shawn Lennon.

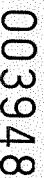
Sincerely,

Triumvirate Environmental Florida Inc.

  
John Wyluda  
Lab Services/Compliance Coordinator

## 003948

003948

COMMENT

AMOUNT  
\$3,000.00

PAY

Three Thousand Dollars and 00 Cents



September 18, 2012

Dear Sir or Madam:

John Lennon, Jr., General Manager, is hereby granted permission to act as an authorized representative of Triumvirate Environmental (Florida), Inc. for the express purpose of signing permit and permit-related documents and other similar documents on behalf of and related to its operations.

Thank you for your consideration and please contact me at 617-628-8098 if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "John McQuillan", is written over the printed name.

John McQuillan  
President, Treasurer, and Secretary  
Triumvirate Environmental (Florida), Inc.  
3701 SW 47<sup>th</sup> Ave, Suite 109  
Davie, FL 33314

---

800.966.9282  
TRIUMVIRATE.COM

---

PRINTED ON 100%  
RECYCLED PAPER

## Table of Contents

	Page No.
Attachment A - Completed Used Oil Processing Facility Permit Application Form	1
Attachment B - Completed Solid Waste Processing Facility Permit Application Form	2
Attachment C - Brief Description of Facility Operations	3
Attachment D - Detailed Process Description	4
Attachment E - Waste Analysis Plan & Material Profiling	5
Attachment F - Description of Sludge, Residue And By-Product Management	6
Attachment G - Waste Tracking Plan	7
Attachment H - Preparedness and Prevention Plan	8
Attachment I - Contingency Plan	9
Attachment J - Spill Prevention and Emergency Procedures	10
Attachment K - Closure Plan	11
Attachment L - Employee Training	12
Figures:	13
1A - Site Map Location	
1B - Site Layout Photo	
2 - Facility Map	
2A to 2O - Facility Photographs	
Appendix A - Facility Emergency Equipment	14
Appendix B - Daily Inspection Log	15
Appendix 1 - List of Facility Tanks	16
Appendix 2 - Examples of Waste Analysis Plan Methodologies	17
Appendix 3 - Profile Forms	18
Appendix 4 - Monthly Fuel Analysis and Facility Inventory Logs	19
Appendix 5 - Used Oil Manifest and Facility Log	20

**Attachment A**

**Completed Used Oil Processing Facility Permit Application Form**



DEP Form#	62-710.901(6)
Form Title	Used Oil Processing Facility Permit Application
Effective Date	June 9, 2005

## Department of Environmental Protection (DEP)

### Used Oil Processing Facility Permit Application Form and Instructions

#### TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>General Instructions .....</b>	<b>1</b>
Who Must File	
Where to File	
Renewals	
Completion of the Application	
<b>Specific Instructions .....</b>	<b>2</b>
Application Fee	
Part I - Application	
Part II - Certification	
Confidential Information	
<b>Line-By-Line Instructions for Completing Part I .....</b>	<b>3</b>
A. General Information .....	3
B. Site Information .....	3-4
C. Operating Information .....	4
Process Descriptions .....	4
Operational Plan .....	4-5
Preparedness and Prevention Plan .....	5
Contingency Plan and Emergency Procedures .....	5-6
Unit Management .....	6
Closure Plan .....	6-7
Employee Training .....	7
<b>Part I - Application Form for a Used Oil Processing Facility Permit ...</b>	<b>8-11</b>
<b>Part II - Certifications (DEP Forms 62-710.901(a-d)) .....</b>	<b>12-15</b>

## **GENERAL INSTRUCTIONS TO APPLY FOR A USED OIL PROCESSING FACILITY PERMIT**

### **APPLICANTS ARE ENCOURAGED TO ARRANGE FOR A PRE-APPLICATION MEETING**

#### **WHO MUST FILE (40 CFR, Part 279.50)**

All persons involved in the processing of used oil as defined in Chapter 40, Part 279 of the Code of Federal Regulations (CFR) and Rule 62-710 of the Florida Administrative Code (F.A.C.).

#### **WHERE TO FILE**

Send the original permit application package with all attachments, along with one copy of the application package and amendments to:

Used Oil Permit Coordinator  
MS4560  
FDEP  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Include a Certification (DEP Form 62-710.901(d), F.A.C.) with the original signature.

The Department will review and comment on the completeness of the application within 30 days of receipt of the application. If it is not complete, the Department will send the applicant a Notice of Deficiency (NOD) within the prescribed time and will ask the applicant to send additional information or correct apparent errors or omissions. The applicant must send the original plus one copy with the additional information within the time specified in the NOD. Again, include a Certification (DEP Form 62-710.901(d), F.A.C.) with each copy. Provide a header with the revision number, page number and date on each page of the additional information so that it can be inserted into the application at its proper place.

#### **RENEWALS**

The fee for a permit renewal is \$2,000. The owner or operator must apply for a renewal of the permit prior to 60 days before the expiration of a facility operating permit. If a facility has operated under the existing permit without any facility or regulatory changes, then the owner or operator must submit (1) a letter demonstrating how the facility will comply with any applicable new or revised laws and rules relating to its operation (NOTE: information submitted to the Department in support of the expiring permit, and which is still valid, does not need to be re-submitted but must be accurately referenced to the effective dates of the existing documents); (2) the Certification (DEP Form 62-710.901(d), F.A.C.); and (3) the permit renewal fee, payable to the Florida Department of Environmental Protection.

However, if there are any major modifications to the facility plan, its operation, or regulatory changes that substantially affect its operation, then the owner or operator must submit a new application for a permit.

#### **COMPLETION OF THE APPLICATION**

Type or print (in ink) the application. Answer all questions in all parts of the application which apply to the facility. Provide a header with revision number, date, and page number on each page of the application. Mark any questions that are not applicable "N/A." Type, print or sketch (in ink) all necessary attachments on 8 1/2" x 11" paper (except for any required maps or scale drawings). The application must be bound and clearly presented with correlated attachments in the exact format described in these instructions.

Incomplete applications will delay the permit process and could affect the continued operation of existing facilities.

## **SPECIFIC INSTRUCTIONS TO APPLY FOR A USED OIL PROCESSING FACILITY PERMIT**

**The fee for a Used Oil Processing Facility Permit is \$2,000. A check for this amount, payable to the Florida Department of Environmental Protection, should be included with this application.**

The Used Oil Processor Permit Application consists of two parts:

### **PART I - Application**

This part includes items regarding general information about the siting and ownership of the facility, and operating information (including process descriptions, operating plans, preparedness and prevention, contingency plans, unit management, closure and training). The standards applicable to this information are found in Chapter 40, Part 279 Subpart F of the Code of Federal Regulations (CFR) and in Rule 62-710.800, F.A.C.

### **PART II - Certification**

This part contains the facility operator's, facility owner's, land owner's and professional engineer's certification of the application and all attachments as required in Rule 62-710.800, F.A.C. Include a new certification with original signatures plus one copy with each new submittal.

### **Confidential Information**

Information submitted to the Department relating to secret processes, methods of manufacture or production, or confidential records may be claimed by the applicant to be of a confidential nature. Claims of confidentiality must be submitted as described in 403.11 and 403.73, Florida Statutes.



## **LINE BY LINE INSTRUCTIONS FOR COMPLETING PART I OF THE APPLICATION FOR A USED OIL PROCESSING FACILITY PERMIT**

### **PART I - Application and Used Oil Processing Facility Requirements**

#### **A. General Information**

1. Place an "X" in the appropriate box for the type of permit application.
2. Enter the revision number (the initial application revision number is 0).
3. Processors involved in other regulated activities must comply with applicable subparts of 40 CFR, Part 279. Mark an "X" in the boxes applicable to the facility's operation. (40 CFR, Part 279.50(b))
4. Enter the date operation began, or the proposed date of the start of an operation.
5. Enter the full legal name of the company. (40 CFR, Part 279.50(b)(2)(i))
6. Enter the facility's EPA identification number. If you do not have an identification number, attach a completed EPA Form 8700-12 "Notification of Regulated Waste Activity" to this application. (40 CFR, Part 279.51(a))
7. Enter the location or street address of the facility. If the facility lacks a street name or route number, give the most accurate alternative geographic information. (40 CFR, Part 279.51(b)(2)(vi))
8. Enter the complete mailing address of the facility. (40 CFR, Part 279.51(b)(2)(iii))
9. Enter the name, title, mailing address and telephone number of a contact person (an employee who is thoroughly familiar with the operation of the facility and whom the Department can contact regarding this application). (40 CFR, Part 279.51(b)(2)(iv))
10. Enter the full legal name, address and telephone of the operator if different from number 9.
11. If the facility owner and operator are not the same person, enter the name, address and telephone number of the owner. (40 CFR, Part 279.51(b)(2)(ii))
12. Enter an "X" in the appropriate block to indicate the facility's legal structure and provide other appropriate information relating to the legal structure of the facility.
13. Enter an "X" into the appropriate block and provide other appropriate information relating to facility ownership. (40 CFR, Part 279.51(b)(2)(ii))
14. Provide the name, registration number, and address of the professional engineer who will certify the appropriate parts of the application. (Rule 62-710.800(3), F.A.C.) If the engineer is associated with a firm, provide the name of the firm.  
These parts include:
  - a) Certification of secondary containment adequacy (capacity), structural integrity (structural strength), and underground process piping for storage tanks, process tanks, and container storage
  - b) Certification of leak detection
  - c) Certification of any substantial construction modifications
  - d) Certification of the closure plan
  - e) Certification of tank design for new or additional tanks
  - f) Recertification of any of the above items

Note: When completing this application, the applicant should be aware of any other federal, state and local permit requirements applicable to the facility. Some requirements of this application may be satisfied using other permit requirements as background or baseline information (e.g. stormwater management, contingency plans, employee safety and training).

#### **B. Site Information**

1. Enter the county and name of the community nearest to the facility. Provide the latitude, longitude, section, township and range to approximate geographic center of the facility. Take this information from the most recent USGS topographic map available. Also provide the Universal Transverse Mercator Grid number (UTM #). This is a 15 digit number in the following format: 00/000000/0000000. the first 2 digits are the zone number, the middle 6 digits are the easting and final 7 digits are the northing.

2. Enter the area (in acres) of the facility site. A facility site includes all contiguous land and structures, other appurtenances, and improvements on the land used for used oil processing operations.
3. Attach a standard USGS contour map extending 2,000 feet beyond the property boundaries of the facility site. The map should indicate:
  - a) The map scale and date
  - b) Any 100-year flood plain area (include a copy of the FIA or FEMA map)
  - c) The orientation of the map

### C. Operating Information

**Note: Applicants are strongly encouraged to arrange a pre-application meeting with their local district office to address sensitive information and description details prior to preparing the permit application.**

1. Indicate the facility's hazardous waste generator status.
2. List the applicable EPA hazardous waste codes as identified in 40 CFR, Part 261.
3. Attach a brief narrative overview of the entire facility operation including a general description of the facility, the nature of the business, and the activities that it intends to conduct, and the anticipated number and types of employees. No proprietary information need be included.
4. A detailed description of the used oil 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. The map should indicate the legal boundaries of the facility showing:
  - a) Access control (fences and gates)
  - b) Buildings and other structures (equipment, recreational areas; access and internal roads; storm, sanitary and process sewerage systems; fire control facilities; etc.)
  - c) Tanks and containers
  - d) Loading and unloading areas
  - e) Drainage or flood control barriers
  - g) Runoff control system (or refer to the facility's stormwater permit)
5. Attach copies of the operating plan which must include the following information:
  - a) An analysis plan which must include at a minimum (40 CFR, Parts 279.53 and 279.55):
    - (i) Sampling plan, including methods and frequency of sampling and analyses;
    - (ii) Fingerprint analysis on incoming shipments, as appropriate; and
    - (iii) Representative analyses on outgoing shipments (one batch/lot can equal a shipment, provided the lots are discreet units), to include: metals and halogen content.
  - b) A description of the management of sludges, residues and byproducts. This should include the characterization analysis as well as the frequency of the removal of the sludge. (40 CFR, Parts 279.10(e) and 279.59)
  - c) An explanation or copies of the forms used for the purposes of tracking and recording shipments of used oil into and out of the facility. Note: These records must be retained for at least three years and must include (40 CFR, Part 279.56):
    - (i) For incoming shipments: the name, address and EPA ID number of the delivering transporter, the name, address and EPA ID number (if applicable) of the origin of the used oil, the quantity of used oil accepted, and the date of acceptance; and
    - (ii) For outgoing shipments: The name, address and EPA ID number of the transporter and end user of the outgoing shipment, the quantity of used oil shipped, and the date of shipment.
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 sudden or non-sudden releases of used oil to air, soil, surface water, or groundwater which could threaten human health or the environment. This description must show evidence of (40 CFR, Part 279.52(a)):
- a) An internal communications or alarm system capable of giving immediate emergency instruction to facility personnel
  - b) A communication device capable of summoning assistance from local emergency response groups (fire, law enforcement, emergency response)
  - c) Fire and spill control equipment: inventories and maps (including fire extinguishers appropriate in type, size and location; adequate spill control equipment; decontamination equipment)
  - d) Water at adequate volume and pressure for all fire control equipment
  - e) Testing and maintenance schedules for all emergency equipment
  - f) Access to a communication or alarm device, either directly or by visual or auditory (voice) contact with another employee, wherever used oil is being handled
  - g) Immediate access to a device capable of summoning external emergency assistance in the event only one employee is on the premises
  - h) Proper aisle space for containers and equipment
  - i) Arrangements with local authorities, to include:
    - (i) Familiarization of fire departments and emergency response teams with the layout of the facility, properties of used oil handled at the facility and all associated hazards, normal employee work areas, entrances and evacuation routes;
    - (ii) At facilities scheduled for possible multiple emergency response units, agreements designating both primary and supporting authorities;
    - (iii) Agreements with State emergency response teams, emergency responses contractors and emergency equipment suppliers;
    - (iv) Familiarization of local hospitals with the properties of the materials handled at the facility and the possible injuries/illnesses resulting from fires, explosions, or releases at this facility; and
    - (v) Documentation of any refusal of any of the described entities to enter into an agreement with the facility (to be noted in operating record).
  - j) Corrective actions taken in response to spills/leaks. (Rules 62-761.700 and 62-762.700, F.A.C.)
7. Attach a copy of the contingency plan and emergency procedures. This requirement may be satisfied by modifying or expounding upon an existing SPCC plan required under 40 CFR 112, (279.52(b)(2)(ii)) or should contain (40 CFR, Part 279.52(b)):
- a) Specific actions/procedures to follow in response to fire, explosion, or sudden releases.
  - b) A description of the emergency response arrangements required in the Preparedness and Prevention plan.
  - c) Names, addresses, phone numbers and qualifications of the primary emergency response coordinator (ERC) as well as designated subordinate ERCs.
  - d) Procedures used by the ERC to activate the emergency response plan (notify employees and appropriate authorities), assess the situation, and to commit resources to properly contain, manage and clean-up the situation.
  - e) Descriptive inventory and location (map) all emergency response equipment (fire extinguishing systems, spill control equipment, internal and external communications and alarm systems, and decontamination equipment) including location (map).
  - f) Identify containers and/or tanks available to hold any released material.
  - g) Describe how equipment will be replaced/cleaned for future use.
  - h) Facility personnel evacuation plan, describing signals and both primary and alternate routes.
  - i) Copies of this plan must be maintained at the facility and submitted to local emergency response authorities identified in the preparedness and prevention plan.
  - j) The plan must be amended when needed (i.e., regulations change, plan fails upon use, the facility process or contingency plan is modified).
  - k) Incidents must be reported to appropriate agencies.
8. Attach a description of the facility's unit management plans. Submit documentation demonstrating that all aboveground used oil process and storage tanks and containers as well as fill pipes for

underground storage tanks are properly labeled with the words "Used Oil." In addition, the management plan description must include documentation which shows that all used oil storage and process tanks and containers meet the following requirements:

a) For containers:

- (i) Adequate aisle space;
- (i) Adequate secondary containment, including design, capacity and specifications; and
- (ii) Inspections and corrective actions.

b) For tanks:

- (i) All aboveground storage and process tanks must meet the requirements of Rules 62-762.500 (Performance Standards for New Storage Tank Systems), 62-762.510 (Performance Standards for Existing Shop-Fabricated storage Tank Systems), 62-762.520 (Performance Standards for Existing Field-Erected Storage Tank Systems), 62-762.600 (General Release Detection Standards), and 62-762.700 (Repairs to Storage Tank Systems). All underground storage and process tanks must meet the requirements of Rules 62-761.500 (Performance Standards for New Storage Tank Systems), 62-761.520 (Performance Standards for Other Existing Petroleum and Petroleum Product storage Systems Non-Vehicular Fuels), 62-761.600 (General Release Detection standards), 62-761.620 (Release Detection Standards for Other Regulated Substance Storage Tanks), 62-761.630 (Release Detection Standards for Integral Piping), and 62-761.700 (Repairs to Storage Tank Systems).
- (ii) All storage and process tanks must have a closure plan that meets the requirements of Rules 62-761.800 (Underground Storage Tank Systems: Out of Service and Closure Requirements) and 62-762.800 (Aboveground Storage Tank Systems: Out of Service and Closure Requirements).
- (iii) All storage and process tanks must have an inspection or monitoring plan that meets the requirements of Rules 62-761.600 (Underground Storage Tank Systems: General Release Detection Standards) and 62-762.600 (Aboveground Storage Tank Systems: General Release Detection Standards).
- (iv) A plan for the removal of released material and accumulated precipitation from secondary containment

9. Attach a copy of the facility's Closure plan (40 CFR, Part 279.54(h)). At time of closure, the permit will be modified to address site specific closure standards. The attached plan may be generic in nature and should include, at a minimum:
- a) A closure schedule;
  - b) A listing of tanks, piping and other equipment that will be cleaned/closed;
  - c) Procedures for decontamination of tanks, containers, pipes, equipment and other process areas;
  - d) A listing and justification of sampling methods (including number of samples), sampling parameters, and analytical methods. All sampling and analysis must be in accordance with SW-846 or equivalent methods;
  - e) A description of the characterization and disposal of rinsewaters and residues generated from clean-up and closure activities;
  - f) A description of the characterization and disposal of solid wastes generated from clean-up and closure activities;
  - g) A description of soil sampling near secondary containment. Also describe how the following will be addressed at time of closure, in accordance with 40 CFR, Part 279.54(h)(ii):
    - (i) A description of how, if soil is contaminated, the groundwater will be sampled; and
    - (ii) A description of how, if groundwater is contaminated, the facility will meet the closure requirements of 40 CFR, Part 265.310, Closure and Post-Closure Permit.
10. Attach a description of the facility's employee training program. This description should document:
- a. The methods and/or materials used to familiarize employees with all state and federal rules and regulations.
  - b. The method of documenting that employees have been trained to use emergency equipment.

- c. How the employee education program is updated to address changes in applicable regulations or facility operations.

# APPLICATION FORM FOR A USED OIL PROCESSING FACILITY PERMIT

## Part I

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

### A. General Information

1. New \_\_\_\_\_ Renewal ☒ Modification \_\_\_\_\_ Date old permit expires Nov 1994
2. Revision number 1
3. NOTE: Processors must also meet all applicable subparts, (describe compliance in process description for applicable standards) if they are:  
☒ generators (Subpart C)  
☒ transporters (Subpart E)  
\_\_\_\_\_ burners of off-spec used oil (Subpart G)  
☒ marketers (Subpart H)  
or  
\_\_\_\_\_ are disposing of used oil (Subpart I)
4. Date current operation began: Jan 18, 1985
5. Facility name: Triumvirate Environmental (Florida) Inc., (TEIFL)
6. EPA identification number: FLD 981 018 773
7. Facility location or street address: 3670 SW 47th Avenue, Davie, FL 33314
8. Facility mailing address:  

<u>3701 SW 47th Avenue, Suite 109</u>	<u>Davie</u>	<u>FL</u>	<u>33314</u>
Street or P.O. Box	City	State	Zip Code
9. Contact person: John P. "Shawn" Lennon Jr. Telephone: (954) 5833795  
Title: General Manager  
Mailing Address:  

<u>3701 SW 47th Avenue, Suite 109</u>	<u>Davie</u>	<u>FL</u>	<u>33314</u>
Street or P.O. Box	City	State	Zip Code
10. Operator's name: Triumvirate Environmental Florida Inc Telephone: (954) 583-3795  
Mailing Address:  

<u>3701 SW 47th Avenue, SUITE 109</u>	<u>Davie</u>	<u>FL</u>	<u>33314</u>
Street or P.O. Box	City	State	Zip Code
11. Facility owner's name: Triumvirate Environmental Telephone: (954) 583-3795  
Mailing Address:  

<u>3701 SW 47th Avenue Suite 109</u>	<u>Davie</u>	<u>FL</u>	<u>33314</u>
Street or P.O. Box	City	State	Zip Code
12. Legal structure:  
☒ corporation (indicate state of incorporation) \_\_\_\_\_  
\_\_\_\_\_ 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 \_\_\_\_\_ 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: \_\_\_\_\_

If leased, indicate:  
Land owner's name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_

Street or P.O. Box \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

- 14 Name of professional engineer \_\_\_\_\_ Registration No. \_\_\_\_\_  
Mailing Address: \_\_\_\_\_

Street or P.O. Box \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Associated with: \_\_\_\_\_

## B. SITE INFORMATION

1. Facility location:

County: USA  
Nearest community: Davie  
Latitude: 28 04 34 Longitude: 80 12 37  
Section: 25 Township: 50 Range: 41  
UTM # 17 / 580.3 KM / 2662.9 KM

2. Facility size (area in acres): 2.5

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.

### C. OPERATING INFORMATION

1. Hazardous waste generator status (SQG, LQG) CESQG

2. List applicable EPA hazardous waste codes:  
D001, D004 to D043

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 C**

4. Attach 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 4, page 4).

**The facility's detailed process description is labeled as Attachment D**

5. The following parts of the facility's operating plan should be included as attachments to the permit application. (See item 5 on pages 4 and 5):

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 discrete units) to include: metals and halogen content.

**The analysis plan is labeled as Attachment E**

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 F**

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 G**

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 6, page 5).

**The preparedness and prevention plan is labeled as Attachment H**



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 7 on pages 5 and 6).

**The contingency plan is labeled as Attachment <sup>I</sup>\_\_\_\_\_**

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 <sup>J</sup>\_\_\_\_\_**

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 9, pages 6 and 7).

**The closure plan is labeled as Attachment <sup>K</sup>\_\_\_\_\_**

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 10, page 7).

**A description of employee training is labeled as Attachment <sup>L</sup>\_\_\_\_\_**

DEP Form#	<u>62-710.901(6)(a)</u>
Form Title	<u>Used Oil Processing Facility</u>
	<u>Permit Application</u>
Effective Date	<u>June 9, 2005</u>

## APPLICATION FORM FOR A USED OIL PROCESSING PERMIT

### PART II - CERTIFICATION

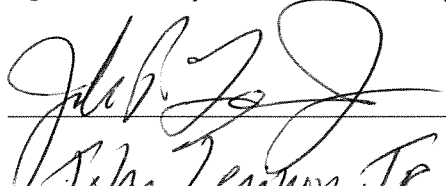
TO BE COMPLETED BY ALL APPLICANTS

#### Form 62-710.901(a). Operator Certification

Triumvirate Environmental Florida Inc. FLD 981 018 773  
Facility Name: \_\_\_\_\_ EPA ID# \_\_\_\_\_

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 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\*

  
\_\_\_\_\_  
John Lennon, Jr / G.M.  
Name and Title (Please type or print)

Date: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

\* If authorized representative, attach letter of authorization.

DEP Form#	62-710.901(6)(b)
Form Title	Used Oil Processing Facility Permit Application
Effective Date	June 9, 2005

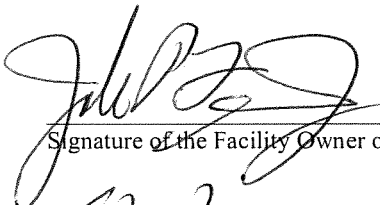
## APPLICATION FROM FOR A USED OIL PROCESSING PERMIT

### PART II - CERTIFICATION

#### Form 62-710.901(b). Facility Owner Certification

Facility Name: Triumvirate Environmental (Florida) Inc. FLD 981 018 773  
EPA ID#

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 Facility Owner or Authorized Representative\*  
John Lemmon, Jr. / G.M.  
Name and Title (Please type or print)

Date: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

\* If authorized representative, attach letter of authorization.

DEP Form#	62-710.901(6)(c)
Form Title	<u>Used Oil Processing Facility</u> <u>Permit Application</u>
Effective Date	<u>June 9, 2005</u>

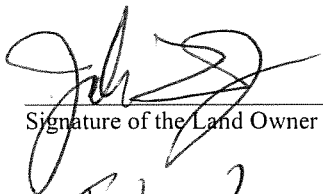
## APPLICATION FROM FOR A USED OIL PROCESSING PERMIT

### PART II - CERTIFICATION

#### Form 62-710.901(c) Land Owner Certification

Facility Name: Triumvirate Environmental Florida Inc FLD 981 018 773  
EPA ID#

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 Land Owner or Authorized Representative\*

John Leppan Jr / E.M.  
Name and Title (Please type or print)

Date: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_

\* If authorized representative, attach letter of authorization.

DEP Form#	<u>62-710.901(6)(d)</u>
Form Title	<u>Used Oil Processing Facility</u> <u>Permit Application</u>
Effective Date	<u>June 9, 2005</u>

## APPLICATION FORM FOR A USED OIL PROCESSING PERMIT

### PART II - CERTIFICATION

**Form 62-710.901(d) 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

\_\_\_\_\_ Initial Certification      X \_\_\_\_\_ Recertification

1. DEP Facility ID Number: FLD 981 018 773
2. Tank Numbers: see attached
3. Facility Name: Triumvirate Environmental Florida Inc.
4. Facility Address: 3701 SW 47th Street Suite 109 Davie FL 33314

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

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

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

Mailing Address: \_\_\_\_\_  
Street or P. O. Box

\_\_\_\_\_  
City                      State                      Zip  
Date: \_\_\_\_\_ Telephone ( ) \_\_\_\_\_

**[PLEASE AFFIX SEAL]**

**Attachment B**

**Completed Solid Waste Processing Facility Permit Application Form**

Reset Form

Print Form



# Florida Department of Environmental Protection

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

DEP Form # 62-701.900(1), F.A.C.

Form Title: Application to Construct, Operate, Modify, or  
Close a Solid Waste Management Facility

Effective Date: January 6, 2010

Incorporated in Rule: 62-701.330(3), F.A.C.

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

### APPLICATION TO CONSTRUCT, OPERATE, MODIFY, OR CLOSE A SOLID WASTE MANAGEMENT FACILITY

### APPLICATION INSTRUCTIONS AND FORMS

Northwest District  
160 Governmental Center  
Pensacola, FL 32502-5794  
850-595-8360

Northeast District  
7825 Baymeadows Way, Ste. B200  
Jacksonville, FL 32256-7590  
904-807-3300

Central District  
3319 Maguire Blvd., Ste. 232  
Orlando, FL 32803-3767  
407-894-7555

Southwest District  
13051 N. Telecom Pkwy  
Temple Terrace, FL 33637  
813-632-7600

South District  
2295 Victoria Ave., Ste. 364  
Fort Myers, FL 33901-3881  
239-332-6975

Southeast District  
400 North Congress Ave.  
West Palm Beach, FL 33401  
561-681-6600

## INSTRUCTIONS TO APPLY FOR A SOLID WASTE MANAGEMENT FACILITY PERMIT

### I. General

Solid Waste Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes, (FS) and in accordance with Florida Administrative Code (FAC) Chapter 62-701. A minimum of four copies of the application shall be submitted to the Department's District Office having jurisdiction over the facility. The appropriate fee in accordance with Rule 62-701.315, FAC, shall be submitted with the application by check made payable to the Department of Environmental Protection (DEP).

Complete appropriate sections for the type of facility for which application is made. Entries shall be typed or printed in ink. All blanks shall be filled in or marked "not applicable" or "no substantial change". Information provided in support of the application shall be marked "submitted" and the location of this information in the application package indicated. The application shall include all information, drawings, and reports necessary to evaluate the facility. Information required to complete the application is listed on the attached pages of this form.

### II. Application Parts Required for Construction and Operation Permits

- A. Landfills and Ash Monofills - Submit Parts A through S
- B. Asbestos Monofills - Submit Parts A,B,C,D,E,F,I,K,M, O through S
- C. Industrial Solid Waste Disposal Facilities - Submit Parts A through S

**NOTE:** Portions of some Parts may not be applicable.

**NOTE:** For facilities that have been satisfactorily constructed in accordance with their construction permit, the information required for A, B and C type facilities does not have to be resubmitted for an operation permit if the information has not substantially changed during the construction period. The appropriate portion of the form should be marked "no substantial change".

### III. Application Parts Required for Closure Permits

- A. Landfills and Ash Monofills - Submit Parts A,B,L, N through S
- B. Asbestos Monofills - Submit Parts A,B,M, O through S
- C. Industrial Solid Waste Disposal Facilities - Submit Parts A,B, L through S

**NOTE:** Portions of some Parts may not be applicable.

### IV. Permit Renewals

The above information shall be submitted at time of permit renewal in support of the new permit. However, facility information that was submitted to the Department to support the expiring permit, and which is still valid, does not need to be re-submitted for permit renewal. Portions of the application not re-submitted shall be marked "no substantial change" on the application form.



**V. Application Codes**

S	-	Submitted
LOCATION	-	Physical location of information in application
N/A	-	Not Applicable
N/C	-	No Substantial Change

**VI. LISTING OF APPLICATION PARTS**

PART A:	GENERAL INFORMATION
PART B:	DISPOSAL FACILITY GENERAL INFORMATION
PART C:	PROHIBITIONS
PART D:	SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL
PART E:	LANDFILL PERMIT REQUIREMENTS
PART F:	GENERAL CRITERIA FOR LANDFILLS
PART G:	LANDFILL CONSTRUCTION REQUIREMENTS
PART H:	HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS
PART I:	GEOTECHNICAL INVESTIGATION REQUIREMENTS
PART J:	VERTICAL EXPANSION OF LANDFILLS
PART K:	LANDFILL OPERATION REQUIREMENTS
PART L:	WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS
PART M:	SPECIAL WASTE HANDLING REQUIREMENTS
PART N:	GAS MANAGEMENT SYSTEM REQUIREMENTS
PART O:	LANDFILL CLOSURE REQUIREMENTS
PART P:	OTHER CLOSURE PROCEDURES
PART Q:	LONG-TERM CARE
PART R:	FINANCIAL ASSURANCE
PART S:	CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE  
A SOLID WASTE MANAGEMENT FACILITY**

Please Type or Print

**PART A. GENERAL INFORMATION**

1. Type of disposal facility (check all that apply):

- |  |  |
|--|--|
| <input type="checkbox"/> Class I Landfill  | <input type="checkbox"/> Ash Monofill      |
| <input type="checkbox"/> Class III Landfill  | <input type="checkbox"/> Asbestos Monofill |
| <input type="checkbox"/> Industrial Solid Waste  |  |
| <input checked="" type="checkbox"/> Other Describe:<br>Non-Hazardous waste consolidation and/or solidification |  |

**NOTE:** Waste Processing Facilities should apply on Form 62-701.900(4), FAC;  
Land Clearing Disposal Facilities should notify on Form 62-701.900(3), FAC;  
Compost Facilities should apply on Form 62-701.900(10), FAC; and  
C&D Disposal Facilities should apply on Form 62-701.900(6), FAC

2. Type of application:

- ☐ Construction  
☒ Operation  
☐ Construction/Operation  
☐ Closure  
☐ Long-term Care Only

3. Classification of application:

- |   |  |
|---|--|
| <input type="checkbox"/> New                | <input type="checkbox"/> Substantial Modification  |
| <input checked="" type="checkbox"/> Renewal | <input type="checkbox"/> Intermediate Modification |
|   | <input type="checkbox"/> Minor Modification        |

4. Facility name: Triumvirate Environmental (Florida) LLC., (TEIFL)

5. DEP ID number: FLD 981 018 773 County: Broward

6. Facility location (main entrance):  
3670 SW 47th Avenue, Davie, FL 33314

7. Location coordinates:

Section: 25 Township: 50 Range: 41

Latitude: 28° 4' 34" Longitude: 80° 12' 37"

Datum: \_\_\_\_\_ Coordinate Method: \_\_\_\_\_

Collected by: \_\_\_\_\_ Company/Affiliation: \_\_\_\_\_

8. Applicant name (operating authority): Triumvirate Environmental (Florida) LLC.,
- Mailing address: 3701 SW 47th Avenue, Suite 109 Davie Florida 33314  
Street or P.O. Box City State Zip
- Contact person: John Wyluda Telephone: (954) 583-3795
- Title: Lab Services and Compliance Coordinator
- jwyluda@triumvirate.com  
E-Mail address (if available)
9. Authorized agent/Consultant: \_\_\_\_\_
- Mailing address: \_\_\_\_\_  
Street or P.O. Box City State Zip
- Contact person: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_
- Title: \_\_\_\_\_
- \_\_\_\_\_ E-Mail address (if available)
10. Landowner (if different than applicant): \_\_\_\_\_
- Mailing address: \_\_\_\_\_  
Street or P.O. Box City State Zip
- Contact person: \_\_\_\_\_ Telephone: (\_\_\_\_) \_\_\_\_\_
- \_\_\_\_\_ E-Mail address (if available)
11. Cities, towns and areas to be served:  
NA  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
12. Population to be served:  
Current: \_\_\_\_\_ Five-Year Projection: \_\_\_\_\_
13. Date site will be ready to be inspected for completion: NA
14. Expected life of the facility: 15 years
15. Estimated costs:  
Total Construction: \$ 500 Closing Costs: \$ 500
16. Anticipated construction starting and completion dates:  
From: NA To: NA
17. Expected volume or weight of waste to be received:  
20 yds<sup>3</sup>/day 2 tons/day 400 gallons/day

**PART B. DISPOSAL FACILITY GENERAL INFORMATION**

1. Provide brief description of disposal facility design and operations planned under this application:  
Simple consolidation of non-hazardous materials from drums and other containers into a 20 cubic yard roll off container. Non-hazardous liquids may also be solidified in the same roll off container using inert absorbent materials. Non-hazardous wastes are parked next to the roll off for consolidation or solidification
2. Facility site supervisor: John P. "Shawn" Lennon  
Title: General Manager Telephone: (954 ) 583-3795  
jlennon@triumvirate.com  
E-Mail address (if available)
3. Disposal area: Total \_\_\_\_\_ acres; Used \_\_\_\_\_ acres; Available \_\_\_\_\_ acres.
4. Weighing scales used: ☐ Yes ☒ No
5. Security to prevent unauthorized use: ☒ Yes ☐ No
6. Charge for waste received: \_\_\_\_\_ \$/yds<sup>3</sup> \_\_\_\_\_ \$/ton
7. Surrounding land use, zoning:
- |  |  |
|--|--|
| <input type="checkbox"/> Residential           | <input checked="" type="checkbox"/> Industrial |
| <input type="checkbox"/> Agricultural          | <input type="checkbox"/> None                  |
| <input checked="" type="checkbox"/> Commercial | <input type="checkbox"/> Other Describe:       |
8. Types of waste received:
- |   |   |
|---|---|
| <input type="checkbox"/> Household              | <input type="checkbox"/> C & D debris       |
| <input type="checkbox"/> Commercial             | <input type="checkbox"/> Shredded/cut tires |
| <input type="checkbox"/> Incinerator/WTE ash    | <input type="checkbox"/> Yard trash         |
| <input type="checkbox"/> Treated biomedical     | <input type="checkbox"/> Septic tank        |
| <input type="checkbox"/> Water treatment sludge | <input type="checkbox"/> Industrial         |

- ☐ Air treatment sludge                      ☐ Industrial sludge  
☐ Agricultural                                      ☐ Domestic sludge  
☐ Asbestos    ☒ Other Describe:

Non-hazardous liquids and solids

---

---

---

---

---

9. Salvaging permitted: ☐ Yes ☒ No

10. Attendant: ☒ Yes ☐ No

Trained operator: ☒ Yes ☐ No

11. Trained spotters: ☐ Yes ☒ No

Number of spotters used: 

---

12. Site located in: ☐ Floodplain

☐ Wetlands

☒ Other:

Roll off container is located on secondary containment inside the tank farm

---

---

---

---

---

13. Days of operation: Monday to Friday

14. Hours of operation: 8:00am to 5:00pm

15. Days Working Face covered: NA

16. Elevation of water table: 4 ft. Datum Used: 

---

17. Number of monitoring wells: 3

18. Number of surface monitoring points: 0

19. Gas controls used: ☐ Yes ☒ No

Type controls: ☐ Active ☐ Passive

Gas flaring: ☐ Yes ☒ No

Gas recovery: ☐ Yes ☒ No

20. Landfill unit liner type:

☐ Natural soils

☐ Double geomembrane

☐ Single clay liner

☐ Geomembrane & composite

☐ Single geomembrane

☐ Double composite

☐ Single composite

☒ None

☐ Slurry wall

☐ Other Describe:

---

---

---

---

---

---



21. Leachate collection method:

- |   |   |
|---|---|
| <input type="checkbox"/> Collection pipes | <input type="checkbox"/> Sand layer         |
| <input type="checkbox"/> Geonets          | <input type="checkbox"/> Gravel layer       |
| <input type="checkbox"/> Well points      | <input type="checkbox"/> Interceptor trench |
| <input type="checkbox"/> Perimeter ditch  | <input checked="" type="checkbox"/> None    |
| <input type="checkbox"/> Other Describe:  |   |

---

---

---

---

---

---

22. Leachate storage method:

- |  |   |
|--|---|
| <input type="checkbox"/> Tanks           | <input type="checkbox"/> Surface impoundments |
| <input type="checkbox"/> Other Describe: |   |

---

---

---

---

---

---



23. Leachate treatment method:

- |                                    |   |
|------------------------------------|---|
| <input type="checkbox"/> Oxidation | <input type="checkbox"/> Chemical treatment |
| <input type="checkbox"/> Secondary | <input type="checkbox"/> Settling           |
| <input type="checkbox"/> Advanced  | <input type="checkbox"/> None               |
| <input type="checkbox"/> Other     |   |

---

---

---

---

---

---

24. Leachate disposal method:

- |  |  |
|--|--|
| <input type="checkbox"/> Recirculated        | <input type="checkbox"/> Pumped to WWTP                      |
| <input type="checkbox"/> Transported to WWTP | <input type="checkbox"/> Discharged to surface water/wetland |
| <input type="checkbox"/> Injection well      | <input type="checkbox"/> Percolation ponds                   |
| <input type="checkbox"/> Evaporation         | <input type="checkbox"/> Spray Irrigation                    |
| <input type="checkbox"/> Other               |  |

---

---

---

---

---

---



25. For leachate discharged to surface waters:

Name and Class of receiving water:

---

---

---

---

---

---

---

---

26. Storm Water:

Collected: ☒ Yes ☐ No

Type of treatment:

Collects in retention pond and seeps back to ground water

---

---

---

---

---

---

---

---

Name and Class of receiving water:

NA - no surface water discharge

---

---

---

---

---

---

---

---

27. Environmental Resources Permit (ERP) number or status:

---

---

---

---

---

---

---

---

**PART C. PROHIBITIONS (62-701.300, FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1. Provide documentation that each of the siting criteria will be satisfied for the facility; (62-701.300(2), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 2. If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12) through (18), FAC, then document this qualification(s).
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3. Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4. Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5. Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 6. Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 7. Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 8. Provide documentation that the facility will be in compliance with the special waste for landfills restrictions; (62-701.300(8), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9. Provide documentation that the facility will be in compliance with the liquid restrictions; (62-701.300(10), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 10. Provide documentation that the facility will be in compliance with the used oil and oily waste restrictions; (62-701.300(11), FAC)

**PART D. SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL (62-701.320, FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
	Attachment B		
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/> 1. Four copies, at minimum, of the completed application form, all supporting data and reports; (62-701.320(5)(a), FAC)



<b>S</b>	<b>LOCATION</b>	<b>N/A</b>	<b>N/C</b>	<b>PART D CONTINUED</b>
<input type="checkbox"/>	Attachment B	<input type="checkbox"/>	<input type="checkbox"/>	2. Engineering and/or professional certification (signature, date and seal) provided on the applications and all engineering plans, reports and supporting information for the application; (62-701.320(6),FAC)
<input type="checkbox"/>	Cover Letter	<input type="checkbox"/>	<input type="checkbox"/>	3. A letter of transmittal to the Department; (62-701.320(7)(a),FAC)
<input type="checkbox"/>	Attachment B	<input type="checkbox"/>	<input type="checkbox"/>	4. A completed application form dated and signed by the applicant; (62-701.320(7)(b),FAC)
<input type="checkbox"/>	Submitted \$1000	<input type="checkbox"/>	<input type="checkbox"/>	5. Permit fee specified in Rule 62-701.315, FAC in check or money order, payable to the Department; (62-701.320(7)(c),FAC)
<input type="checkbox"/>	Cover letter, attach A-L, Appendix A,B 1-5, Figs 1,2	<input type="checkbox"/>	<input type="checkbox"/>	6. An engineering report addressing the requirements of this rule and with the following format: a cover sheet, text printed on 8 1/2 inch by 11 inch consecutively numbered pages, a table of contents or index, the body of the report and all appendices including an operation plan, contingency plan, illustrative charts and graphs, records or logs of tests and investigations, engineering calculations; (62-701.320(7)(d),FAC)
<input type="checkbox"/>	Attachment K, and Attachment C and D	<input type="checkbox"/>	<input type="checkbox"/>	7. Operation Plan and Closure Plan; (62-701.320(7)(e)1,FAC)
<input type="checkbox"/>	Attachment I	<input type="checkbox"/>	<input type="checkbox"/>	8. Contingency Plan; (62-701.320(7)(e)2,FAC)
<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Plans or drawings for the solid waste management facilities in appropriate format (including sheet size restrictions, cover sheet, legends, north arrow, horizontal and vertical scales, elevations referenced to NGVD 1929) showing; (62-701.320(7)(f),FAC)
<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. A regional map or plan with the project location in relation to major roadways and population centers;
<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. A vicinity map or aerial photograph no more than 1 year old showing the facility site and relevant surface features located within 1000 feet of the facility;
<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. A site plan showing all property boundaries certified by a Florida Licensed Professional Surveyor and Mapper; and
<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Other necessary details to support the engineering report, including referencing elevations to a consistent, nationally recognized datum and identifying the method used for collecting latitude and longitude data.

**S**      **LOCATION**      **N/A**      **N/C**

**PART D CONTINUED**

- |                          |                |                                     |                          |   |
|--------------------------|----------------|-------------------------------------|--------------------------|---|
| <input type="checkbox"/> | _____          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 10. Documentation that the applicant either owns the property or has legal authority from the property owner to use the site; (62-701.320(7)(g),FAC)  |
| <input type="checkbox"/> | _____          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 11. For facilities owned or operated by a county, provide a description of how, if any, the facilities covered in this application will contribute to the county's achievement of the waste reduction and recycling goals contained in Section 403.706,FS; (62-701.320(7)(h),FAC)               |
| <input type="checkbox"/> | _____          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 12. Provide a history and description of any enforcement actions taken by the Department against the applicant for violations of applicable statutes, rules, orders or permit conditions relating to the operation of any solid waste management facility in this state; (62-701.320(7)(i),FAC) |
| <input type="checkbox"/> | _____          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 13. Proof of publication in a newspaper of general circulation of notice of application for a permit to construct or substantially modify a solid waste management facility; (62-702.320(8),FAC)  |
| <input type="checkbox"/> | _____          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14. Provide a description of how the requirements for airport safety will be achieved including proof of required notices if applicable. If exempt, explain how the exemption applies; (62-701.320(13),FAC)   |
|                          | Not a landfill |                                     |                          |   |
| <input type="checkbox"/> | _____          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 15. Explain how the operator and spotter training requirements and special criteria will be satisfied for the facility; (62-701.320(15), FAC)   |

**PART E.      LANDFILL PERMIT REQUIREMENTS (62-701.330, FAC)**

**S**      **LOCATION**      **N/A**      **N/C**

- |                          |       |                                     |                          |  |
|--------------------------|-------|-------------------------------------|--------------------------|--|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Regional map or aerial photograph no more than 5 years old showing all airports that are located within five miles of the proposed landfill; (62-701.330(3)(a),FAC) |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Plot plan with a scale not greater than 200 feet to the inch showing; (62-701.330(3)(b),FAC)  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Dimensions;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Locations of proposed and existing water quality monitoring wells;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | c. Locations of soil borings;  |

**S**      **LOCATION**      **N/A**      **N/C**

**PART E CONTINUED**

- |                          |       |                                     |                          |  |
|--------------------------|-------|-------------------------------------|--------------------------|--|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. Proposed plan of trenching or disposal areas;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | e. Cross sections showing original elevations and proposed final contours which shall be included either on the plot plan or on separate sheets; |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | f. Any previously filled waste disposal areas;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | g. Fencing or other measures to restrict access.   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. Topographic maps with a scale not greater than 200 feet to the inch with 5-foot contour intervals showing; (62-701.330(3)(c),FAC):            |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Proposed fill areas;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Borrow areas;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | c. Access roads;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. Grades required for proper drainage;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | e. Cross sections of lifts;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | f. Special drainage devices if necessary;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | g. Fencing;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | h. Equipment facilities.   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. A report on the landfill describing the following; (62-701.330(3)(d),FAC)   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. The current and projected population and area to be served by the proposed site;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. The anticipated type, annual quantity, and source of solid waste, expressed in tons;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | c. Planned active life of the facility, the final design height of the facility and the maximum height of the facility during its operation;     |

**S**      **LOCATION**      **N/A**      **N/C**

**PART E CONTINUED**

- |                          |       |                                     |                          |   |
|--------------------------|-------|-------------------------------------|--------------------------|---|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. The source and type of cover material used for the landfill.   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5. Provide evidence that an approved laboratory shall conduct water quality monitoring for the facility in accordance with Chapter 62-160,FAC; (62-701.330(3)(g),FAC) |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. Provide a statement of how the applicant will demonstrate financial responsibility for the closing and long-term care of the landfill; (62-701.330(3)(h),FAC)      |

**PART F.      GENERAL CRITERIA FOR LANDFILLS (62-701.340,FAC)**

**S**      **LOCATION**      **N/A**      **N/C**

- |                          |       |                                     |                          |  |
|--------------------------|-------|-------------------------------------|--------------------------|--|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Describe (and show on a Federal Insurance Administration flood map, if available) how the landfill or solid waste disposal unit shall not be located in the 100-year floodplain where it will restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain unless compensating storage is provided, or result in a washout of solid waste; (62-701.340(3)(b),FAC) |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Describe how the minimum horizontal separation between waste deposits in the landfill and the landfill property boundary shall be 100 feet, measured from the toe of the proposed final cover slope; (62-701.340(3)(c),FAC)   |

**PART G.      LANDFILL CONSTRUCTION REQUIREMENTS (62-701.400,FAC)**

**S**      **LOCATION**      **N/A**      **N/C**

- |                          |       |                                     |                          |   |
|--------------------------|-------|-------------------------------------|--------------------------|---|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Describe how the landfill shall be designed so that solid waste disposal units will be constructed and closed at planned intervals throughout the design period of the landfill and shall be designed to achieve a minimum factor of safety of 1.5 using peak strength values to prevent failures of side slopes and deep-seated failures; (62-701.400(2),FAC) |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Landfill liner requirements; (62-701.400(3),FAC)   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. General construction requirements; (62-701.400(3)(a),FAC):   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1) Provide test information and documentation to ensure the liner will be constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure;   |



**S**      **LOCATION**      **N/A**      **N/C**

**PART G CONTINUED**

- |                          |       |                                     |                          |  |   |
|--------------------------|-------|-------------------------------------|--------------------------|--|---|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)  | Document foundation is adequate to prevent liner failure;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3)  | Constructed so bottom liner will not be adversely impacted by fluctuations of the ground water;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (4)  | Designed to resist hydrostatic uplift if bottom liner located below seasonal high ground water table;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (5)  | Installed to cover all surrounding earth which could come into contact with the waste or leachate.  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Composite liners; (62-701.400(3)(b),FAC)                      |   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1)  | Upper geomembrane thickness and properties;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)  | Design leachate head for primary LCRS including leachate recirculation if appropriate;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3)  | Design thickness in accordance with Table A and number of lifts planned for lower soil component.   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | c. Double liners; (62-701.400(3)(c),FAC)                         |   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1)  | Upper and lower geomembrane thicknesses and properties;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)  | Design leachate head for primary LCRS to limit the head to one foot above the liner;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3)  | Lower geomembrane sub-base design;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (4)  | Leak detection and secondary leachate collection system minimum design criteria ( $k \geq 10$ cm/sec, head on lower liner $\leq 1$ inch, head not to exceed thickness of drainage layer); |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. Standards for geosynthetic components; (62-701.400(3)(d),FAC) |   |



**S**      **LOCATION**      **N/A**      **N/C**

**PART G CONTINUED**

- |                          |       |                                     |                          |   |
|--------------------------|-------|-------------------------------------|--------------------------|---|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1)      Factory and field seam test methods to ensure all geomembrane seams achieve the minimum specifications;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)      Geomembranes to be used shall pass a continuous spark test by the manufacturer;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3)      Design of 24-inch-thick protective layer above upper geomembrane liner;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (4)      Describe operational plans to protect the liner and leachate collection system when placing the first layer of waste above 24-inch-thick protective layer. |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (5)      HDPE geomembranes, if used, meet the specifications in GRI GM13 and LLDPE geomembranes, if used, meet the specifications in GRI GM17;                      |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (6)      PVC geomembranes, if used, meet the specifications in PGI 1104;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (7)      Interface shear strength testing results of the actual components which will be used in the liner system;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (8)      Transmissivity testing results of geonets if they are used in the liner system;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (9)      Hydraulic conductivity testing results of geosynthetic clay liners if they are used in the liner system;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | e. Geosynthetic specification requirements; (62-701.400(3)(e),FAC)  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1)      Definition and qualifications of the designer, manufacturer, installer, QA consultant and laboratory, and QA program;                                      |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)      Material specifications for geomembranes, geocomposites, geotextiles, geogrids, and geonets;   |

**S**      **LOCATION**      **N/A**      **N/C**

**PART G CONTINUED**

- |                          |       |                                     |                          |  |  |
|--------------------------|-------|-------------------------------------|--------------------------|--|--|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3)  | Manufacturing and fabrication specifications including geomembrane raw material and roll QA, fabrication personnel qualifications, seaming equipment and procedures, overlaps, trial seams, destructive and nondestructive seam testing, seam testing location, frequency, procedure, sample size and geomembrane repairs; |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (4)  | Geomembrane installation specifications including earthwork, conformance testing, geomembrane placement, installation personnel qualifications, field seaming and testing, overlapping and repairs, materials in contact with geomembrane and procedures for lining system acceptance;                                     |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (5)  | Geotextile and geogrid specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (6)  | Geonet and geocomposite specifications including handling and placement, conformance testing, stacking and joining, repair, and placement of soil materials and any overlying materials;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (7)  | Geosynthetic clay liner specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil material and any overlying materials;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | f. Standards for soil liner components (62-710.400(3)(f),FAC): |  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1)  | Description of construction procedures including overexcavation and backfilling to preclude structural inconsistencies and procedures for placing and compacting soil component in layers;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)  | Demonstration of compatibility of the soil component with actual or simulated leachate in accordance with EPA Test Method 9100 or an equivalent test method;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3)  | Procedures for testing in-situ soils to demonstrate they meet the specifications for soil liners;  |

**S**      **LOCATION**      **N/A**      **N/C**

**PART G CONTINUED**

- |                          |       |                                     |                          |   |
|--------------------------|-------|-------------------------------------|--------------------------|---|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (4) Specifications for soil component of liner including at a minimum:  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (a) Allowable particle size distribution, Atterberg limits, shrinkage limit;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (b) Placement moisture and dry density criteria;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (c) Maximum laboratory-determined saturated hydraulic conductivity using simulated leachate;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (d) Minimum thickness of soil liner;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (e) Lift thickness;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (f) Surface preparation (scarification);  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (g) Type and percentage of clay mineral within the soil component;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (5) Procedures for constructing and using a field test section to document the desired saturated hydraulic conductivity and thickness can be achieved in the field. |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | g. If a Class III landfill is to be constructed with a bottom liner system, provide a description of how the minimum requirements for the liner will be achieved.   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. Leachate collection and removal system (LCRS); (62-701.400(4),FAC)   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. The primary and secondary LCRS requirements; (62-701.400(4)(a),FAC)  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1) Constructed of materials chemically resistant to the waste and leachate;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2) Have sufficient mechanical properties to prevent collapse under pressure;   |



<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	<b>PART G CONTINUED</b>	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3)	Have granular material or synthetic geotextile to prevent clogging;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4)	Have method for testing and cleaning clogged pipes or contingent designs for rerouting leachate around failed areas;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Other LCRS requirements; (62-701.400(4)(b) and (c),FAC)	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1)	Bottom 12 inches having hydraulic conductivity $\geq 1 \times 10^{-3}$ cm/sec;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2)	Total thickness of 24 inches of material chemically resistant to the waste and leachate;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3)	Bottom slope design to accommodate for predicted settlement and still meet minimum slope requirements;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4)	Demonstration that synthetic drainage material, if used, is equivalent or better than granular material in chemical compatibility, flow under load and protection of geomembrane liner.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Leachate recirculation; (62-701.400(5),FAC)	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Describe general procedures for recirculating leachate;	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Describe procedures for controlling leachate runoff and minimizing mixing of leachate runoff with storm water;	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Describe procedures for preventing perched water conditions and gas buildup;	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Describe alternate methods for leachate management when it cannot be recirculated due to weather or runoff conditions, surface seeps, wind-blown spray, or elevated levels of leachate head on the liner;	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Describe methods of gas management in accordance with Rule 62-701.530, FAC;	

**S**      **LOCATION**      **N/A**      **N/C**

**PART G CONTINUED**

☐ \_\_\_\_\_ ☒ ☐

f. If leachate irrigation is proposed, describe treatment methods and standards for leachate treatment prior to irrigation over final cover and provide documentation that irrigation does not contribute significantly to leachate generation.

☐ \_\_\_\_\_ ☒ ☐

5. Leachate storage tanks and leachate surface impoundments; (62-701.400(6), FAC)

☐ \_\_\_\_\_ ☒ ☐

a. Surface impoundment requirements; (62-701.400(6)(b), FAC)

☐ \_\_\_\_\_ ☒ ☐

(1) Documentation that the design of the bottom liner will not be adversely impacted by fluctuations of the ground water;

☐ \_\_\_\_\_ ☒ ☐

(2) Designed in segments to allow for inspection and repair as needed without interruption of service;

☐ \_\_\_\_\_ ☒ ☐

(3) General design requirements;

☐ \_\_\_\_\_ ☒ ☐

(a) Double liner system consisting of an upper and lower 60-mil minimum thickness geomembrane;

☐ \_\_\_\_\_ ☒ ☐

(b) Leak detection and collection system with hydraulic conductivity  $\geq 1$  cm/sec;

☐ \_\_\_\_\_ ☒ ☐

(c) Lower geomembrane placed on subbase  $\geq 6$  inches thick with  $k \leq 1 \times 10^{-5}$  cm/sec or on an approved geosynthetic clay liner with  $k \leq 1 \times 10^{-7}$  cm/sec;

☐ \_\_\_\_\_ ☒ ☐

(d) Design calculation to predict potential leakage through the upper liner;

☐ \_\_\_\_\_ ☒ ☐

(e) Daily inspection requirements and notification and corrective action requirements if leakage rates exceed that predicted by design calculations;

☐ \_\_\_\_\_ ☒ ☐

(4) Description of procedures to prevent uplift, if applicable;

☐ \_\_\_\_\_ ☒ ☐

(5) Design calculations to demonstrate minimum two feet of freeboard will be maintained;

☐ \_\_\_\_\_ ☒ ☐

(6) Procedures for controlling vectors and off-site odors.

**S**      **LOCATION**      **N/A**      **N/C**

**PART G CONTINUED**

- |                          |       |                                     |                          |  |
|--------------------------|-------|-------------------------------------|--------------------------|--|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Above-ground leachate storage tanks; (62-701.400(6)(c),FAC)   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1) Describe tank materials of construction and ensure foundation is sufficient to support tank;                                       |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2) Describe procedures for cathodic protection if needed for the tank;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3) Describe exterior painting and interior lining of the tank to protect it from the weather and the leachate stored;                 |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (4) Describe secondary containment design to ensure adequate capacity will be provided and compatibility of materials of construction; |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (5) Describe design to remove and dispose of stormwater from the secondary containment system;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (6) Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling;          |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (7) Inspections, corrective action and reporting requirements;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (a) Overfill prevention system weekly;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (b) Exposed tank exteriors weekly;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (c) Tank interiors when tank is drained or at least every three years;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (d) Procedures for immediate corrective action if failures detected;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (e) Inspection reports available for department review.  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | c. Underground leachate storage tanks; (62-701.400(6)(d),FAC)  |

S	LOCATION	N/A	N/C	PART G CONTINUED
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) Describe materials of construction;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) A double-walled tank design system to be used with the following requirements;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(a) Interstitial space monitoring at least weekly;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(b) Corrosion protection provided for primary tank interior and external surface of outer shell;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(c) Interior tank coatings compatible with stored leachate;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(d) Cathodic protection inspected weekly and repaired as needed;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling and provide for weekly inspections;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4) Inspection reports available for department review.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Schedule provided for routine maintenance of LCRS; (62-701.400(6)(e), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. Liner systems construction quality assurance (CQA); (62-701.400(7), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Provide CQA Plan including:
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) Specifications and construction requirements for liner system;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) Detailed description of quality control testing procedures and frequencies;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) Identification of supervising professional engineer;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4) Identify responsibility and authority of all appropriate organizations and key personnel involved in the construction project;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	<b>PART G CONTINUED</b>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(5) State qualifications of CQA professional engineer and support personnel;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(6) Description of CQA reporting forms and documents;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. An independent laboratory experienced in the testing of geosynthetics to perform required testing;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. Soil Liner CQA (62-701.400(8)FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Documentation that an adequate borrow source has been located with test results or description of the field exploration and laboratory testing program to define a suitable borrow source;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Description of field test section construction and test methods to be implemented prior to liner installation;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Description of field test methods including rejection criteria and corrective measures to insure proper liner installation.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Surface water management systems; (62-701.400(9),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Provide a copy of a Department permit for stormwater control or documentation that no such permit is required;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Design of surface water management system to isolate surface water from waste filled areas and to control stormwater run-off;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Details of stormwater control design including retention ponds, detention ponds, and drainage ways;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Gas control systems; (62-701.400(10),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Provide documentation that if the landfill is receiving degradable wastes, it will have a gas control system complying with the requirements of Rule 62-701.530, FAC;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. For landfills designed in ground water, provide documentation that the landfill will provide a degree of protection equivalent to landfills designed with bottom liners not in contact with ground water; (62-701.400(11),FAC)

**PART H. HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (62-701.410(1), FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Submit a hydrogeological investigation and site report including at least the following information:
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Regional and site specific geology and hydrogeology;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Direction and rate of ground water and surface water flow including seasonal variations;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Background quality of ground water and surface water;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Any on-site hydraulic connections between aquifers;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Site stratigraphy and aquifer characteristics for confining layers, semi-confining layers, and all aquifers below the landfill site that may be affected by the landfill;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. Description of topography, soil types and surface water drainage systems;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. Inventory of all public and private water wells within a one-mile radius of the landfill including, where available, well top of casing and bottom elevations, name of owner, age and usage of each well, stratigraphic unit screened, well construction technique and static water level;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	h. Identify and locate any existing contaminated areas on the site;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. Include a map showing the locations of all potable wells within 500 feet of the waste storage and disposal areas;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Report signed, sealed and dated by PE and/or PG.

**PART I. GEOTECHNICAL INVESTIGATION REQUIREMENTS (62-701.410(2),FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Submit a geotechnical site investigation report defining the engineering properties of the site including at least the following:
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Description of subsurface conditions including soil stratigraphy and ground water table conditions;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Investigate for the presence of muck, previously filled areas, soft ground, lineaments and sink holes;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Estimates of average and maximum high water table across the site;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Foundation analysis including:
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) Foundation bearing capacity analysis;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) Total and differential subgrade settlement analysis;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) Slope stability analysis;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Description of methods used in the investigation and includes soil boring logs, laboratory results, analytical calculations, cross sections, interpretations and conclusions;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. An evaluation of fault areas, seismic impact zones, and unstable areas as described in 40 CFR 258.13, 40 CFR 258.14 and 40 CFR 258.15.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Report signed, sealed and dated by PE and/or PG.

**PART J. VERTICAL EXPANSION OF LANDFILLS (62-701.430,FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Describe how the vertical expansion shall not cause or contribute to leachate leakage from the existing landfill, shall not cause objectionable odors, or adversely affect the closure design of the existing landfill;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Describe how the vertical expansion over unlined landfills will meet the requirements of Rule 62-701.400, FAC with the exceptions of Rule 62-701.430(1)(c),FAC;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Provide foundation and settlement analysis for the vertical expansion;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Provide total settlement calculations demonstrating that the final elevations of the lining system, that gravity drainage, and that no other component of the design will be adversely affected;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. Minimum stability safety factor of 1.5 for the lining system component interface stability and deep stability;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. Provide documentation to show the surface water management system will not be adversely affected by the vertical expansion;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. Provide gas control designs to prevent accumulation of gas under the new liner for the vertical expansion.



**PART K. LANDFILL OPERATION REQUIREMENTS (62-701.500,FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Provide documentation that landfill will have at least one trained operator during operation and at least one trained spotter at each working face; (62-701.500(1),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Provide a landfill operation plan including procedures for: (62-701.500(2), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Designating responsible operating and maintenance personnel;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Emergency preparedness and response, as required in subsection 62-701.320(16), FAC;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Controlling types of waste received at the landfill;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Weighing incoming waste;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Vehicle traffic control and unloading;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. Method and sequence of filling waste;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. Waste compaction and application of cover;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	h. Operations of gas, leachate, and stormwater controls;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. Water quality monitoring.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	j. Maintaining and cleaning the leachate collection system;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Provide a description of the landfill operation record to be used at the landfill; details as to location of where various operational records will be kept (i.e. FDEP permit, engineering drawings, water quality records, etc.) (62-701.500(3),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Describe the waste records that will be compiled monthly and provided to the Department annually; (62-701.500(4),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. Describe methods of access control; (62-701.500(5),FAC)



**S**      **LOCATION**      **N/A**      **N/C**

**PART K CONTINUED**

- |                          |       |                                     |                          |  |
|--------------------------|-------|-------------------------------------|--------------------------|--|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. Describe load checking program to be implemented at the landfill to discourage disposal of unauthorized wastes at the landfill; (62-701.500(6),FAC) |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7. Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7),FAC)  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Waste layer thickness and compaction frequencies;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Special considerations for first layer of waste placed above liner and leachate collection system;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | c. Slopes of cell working face and side grades above land surface, planned lift depths during operation;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. Maximum width of working face;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | e. Description of type of initial cover to be used at the facility that controls:  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1) Vector breeding/animal attraction  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2) Fires  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3) Odors  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (4) Blowing litter   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (5) Moisture infiltration  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | f. Procedures for applying initial cover including minimum cover frequencies;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | g. Procedures for applying intermediate cover;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | h. Time frames for applying final cover;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | i. Procedures for controlling scavenging and salvaging.  |



<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART K CONTINUED
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	j. Description of litter policing methods;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	k. Erosion control procedures.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Describe operational procedures for leachate management including; (62-701.500(8),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Leachate level monitoring, sampling, analysis and data results submitted to the Department;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Operation and maintenance of leachate collection and removal system, and treatment as required;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Procedures for managing leachate if it becomes regulated as a hazardous waste;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Identification of treatment or disposal facilities that may be used for off-site discharge and treatment of leachate;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Contingency plan for managing leachate during emergencies or equipment problems;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. Procedures for recording quantities of leachate generated in gal/day and including this in the operating record;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	h. Procedures for water pressure cleaning or video inspecting leachate collection systems.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. Describe how the landfill receiving degradable wastes shall implement a gas management system meeting the requirements of Rule 62-701.530, FAC; (62-701.500(9),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. Describe procedures for operating and maintaining the landfill stormwater management system to comply with the requirements of Rule 62-701.400(9); (62-701.500(10),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART K CONTINUED
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. Equipment and operation feature requirements; (62-701.500(11),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Sufficient equipment for excavating, spreading, compacting and covering waste;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Communications equipment;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Dust control methods;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. Litter control devices;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. Signs indicating operating authority, traffic flow, hours of operation, disposal restrictions.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. Provide a description of all-weather access road, inside perimeter road and other roads necessary for access which shall be provided at the landfill; (62-701.500(12),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. Additional record keeping and reporting requirements; (62-701.500(13),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Records used for developing permit applications and supplemental information maintained for the design period of the landfill;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Monitoring information, calibration and maintenance records, copies of reports required by permit maintained for at least 10 years;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Maintain annual estimates of the remaining life of constructed landfills and of other permitted areas not yet constructed and submit this estimate annually to the Department;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Procedures for archiving and retrieving records which are more than five year old.

**PART L. WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS (62-701.510, FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			1. Water quality and leachate monitoring plan shall be submitted describing the proposed ground water, surface water and leachate monitoring systems and shall meet at least the following requirements;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			a. Based on the information obtained in the hydrogeological investigation and signed, dated and sealed by the PG or PE who prepared it; (62-701.510(2)(a),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			b. All sampling and analysis performed in accordance with Chapter 62-160, FAC; (62-701.510(2)(b),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			c. Ground water monitoring requirements; (62-701.510(3),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(1) Detection wells located downgradient from and within 50 feet of disposal units;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(2) Downgradient compliance wells as required;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(3) Background wells screened in all aquifers below the landfill that may be affected by the landfill;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(4) Location information for each monitoring well;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(5) Well spacing no greater than 500 feet apart for downgradient wells and no greater than 1500 feet apart for upgradient wells unless site specific conditions justify alternate well spacings;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(6) Well screen locations properly selected;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(7) Monitoring wells constructed to provide representative ground water samples;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(8) Procedures for properly abandoning monitoring wells;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			(9) Detailed description of detection sensors if proposed.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			d. Surface water monitoring requirements; (62-701.510(4),FAC)



**S**      **LOCATION**      **N/A**      **N/C**

**PART L CONTINUED**

- |                          |       |                                     |                          |   |   |
|--------------------------|-------|-------------------------------------|--------------------------|---|---|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1)   | Location of and justification for all proposed surface water monitoring points;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)   | Each monitoring location to be marked and its position determined by a registered Florida land surveyor;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | e. Leachate sampling locations proposed; (62-701.510(5),FAC)  |   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | f. Initial and routine sampling frequency and requirements; (62-701.510(6),FAC)   |   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1)   | Initial background ground water and surface water sampling and analysis requirements;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)   | Routine leachate sampling and analysis requirements;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3)   | Routine monitoring well sampling and analysis requirements;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (4)   | Routine surface water sampling and analysis requirements.   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | g. Describe procedures for implementing evaluation monitoring, prevention measures and corrective action as required; (62-701.510(7),FAC) |   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | h. Water quality monitoring report requirements;(62-701.510(9),FAC)   |   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (1)   | Semi-annual report requirements (see paragraphs 62 701.510(6)(c),(d)and (e) for sampling frequencies);  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (2)   | Documentation that the water quality data shall be provided to the Department in an electronic format consistent with requirements for importing into Department databases, unless an alternate form of submittal is specified in the permit. |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3)   | Two and one-half year report requirements, or every five years if in long-term care, signed, dated and sealed by PG or PE.  |



**PART M. SPECIAL WASTE HANDLING REQUIREMENTS (62-701.520, FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1. Describe procedures for managing motor vehicles; (62-701.520(1),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 2. Describe procedures for landfilling shredded waste; (62-701.520(2),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3. Describe procedures for asbestos waste disposal; (62-701.520(3),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4. Describe procedures for disposal or management of contaminated soil; (62-701.520(4), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5. Describe procedures for disposal of biological wastes; (62-701.520(5), FAC)

**PART N. GAS MANAGEMENT SYSTEM REQUIREMENTS (62-701.530,FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1. Provide the design for a gas management system that will (62-701.530(1), FAC):
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> a. Be designed to prevent concentrations of combustible gases from exceeding 25% the LEL in structures and 100% the LEL at the property boundary;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> b. Be designed for site-specific conditions;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> c. Be designed to reduce gas pressure in the interior of the landfill;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> d. Be designed to not interfere with the liner, leachate control system or final cover.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 2. Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes; (62-701.530(2), FAC):
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3. Provide documentation describing how the gas remediation plan and odor remediation plan will be implemented; (62-701.530(3), FAC):
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4. Landfill gas recovery facilities; (62-701.530(5), FAC):

**S**      **LOCATION**      **N/A**      **N/C**

**PART N CONTINUED**

- |                          |       |                                     |                          |   |
|--------------------------|-------|-------------------------------------|--------------------------|---|
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Information required in Rules 62-701.320(7) and 62-701.330(3), FAC supplied;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Information required in Rule 62-701.600(4), FAC supplied where relevant and practical;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | c. Estimate of current and expected gas generation rates and description of condensate disposal methods provided;   |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. Description of procedures for condensate sampling, analyzing and data reporting provided;  |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | e. Closure plan provided describing methods to control gas after recovery facility ceases operation and any other requirements contained in Rule 62-701.400(10), FAC; |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | f. Performance bond provided to cover closure costs if not already included in other landfill closure costs.  |

**PART O.      LANDFILL FINAL CLOSURE REQUIREMENTS (62-701.600,FAC)**

**S**      **LOCATION**      **N/A**      **N/C**

- |                          |                       |                                     |                          |   |
|--------------------------|-----------------------|-------------------------------------|--------------------------|---|
| <input type="checkbox"/> | Attachment K<br>_____ | <input type="checkbox"/>            | <input type="checkbox"/> | 1. Closure permit requirements; (62-701.600(2),FAC)   |
| <input type="checkbox"/> | _____                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Application submitted to Department at least 90 days prior to final receipt of wastes;       |
| <input type="checkbox"/> | Attachment K<br>_____ | <input type="checkbox"/>            | <input type="checkbox"/> | b. Closure plan shall include the following:  |
| <input type="checkbox"/> | Attachment K<br>_____ | <input type="checkbox"/>            | <input type="checkbox"/> | (1) Closure design plan;  |
| <input type="checkbox"/> | Attachment K<br>_____ | <input type="checkbox"/>            | <input type="checkbox"/> | (2) Closure operation plan;   |
| <input type="checkbox"/> | Attachment K<br>_____ | <input type="checkbox"/>            | <input type="checkbox"/> | (3) Plan for long-term care;  |
| <input type="checkbox"/> | Attachment K<br>_____ | <input type="checkbox"/>            | <input type="checkbox"/> | (4) A demonstration that proof of financial responsibility for long-term care will be provided. |





<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	<b>PART O CONTINUED</b>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Closure design plan including the following requirements: (62-701.600(3),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Plan sheet showing phases of site closing;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Drawings showing existing topography and proposed final grades;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Provisions to close units when they reach approved design dimensions;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Final elevations before settlement;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Side slope design including benches, terraces, down slope drainage ways, energy dissipaters and discussion of expected precipitation effects;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. Final cover installation plans including:
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) CQA plan for installing and testing final cover;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) Schedule for installing final cover after final receipt of waste;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) Description of drought-resistant species to be used in the vegetative cover;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4) Top gradient design to maximize runoff and minimize erosion;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(5) Provisions for cover material to be used for final cover maintenance.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. Final cover design requirements:
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) Protective soil layer design;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) Barrier soil layer design;



<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	<u>PART O CONTINUED</u>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) Erosion control vegetation;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4) Geomembrane barrier layer design;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(5) Geosynthetic clay liner design if used;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(6) Stability analysis of the cover system and the disposed waste.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	h. Proposed method of stormwater control;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. Proposed method of access control;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	j. Description of the proposed or existing gas management system which complies with Rule 62-701.530, FAC.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	3. Closure operation plan shall include: (62-701.600(4), FAC)
<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	a. Detailed description of actions which will be taken to close the landfill;
<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	b. Time schedule for completion of closing and long-term care;
<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	c. Describe proposed method for demonstrating financial assurance for long-term care;
<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	d. Operation of the water quality monitoring plan required in Rule 62-701.510, FAC.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Development and implementation of gas management system required in Rule 62-701.530, FAC.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	4. Certification of closure construction completion including: (62-701.600(6), FAC)
<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	a. Survey monuments; (62-701.600(6)(a), FAC)
<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	b. Final survey report; (62-701.600(6)(b), FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART O CONTINUED
----------	-----------------	------------	------------	------------------

<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	5. Declaration to the public; (62-701.600(7),FAC)
--------------------------	-----------------------	--------------------------	--------------------------	---

<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	6. Official date of closing; (62-701.600(8),FAC)
--------------------------	-----------------------	--------------------------	--------------------------	--

<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	7. Justification for and detailed description of procedures to be followed for temporary closure of the landfill, if desired; (62-701.600(9),FAC)
--------------------------	-----------------------	--------------------------	--------------------------	---

**PART P. OTHER CLOSURE PROCEDURES (62-701.610,FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
----------	-----------------	------------	------------

<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	1. Describe how the requirements for use of closed solid waste disposal areas will be achieved;(62-701.610(1),FAC)
--------------------------	-----------------------	--------------------------	--------------------------	--

<input type="checkbox"/>	Attachment K _____	<input type="checkbox"/>	<input type="checkbox"/>	2. Describe how the requirements for relocation of wastes will be achieved; (62-701.610(2), FAC)
--------------------------	-----------------------	--------------------------	--------------------------	--

**PART Q. LONG-TERM CARE (62-701.620,FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
----------	-----------------	------------	------------

<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Maintaining the gas collection and monitoring system; (62-701.620(5), FAC)
--------------------------	-------	-------------------------------------	--------------------------	---

<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Stabilization report requirements; (62-701.620(6),FAC)
--------------------------	-------	-------------------------------------	--------------------------	---

<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Right of access;(62-701.620(7),FAC)
--------------------------	-------	-------------------------------------	--------------------------	--

<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Requirements for replacement of monitoring devices; (62-701.620(8),FAC)
--------------------------	-------	-------------------------------------	--------------------------	--

<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. Completion of long-term care signed and sealed by professional engineer (62-701.620(9), FAC).
--------------------------	-------	-------------------------------------	--------------------------	--

**PART R. FINANCIAL ASSURANCE (62-701.630,FAC)**

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Provide cost estimates for closing, long-term care, and corrective action costs estimated by a PE for a third party performing the work, on a per unit basis, with the source of estimates indicated; (62-701.630(3)&(7), FAC).
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Describe procedures for providing annual cost adjustments to the Department based on inflation and changes in the closing, long-term care, and corrective action plans; (62-701.630(4)&(8), FAC).
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Describe funding mechanisms for providing proof of financial assurance and include appropriate financial assurance forms; (62-701.630(5),(6),&(9), FAC).
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Provide documentation and the appropriate forms for delaying submitting proof of financial assurance for solid waste disposal units that qualify; (62-701.630(2)(c), FAC).

**PART 5. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER**

1. Applicant:

The undersigned applicant or authorized representative of Triumvirate Environmental  
Florida is aware that statements made in this form and attached

information are an application for a Solid Waste Management Permit from the Florida Department of Environmental Protection and certifies that the information in this application is true, correct and complete to the best of his/her knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the Department. It is understood that the Permit is not transferable, and the Department will be notified prior to the sale or legal transfer of the permitted facility.

Signature of Applicant or Agent

Name and Title (please type)

E-Mail address (if available)

Mailing Address

City, State, Zip Code

Telephone Number

Date:

Attach letter of authorization if agent is not a governmental official, owner, or corporate officer.

2. Professional Engineer registered in Florida (or Public Officer if authorized under Sections 403.707 and 403.7075, Florida Statutes):

This is to certify that the engineering features of this solid waste management 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 maintained and operated, will comply with all applicable statutes of the State of Florida and rules of the Department. It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and operation of the facility.

Signature

Name and Title (please type)

Florida Registration Number  
(please affix seal)

Mailing Address

City, State, Zip Code

E-Mail address (if available)

Telephone Number

Date:

## **Attachment C**

### **Brief Description of Facility Operations**

## **Attachment C**

### **Brief Description of Facility Operations**

Triumvirate Environmental (Florida) Inc., (TEIFL) is used oil processing and solid waste processing facility that is located in the Town of Davie. As used oil filter and used oil processor, transporter, transfer facility, and marketer, TEIFL is subject to 40 CFR 279 and applicable state regulations governing used oil management. Used oil is stored in one of the multiple tanks located within the southernmost tank storage area. There are no underground tanks or underground piping located at the facility. All above ground tanks, piping, and ancillary equipment is secondarily contained. Used oil is processed at the facility utilizing proprietary physical and chemical methodologies. Used oil and non-hazardous waste are tested in accordance with the facility's Waste Analysis Plan (Located in Attachment E).

TEIFL is also a solid waste processing facility. TEIFL receives non-hazardous wastes from CERCLA and non-CERCLA sites. TEIFL consolidates non-recyclable, non-hazardous oily sludge's and other non-hazardous wastes from drums and other containers into a roll-off container. The roll-off container is then shipped offsite to a permitted municipal landfill.

Additionally, TEIFL is also a hazardous waste transporter, 10 day hazardous waste transfer facility, and a biomedical waste transporter and storage facility. TEIFL is also a transporter, transfer facility, and small quantity handler of universal waste lamps and devices.

As of the date of this application TEIFL has 23 employees.

## **Attachment D**

### **Detailed Process Description**



## **Attachment D**

### **Detailed Process Description**

Triumvirate Environmental (Florida) Inc., (TEIFL) is a used oil processing facility located in the town of Davie, Florida. As a used oil and used oil filter processor, transporter, and marketer, TEIFL is subject to 40 CRF 279 and all applicable state and local regulations governing used oil management. Additionally, TEIFL is a hazardous waste transporter, 10 day hazardous waste transfer facility, non-hazardous waste processing facility, biomedical waste transporter, and biomedical waste storage facility. TEIFL is also a transporter, transfer facility, and small quantity handler of universal waste and devices.

TEIFL accepts all used oil, off specification fuel, coolants, oil filters, industrial non-hazardous waste, oily wastewater, petroleum contact water, non-hazardous investigative derived wastewater, non-hazardous investigative derived solids and sludge's, non-hazardous sludge, petroleum contaminated soil, and sludge's, and virgin fuels.

#### **Treatment Storage and Other Processing**

Used oil is collected at the facility from pump trucks, DOT-approved drums, or tanker trailers from automotive generators such as dealerships and used oil generators from the marine industry and other used oil generating industries.

Used oil is received from pump trucks, DOT-approved drums, or tanker trailers from generators such as companies in the automotive industry, cruise ships, and industrial manufactures. At the facility, used oil is transferred into one of the 20,000 gallon storage tanks. A list of storage tanks is shown in Appendix 1. The location of these storage tanks are shown in Figure 1C – Site Plan. The used oil is then filtered, heat-treated for oil/water separation, and then sold as burner fuel to asphalt plants, cement plants, and power utility companies. Used oil is tested by an outside laboratory to make sure the used oil fuel meets compliance with the federal standards for “on-specification: fuel.” Each load that enters the facility is tested for halogens using a Dexsil test kit to ensure the oil does not exceed 999 parts per million total halogens.

Non-hazardous waste water is collected in separate compartments of pump trucks. It is also collected in DOT-approved drums, or tanker trailers from generators such as cruise ships, auto dealerships, and industrial facilities. The water is transferred into a 100,000 gallon surge tank designated as Tank T21, then filtered, then heated for oil/water separation (water fraction only), and then transferred to an offsite industrial wastewater pre-treatment facility for treatment and disposal. The term “oily wastewater” is applied only to non-hazardous oily wastewater, based on either a TCLP test of petroleum related contaminants of the generator’s waste stream of <1,000 ppm total halogens based on the generator’s technical knowledge of the waste stream if the source and extent of the contamination is known.

Used oil is stored in one of multiple tanks located within the southernmost tank storage area. Oily wastewater is stored in both the southern and northern tank storage areas. There are no underground tanks or piping located at the facility. All tanks, piping, and ancillary equipment are located within secondary containments. Used oil is processed utilizing proprietary physical and chemical methods. Refer to Figures 1B for the sitemap and Appendix 1 for a list of all tanks at the facility.

### Analysis

As stated in 40 CFR 279.10(b)(ii), used oil containing or thought to contain more than 999 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous wastes listed in Subpart D of 40 CFR 261. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix VIII of part 261 of this chapter)

- (A) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffin's if they are processed through a tolling arrangement, as described in 279.24(c), to reclaim metalworking oils/fluids. The presumption does not apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.
- (B) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFC's are destined for reclamation. The rebuttable presumption does apply to used oils contaminated.

### On Specification Used Oil

According to 40 CFR 279.11 used oil burned for energy recovery and any fuel produced from used oil by processing, blending, or other treatment is subject to regulation under 40 CFR 279 if it can be shown that the used oil does not exceed any part of the allowable levels for constituents shown below:

Table I	
Constituents / Property	Allowable Levels
Arsenic	5 ppm Maximum
Cadmium	2 ppm Maximum
Chromium	10 ppm Maximum
Lead	100 ppm Maximum
Flash Point	100 F minimum
Total Halogens	4,000 ppm maximum

Pursuant to 40 CFR 279.72, a generator, transporter, processor, re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the specifications of the Table I

by performing analyses or obtaining copies of analyses or other information documenting that the used oil meets the above specifications.

TEIFL utilized on-site, contract laboratories, and/or laboratory capabilities of its affiliate companies to satisfy the requirements of its waste analysis plan. All laboratories shall utilize the methodologies and procedures found in USEPA publications SW-846, most current edition. Examples of methodologies utilized onsite by TEIFL and by contact laboratories are identified in Appendix 2.

TEIFL conducts various site-specific analyses for the various generators which they encounter. Regular generators (i.e., generators that produce used oil or oily wastewater as part of a normal on going operation) and non-regular generators of used oil and oily wastewaters are sampled and analyzed initially using the Dexsil test or other equivalent test method. Subsequent used oil from the same generators is screened for halogens using a Tekmate halogen sniffer or other equivalent halogen sniffer. Results of halogen screening are shown on the used oil manifest. If the halogen sniffer detects halogens, the used oil is tested using the Dexsil test. If the halogen sniffer detects no halogens, the used oil is accepted.

Every load delivered to a facility by an outside transporter is sampled prior to off-loading the material. Non-frequent generators or one time generators are sampled prior to removal of material from the site.

Before TEIFL accepts used oil from a generator for the first time, a sample of the oil is examined to determine whether or not the total halogen content is less than equal to 999 ppm. TEFL utilizes SW-846 Method 9077 "Test for Chlorine in New and Used Petroleum Products" and other equivalent method(s) to determine halogen content. If the oil contains less than or equal to 999ppm total halogens, TEIFL shall accept the material for processing. After the initial receipt, subsequent used oil from the same generators are tested for halogens using the Tekmate halogen sniffer or other equivalent halogen sniffer. If the halogen sniffer does not detect halogens, the used oil is accepted. If halogens are detected by the sniffer, the above mentioned test method used of initial acceptance of used oil is performed.

If use the used oil contains 1,000 ppm or more total halogens, TEIFL shall forward the sample to a contract laboratory or a permitted hazardous waste facility for analysis by EPA method 8010 or an equivalent method(s) to check for significant concentrations of 40 CFR 261, Appendix VIII halogenated constituents. Significant concentrations of halogenated constituents, as outlined by USEPA, is any single halogenated constituent with a concentration exceeding 100 ppm.

If the used oil does not contain significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds; TEIFL shall accept the used oil. If the used oil does contain significant concentrations of 40CFR 261, Appendix VIII halogenated compounds, TEIFL shall inform the generator that use used oil must be managed as a hazardous waste and routed through the Triumvirate network of facilities or other permitted hazardous waste facilities.




## **Hazardous Waste Transporter**

### **Treatment, Storage, and Other Processing**

TEIFL is a registered hazardous waste transporter and disposes of customers hazardous waste by temporarily storing the wastes until they are picked up or delivered to a permitted waste disposal facility (40 CFR 263.12). TEIFL has a dedicated area at its facility for storing drummed hazardous wastes. Drummed hazardous wastes are stored in its permitted area and are not exceeding the permitted volume. All drums of hazardous waste are kept within secondary containment.

## **Non-Hazardous Sludge, Non-Hazardous Investigate Derived Soils, and Petroleum Contaminated Soils and Sludge's (i.e., non-hazardous sludge) Processor**

### **Treatment, Storage and Other Processing**



Non-hazardous sludge's which include heavy oils and/or contaminated fuels must be blended before they meet customer fuel specification. After being pumped into the 100,000 gallon surge tank, the material enters the normal separation processes. Bottom sludge's generated during this process must regularly be removed from the tank. The tanks are cleaned and the material is drummed and tested for TCLP toxicity. The tanks are cleaned and the material is drummed and tested for TCLP toxicity. Hazardous sludge's are managed as hazardous wastes and disposed of through a permitted waste disposal facility.

### **Analysis**

Solids/Sludge's shall be analyzed for RCRA metals and organic constituents in accordance with Toxicity Characteristic Leaching Procedure (TCLP) or may be accepted based on the generator's technical knowledge of the waste stream. Additional testing for ignitability or corrosivity may be required.

## **Solid Waste Processing**

TEIFL is also a solid waste processing facility. TEIFL receives CERCLA and non-CERCLA non-hazardous wastes in drums and other similar size containers. These drums are parked either inside the one storage building or in other secondary containment. Some drums of used oil contain non-pump able, non-recyclable sludge's and solids after pumping out the used oil. TEIFL consolidates all the above mentioned non-hazardous wastes from these smaller containers into the 20 cubic yard roll-off container. An inert absorbent material is used to solidify any free liquids that may be present inside the roll-off. The roll-off container is then shipped offsite to a permitted municipal landfill.

### **Analysis**



Solids/sludge's shall be analyzed for RCRA metals and organic constituents in accordance with Toxicity Characteristic Leaching Procedure (TCLP) or may be accepted based on the generator's technical knowledge of the waste stream. Additional testing for ignitability or corrosivity may be required.

## **Attachment E**

### **Waste Analysis Plan & Material Profiling**

# **Attachment E**

## **Waste Analysis Plan & Material Profiling**

### **1.0 Introduction**

Triumvirate Environmental (Florida) Inc., (TEIFL) is a used oil processing facility located in the town of Davie, Florida. As a used oil and used oil filter processor, transporter, and marketer, TEIFL is subject to 40 CFR 279 and all applicable state and local regulations governing used oil management. Specifically, 40 CFR 279.55 requires TEIFL, as a used oil processing facility, to prepare, maintain, and adhere to a Waste Analysis Plan. As stated in 40 CFR 279.55, the owner/operator of a used oil processing facility must develop and follow a written waste analysis plan describing the procedures that shall be used to comply with the analytical requirements of 40 CFR 279.53, the rebuttable presumption, and 40 CFR 279.72, the determination of on-specification used oil. This waste analysis plan is developed to satisfy the requirements of 40 CFR 279.55 by establishing methods for documenting the analytical requirements of 40 CFR 279.53 and 279.72.

Additionally, TEIFL is a hazardous waste transporter, 10 day hazardous waste transfer facility, non-hazardous waste processing facility, biomedical waste transporter, and biomedical waste storage facility. TEIFL is also a transporter, transfer facility, and small quantity handler of universal waste and devices. This waste analysis plan is also designed to ensure compliance with RCRA waste characterization and management regulations.

### **2.0 Used Oil and Oily Waste**

Used oil and oily waste include but are not limited to used oil, oily wastewater, oil filters, and oil contaminated solids and sludge's.

### **2.1 Rebuttable Presumption**

As stated in 40 CFR 279.10(b)(ii), used oil containing or thought to contain more than 999 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous wastes listed in Subpart D of 40 CFR 261. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of part 261 of this chapter)

(A) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffin's, if they are processed, through a tolling arrangement as described in 279.24(c), to reclaim metalworking oils/fluids. The presumption does not apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.

(B) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated.

## 2.2 On Specification Used Oil

According to 40 CFR 279.11 used oil burned for energy recovery and any fuel produced from used oil by processing, blending, or other treatment is subject to regulation under 40 CFR 279 if it can be shown that the used oil does not exceed any part of the allowable levels for constituents shown below:

Table I	
Constituents / Property	Allowable Levels
Arsenic	5 ppm Maximum
Cadmium	2 ppm Maximum
Chromium	10 ppm Maximum
Lead	100 ppm Maximum
Flash Point	100 F minimum
Total Halogens	4,000 ppm maximum

Pursuant to 40 CFR 279.72, a generator, transporter, processor, re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the specifications of the Table I by performing analyses or obtaining copies of analyses or other information documenting that the used oil meets the above specifications.

## 2.3 Waste Analysis Plan

TEIFL utilized on-site, contract laboratories, and/or laboratory capabilities of its affiliate companies to satisfy the requirements of its waste analysis plan. All laboratories shall utilize the methodologies and procedures found in USEPA publications SW-846, most current edition. Examples of methodologies utilized onsite by TEIFL and by contract laboratories are identified in Appendix 2.

TEIFL because of the nature of its business varies the analysis on a site-specific basis. Regular generators (i.e., generators that produce used oil or oily wastewater as part of a normal on going operation) and non-regular generators of used oil and oily wastewaters are sampled and analyzed initially using the Dexsil test or other equivalent test method. Subsequent used oil from the same generators are screened for halogens using a Tekmate halogen sniffer or other equivalent halogen sniffer. Results of halogen screening are shown on the used oil manifest. If the halogen sniffer detects halogens, the used oil is tested using the Dexsil test. If the halogen sniffer detects no halogens, the used oil is accepted.

### 2.3.1 Used Oil and Oily Waste



### 2.3.1.1 Used Oil and Oily Wastewater

Before TEIFL accepts used oil from a generator for the first time, a sample of the oil is examined to determine whether or not the total halogen content is less than equal to 999 ppm. TEFL utilizes SW-846 Method 9077 "Test for Chlorine in New and Used petroleum Products" and other equivalent method(s) to determine halogen content. If the oil contains less than or equal to 999ppm total halogens, TEIFL shall accept the material for processing. After the initial receipt, subsequent used oil from the same generators are tested for halogens using the Tekmate halogen sniffer or other equivalent halogen sniffer. If the halogen sniffer does not detect halogens, the used oil is accepted. If halogens are detected by the sniffer, the above mentioned test method used of initial acceptance of used oil is performed.

If use the used oil contains 1,000 ppm or more total halogens, TEIFL shall forward the sample to a contract laboratory or a permitted hazardous waste facility for analysis by EPA method 8010 or an equivalent method(s) to check for significant concentrations of 40 CFR 261, Appendix VIII halogenated constituents. Significant concentrations of halogenated constituents, as outlined by USEPA, is any single halogenated constituent with a concentration exceeding 100 ppm.

If the used oil does not contain significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds, TEIFL shall accept the used oil. If the used oil does contain significant concentrations of 40CFR 261, Appendix VIII halogenated compounds, TEIFL shall inform the generator that use used oil must be managed as a hazardous waste and routed through the Triumvirate network of facilities or other permitted hazardous waste facilities.

Documentation of this waste analysis shall be through facility inventory logs and/or the material Profile Form (of their equivalent) for used oil and oily waste (see appendix 3)

Notes:

1. Compressor and refrigerant oils contaminated with chlorofluorocarbons (CFCs) shall be managed as hazardous waste. Refer to Section 6.0 for waste analysis information regarding hazardous wastes. TEIFL may revise this standard operating procedure in accordance with federal, state, and local regulations.
2. Hazardous waste from conditionally exempt small quantity generators (CESQG) shall not be mixed with used oil
3. TEIFL does not accept used oil commingled with antifreeze without analytical data indicating that the antifreeze was non-hazardous prior to mixing with the used oil.

### 2.3.1.2 Oil Filters

Before accepting used oil filters (crushed or uncrushed) for transportation and recycling as scrap metal, the oil filters shall be gravity drained by the generator pursuant to 40 CFR 279.10 9(c)(1)(i), Pursuant to 40 CFR 279.10(c)(1)(i) and 40 CFR 261.4(b)(13), oil filters are not subject regulation as hazardous waste under 40 CFR 261 or used oil under 40 CFR 279. A material profile form is not required for this waste.

If any indication exists that the oil filters have been commingled with waste listed in Subpart D of 40 CFR 261 the filters shall be rejected. A sample of the commingled waste shall be obtained for analysis pursuant to Section 6.0

### **2.3.1.3 Oily Solids/Sludge's Destined for Recycling**

Before TEIFL accepts oily solids or oily sludge's from a generator for the first time, a sample of the material is examined to determine whether or not the total halogen content is less than equal to 999 ppm. TEFL utilizes SW-846 Method 9077 "Test for Chlorine in New and Used petroleum Products" and other equivalent method(s) to determine halogen content. If the material contains less than or equal to 999 ppm total halogens, TEIFL shall accept the material for processing. After the initial receipt, subsequent oily solids or oily sludge's from the same generators are tested for halogens using the Tekmate halogen sniffer or other equivalent halogen sniffer. If the halogen sniffer does not detect halogens, the used oil is accepted. If halogens are detected by the sniffer, the above mentioned test method used of initial acceptance of used oil is performed.

If use the used oil contains 1,000 ppm or more total halogens, TEIFL shall forward the sample to a contract laboratory or a permitted hazardous waste facility for analysis by EPA method 8010 or an equivalent method(s) to check for significant concentrations of 40 CFR 261, Appendix VIII halogenated constituents. Significant concentrations of halogenated constituents, as outlined by USEPA, is any single halogenated constituent with a concentration exceeding 100 ppm.

If the material does not contain significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds, TEIFL shall accept the used oil. If the used oil does contain significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds, TEIFL shall inform the generator that use material must be managed as a hazardous waste and routed through the Triumvirate network of facilities or other permitted hazardous waste facilities.

Documentation of this waste analysis shall be through facility inventory logs and/or the material Profile Form (of their equivalent) for used oil and oily waste (see appendix 3)

Note: Hazardous waste sludge's / solids from Conditionally Exempt Small Quantity Generators shall not be mixed with oily waste.

### **2.3.1.4 Oily Solids / Sludge's Destined for Disposal**

Although used oil is commonly recovered from oily solids/sludge's oily solids/sludge's may be managed as waste destined for disposal, not recycling. Therefore these materials, when destined for disposal, shall be analyzed for RCRA metals and organics in accordance with the TCLP as well as ignitability and corrosivity, if applicable. If process knowledge is available indicating the nature and/or physical characteristics of the waste, the above mentioned analytical requirements may be reduced. However, the minimum analytical requirements shall be RCRA metals and organics in accordance with TCLP.

Documentation of this waste analysis shall be through the Material Profile Form in Appendix 3 or equivalent.

### **2.3.3 Processed Used Oil**

Processed used oil is stored in a product tank until shipment to an industrial furnace. Each time a tanker trailer is loaded with processed used oil for shipment to an industrial furnace, the used oil shall be tested to demonstrate that the total halogen content is less than or equal to 1,000 PPM. TEIFL utilizes SW-846 Method 9077 "Test Method for Total Chlorine in New and Used Petroleum Products" or equivalent method to determine the halogen content.

Samples are also analyzed monthly by a contract laboratory to determine if the used oil is on specification meeting the requirements of Table I. One sample is taken every 1000,000 gallons batch or two samples per month, whichever is greater. In addition to the requirements of Table I in Section 2.2 above, the samples shall be analyzed for polychlorinated biphenyls (PCBs), BTUs, or sulfur, and viscosity. All analysis shall be conducted in accordance with SW-846 or ASTM protocols, as applicable.

Documentation of this waste analysis shall be through facility inventory logs and monthly analytical data maintained as part of the facility records, as shown in Appendix 4 and copies forwarded to the customer so that they can be include in their operational records.

## **3.0 Non-Hazardous Wastewater**

Incoming wastewater shall be analyzed for RCRA metals and organic constituents in accordance with the Toxicity Characteristic Leaching Procedure (TCLP). Additional testing for ignitability and corrosivity may also be required. If process knowledge is available indicating the nature and / or physical characteristics of the waste, then the above mentioned analytical requirements may be reduced.

## **4.0 Petroleum Contact Water**

For wastewater subject to the Petroleum Contact Water (PCW) regulations under rule 62-740 F.A.C. generators shall provide analytical data or process knowledge demonstrating that the PCW does not contain hazardous constituents above those found in the petroleum source of the PCW or other hazardous constituents not normally found in the PCW.

Documentation of this waste analysis shall be through the Material Profile Form (Appendix 3). If it is determined that the waste is hazardous refer to section 6.0 below for more waste analysis information.

## **5.0 Non-Hazardous Solids/Sludge's**

Solids/Sludge's shall be analyzed for RCRA metals and organic constituents in accordance with the Toxicity characteristic Leaching Procedure (TCLP). Additional testing for ignitability and corrosivity may also be required. If process knowledge is available indicating the nature and / or physical characteristics of the waste, then the above mentioned analytical requirements may be reduced.

Documentation of this waste analysis shall be through the Material Profile Form (appendix 3).

If the waste is determined to be hazardous refer to Section 6.0 for additional waste analysis information.

## **6.0 Hazardous Waste – Including Paint Waste**

Analytical testing for these wastes shall be dictated by the waste analysis plan for the hazardous waste facility receiving the waste. Documentation of the waste analysis shall be through the Material Profile Form required by the hazardous waste facility. Refer to Appendix 3 for an example Material Profile Form for hazardous waste.

### **NOTE:**

1. Compressor and refrigerant oils contaminated with chlorofluorocarbons (CFCs) shall be managed as hazardous waste in accordance with this section
2. Hazardous waste from conditionally exempt small quantity generators shall not be mixed with used oil.

## **7.0 Antifreeze and Coolants**

Antifreeze and coolants are sent to a licensed antifreeze recycler. When recycled, antifreeze is not subject to TCLP, ignitability, or corrosivity testing. When the waste is to be sent for disposal, however, these materials shall be analyzed for TCLP metals and organic's. Additional testing for ignitability and corrosivity may also be required. If process knowledge is available indicating the nature and or physical characteristics of the waste the above mentioned analytical requirements may be reduced. However, the minimum analytical requirement when disposing of the waste shall include RCRA metals and volatile organics in accordance with TCLP.

Whether recycled or disposed, documentation of this waste analysis shall be through the Material Profile Form (appendix 3).

If the waste is determined to be hazardous refer to Section 6.0 for more waste analysis information.

## **8.0 Commercial Chemical Products and Off Specification Products**

Commercial chemical Products are materials that were never used and are in their original packaging or container. Off specification products are materials that are no longer suitable for their original intended purpose due to expiration of its shelf life, chemicals degradation, or contamination. An example of an off specification product is waste fuels. Off specification products do not include wastes or spent materials which were generated through the use of the product of from a manufacturing or industrial process.

Pursuant to 40 CFR 261.2(c)(3), commercial chemical products destined for reclamation are exempt from regulation as a waste.

No analytical testing is required for off-specification fuels. Documentation of waste analysis for commercial chemical products and off specification products, other than fuels, shall be the Material Profile Form in Appendix 3. Material Safety Data Sheets may provide sufficient information to characterize off specification products. However, if the MSDS information is incomplete additional analysis may be required. The additional analysis conducted to supplements the MSDS shall be determined on a case by case basis taking into consideration the type of off-specification product and process knowledge.

## **9.0 Empty Drums**

A drum that held hazardous waste listed in 40 CFR 261.31, 261.32, and 261.33(f) is empty if all the waste in the drum has been removed by all reasonable means and no more than one inch of material remains in the drum.

A drum that held acutely hazardous waste listed in 40 CFR 261.33(e) is empty if the drum was emptied by all reasonable means and tripled rinsed by a material that is capable of removing the acutely hazardous waste.

If the above conditions are met the drums do not require a Material Profile Form. If the above conditions are not met the drum and its contents must be managed as hazardous waste. Refer to section 6.0 for more waste analysis information.

## **10.0 Batteries**

Pursuant to 40 CFR 261.6 (a)(iv), spent lead acid batteries destined for reclamation are subject to regulation under 40 CFR 266, subpart G in lieu of 40 CFR 261 and 262. Leaking batteries shall not be accepted under this waste analysis criteria. Leaking batteries shall be managed as D002 hazardous waste in accordance with section 6.0 of this waste analysis plan.

Pursuant to 40 CFR 273 Nickel Cadmium and lithium batteries destined for reclamation are subject to regulation under 40 CFR 266, subpart G in lieu of 40 CFR 261 and 262. A Material Profile Form will be completed for all batteries that enter the facility.

When it is not possible to manage batteries as universal waste they will be placed into DOT approved containers and managed as hazardous waste. Refer to section 6.0 for more waste analysis information.

## **11.0 Universal Waste Lamps and Devices**

Universal waste lamps and devices are managed and accumulated by TEIFL in small quantities (<5,000 kg) as universal wastes in accordance with 40 CFR 273 subpart B. When properly managed under 40 CFR 273 universal waste lamps and devices are not subject to waste analysis plan requirements. A material profile form is completed for lamps and devices managed as universal waste. Appendix 3 contains an example of such a material profile form. TEIFL sends universal waste lamps and devices to a licensed recycler.



## **12.0 Prohibited Waste**

TEIFL does not accept radioactive, PCB or hazardous waste for processing / treatment onsite.

## **Attachment F**

### **Description of Sludge, Residue And By-Product Management**

## **Attachment F**

### **Description of Sludge, Residue And By-Product Management**

#### **Oily Solids/Sludge's Destined for Recycle**

Before TEIFL accepts oily solids/sludge's from a generator for the first time, a sample of the material is examined to determine whether or not the total halogen content is less than equal to 999 ppm. TEFL utilizes SW-846 Method 9077 "Test for Chlorine in New and Used Petroleum Products" and other equivalent method(s) to determine halogen content. If the material contains less than or equal to 999 ppm total halogens, TEIFL shall accept the material for recycling. After the initial receipt, subsequent used oil from the same generators are tested for halogens using the Tekmate halogen sniffer or other equivalent halogen sniffer. If the halogen sniffer does not detect halogens, the material is accepted. If halogens are detected by the sniffer, the above mentioned test method used of initially is conducted.

If use the used material contains 1,000 ppm or more total halogens, TEIFL shall forward the sample to a contract laboratory or a permitted hazardous waste facility for analysis by EPA method 8010 or an equivalent method(s) to check for significant concentrations of 40 CFR 261, Appendix VIII halogenated constituents. Significant concentrations of halogenated constituents, as outlined by USEPA, is any single halogenated constituent with a concentration exceeding 100 ppm or the total halogens exceeding 1,000ppm

If the used material does not contain significant concentrations of 40 CFR 261, Appendix VIII halogenated constituents; TEIFL shall accept the material for recycling. If the material does contain significant concentrations of 40 CFR 261, Appendix VIII halogenated compounds, TEIFL shall inform the generator that use material must be managed as a hazardous waste and routed through the Triumvirate network of facilities or other permitted hazardous waste facilities.

Documentation of this waste analysis shall be through facility inventory logs and/or Material Profile Form for used oil or oil waste.

#### **Oily Solids/Sludge's Destined for Disposal**

Although used oil is commonly recovered from oily solids/sludge's, oily solids/sludge's may be managed as waste destined for disposal, not recycling. Therefore, these materials, when destined for disposal shall be analyzed for RCRA metals and organics in accordance with the Toxicity Characteristic Leaching Procedure (TCLP) as well as for ignitability and corrosivity, if applicable. If process knowledge is available indicating the nature and/or physical characteristics of the waste, the above mentioned analytical requirements may be reduced. If the material is determined to be hazardous, it shall be managed as a hazardous waste pursuant to section 6.0 of the waste analysis plan.

#### **Non-Hazardous Solids/Sludge's**

Non-Hazardous Solids/Sludges shall be analyzed for RCRA metals and organic constituents in accordance with the Toxicity Characteristic Leaching Procedure (TCLP) as well as for ignitability and



corrosivity, if applicable. If process knowledge is available indicating the nature and/or physical characteristics of the waste, the above mentioned analytical requirements may be reduced.

Documentation of this waste analysis shall be the Material Profile Form

If the waste is determined to be hazardous, refer to Section 6.0 of the Waste Analysis Plan, in Attachment E for additional waste analysis information.

### **Management of Residues**

Residues from the processing of used oil are managed in accordance with 40 CFR 279.10(c) and characterized in accordance with TEIFL's Waste Analysis Plan in Attachment E. Non-pumpable, non-recyclable, non-hazardous residues are placed in the permitted solid waste roll-off. Hazardous residues are properly disposed as hazardous waste.

## **Attachment G**

### **Waste Tracking Plan**

## **Attachment G**

### **Waste Tracking Plan**

Refer to Appendix 5 for copies of TEIFL's used oil manifest and facility inventory log utilized for the receipt of Used Oil and for the Used Oil Fuel Delivery manifest utilized to track the delivery of used oil fuel to various industrial furnaces throughout Florida. Additionally TEIFL maintains a used oil recordkeeping form required by FDEP. TEIFL shall maintain all applicable documentation for a minimum of three years.

**Attachment H**  
**Preparedness and Prevention Plan**

# Preparedness and Prevention plan

## 1.0 Introduction

This plan demonstrates compliance with the requirements of 40 CFR 279.52(a) and 40 CFR 265.30 through 265.37 (as referenced under rule 62-730.171(2)(b))

Triumvirate Environmental (Florida) Inc., (TEIFL) is permitted hazardous waste transporter that operates a ten (10) day hazardous waste transfer facility for drummed hazardous waste. Waste stored in the 10 day transfer area is shipped to a permitted hazardous waste treatment, storage, or disposal facility. TEIFL also operates a used oil processing facility. Below is the facility's location address and EPA ID number.

Triumvirate Environmental (Florida) Inc.  
3670 SW 47<sup>th</sup> Avenue  
Davie, FL 33314  
EPA ID No. FLD 981 018 773

## 2.0 Maintenance and Operation of Facility (40CFR 265.31)

TEIFL as owner and operator maintains and operates the facility in a manner that minimizes the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

## 3.0 Required Equipment (40 CFR 265.32)

Refer to Appendix A of this plan for a list of all emergency preparedness and prevention equipment.

TEIFL shall maintain an alarm system to provide emergency communication and instruction to facility personnel.

TEIFL shall maintain a telephone and/or hand held radio system capable of summoning inside and outside emergency assistance from local police, fire department, hospital, and other local emergency response organizations.

TEIFL shall maintain an adequate on-site supply of fire extinguishers, fire control equipment, spill equipment, decontamination equipment, and adequate water pressure.

## 4.0 Testing and Maintenance of Equipment (40 CFR 265.33)

The facility communications and alarm system, fire protection equipment, spill control equipment, decontamination equipment shall be checked daily for proper operation in time of an emergency. Refer to appendix B of this plan for a copy of the daily inspection log.

#### **5.0 Access to Communication or Alarm System (40 CFR 265.34)**

All personnel involved in facility operations shall have immediate access to the alarm and communications system through visual or voice contact with other employees, facility operations shall be conducted with a minimum of one employee offsite.

#### **6.0 Required Aisle Space (40 CFR 265.35)**

Adequate Aisle space is maintained between every two adjacent row of drum to facility access to the drum in case of a spill or emergency.

#### **7.0 Arrangements with Local Authorities (40 CFR 265.37)**

A copy of the facility's contingency plan and emergency procedures is sent to the local fire department, police, hospital, or any other local agency who is called upon for assistance in case of an emergency at the facility. Each agency is invited to visit the facility to familiarize the agency of the facility operations and emergency procedures.

# **CONTINGENCY PLAN & EMERGENCY PROCEDURES**

**TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC.  
3701 S.W. 47<sup>th</sup> Avenue, Suite 109  
Davie, FL 33314**

**August 23, 2012  
(Revision 5)**

**Prepared by  
John H. Wyluda  
Lab Services and Compliance Coordinator  
Triumvirate Environmental (Florida) Inc.**

## **Table of Contents**

	<b>Page No.</b>
1.0 Introduction	3
1.1 Purpose	3
1.2 Scope	3
1.3 Responsibility	3
2.0 General Information	4
3.0 Implementation of Contingency Plan	4
4.0 Arrangement with Local Emergency Response Agencies	4
5.0 Copies of Contingency Plan	4
6.0 Amendments to Contingency Plan	4
7.0 Emergency Coordinators	5
8.0 Emergency Procedures	5
8.1 Identifying Releases and Hazards	5
8.2 Notification and Reporting	6
8.3 Emergency Procedures	6
8.4 Emergency Equipment	7
8.5 Evacuation of Facility	7
9.0 Recordkeeping	8

## **Appendices**

Appendix A -	Correspondence with Local Authorities	9
Appendix B -	Emergency Contact List	10
Appendix C -	Emergency Equipment	12
Appendix D -	Evacuation Routes	14
Appendix E -	Site Location Map & Site Layout Photograph	15
Appendix F -	Material Inventory List	16
Appendix G -	Material Safety Data Sheets	18



## **1.0 Introduction**

### **1.1 Purpose**

The purpose of this plan is to minimize hazards to human health and the environment from fire, explosion, and/or any unplanned sudden release of hazardous materials or waste to the environment. This plan is to be implemented immediately whenever there is a fire, explosion, and/or sudden release of material / waste that could threaten human health and/or the environment.

This document establishes a Contingency Plan and Emergency procedures that complies with the following permits and licenses.

- a. FDEP Hazardous Waste Transporter/Transfer Facility  
No. FLD 981 018 773
- b. FDEP Used Oil / Solid Waste Processing Facility No. 77390-HO-007
- c. BCEPD Hazardous Materials Storage Facility No. ST-00055-10
- d. BCEPD Hazardous Materials Transfer Facility No. HTS-0055-11-01

### **1.2 Scope**

This contingency plan and emergency procedures was developed in accordance with:

Code of Federal Regulations:	40 CFR 262.34, 264.52, 265.52
Florida Administrative Code:	62-730.171(2)(a) [40 CFR 265 Subpart C&D]
Broward County Codes:	27-306(b)(8), 27-368(c)(4)(e), 27-368(d)(3)(f)

### **1.3 Responsibilities**

The General Manager or his designee is responsible for modifying this plan, as needed, to reflect changes in facility operations and/or county, state, or federal regulations. The General Manager or his/her designee is responsible for the implementation of this plan in the event of an emergency and/or accidental release of material/waste. The General Manager is responsible for ensuring that all employees are familiar with the content of this plan and are able to implement it, if needed.

The General Manager is responsible for ensuring that this plan is posted and accessible to all employees. In the absence of the General Manager, the Operations Manager is responsible for implementing the plan in the event of an emergency and/or accidental release of material / waste.

All plant employees are responsible for reading, understanding, and implementing this plan in the event of an emergency and/or accidental release of material / waste.

## **2.0 General Information**

Facility Name: Triumvirate Environmental (Florida), Inc.

Facility Location: 3670 SW 47<sup>th</sup> Avenue  
Davie, FL 33314

Office Address: 3701 SW 47<sup>th</sup> Avenue, Suite 109  
Davie, FL 33314

EPA ID Number: FLD 981 018 773

Facility Activities: Used Oil / Solid Waste Processing, 10 Day Hazardous  
Waste Transfer Facility, Biomedical Waste Storage Facility

## **3.0 Implementation of Contingency Plan**

The provisions of this plan will be carried out immediately whenever there is a fire, explosion, or sudden release of hazardous material / waste to the environment.

## **4.0 Arrangement with Local Emergency Response Agencies**

Arrangements with local authorities have been established by providing the Davie Police Department, Davie Fire Department, Plantation General Hospital, and Broward General Hospital with a copy of this plan and a letter requesting their assistance in the event of an emergency. Refer to Appendix A for a copy of all correspondences. In the event of a revision of this plan, a copy will be submitted to the above referenced agencies.

## **5.0 Copies of the Contingency Plan**

A copy of the Contingency Plan and all associated revisions will be maintained at the facility and the office. A copy of the plan will be submitted to the Davie Police Department, Davie Fire Department, Plantation General Hospital, and Broward General Hospital. Additional copies of this plan are available from the General Manager.

## **6.0 Amendments to Contingency Plan**

This plan will be revised, if necessary, whenever:

- a. Applicable ordinances or regulations are revised;
- b. The plan fails in an emergency;

- c. The facility changes in a manner that materially increases the potential for fires, explosions, or the release of hazardous materials / waste, or changes the response necessary in an emergency,
- d. The Emergency Coordinators change,
- e. The list of emergency equipment changes.

In the event of revisions to this plan, a revised copy will be submitted to the authorities identified in Section 4.0. A revised copy of this plan will also be maintained at the facility and office.

## **7.0 Emergency Coordinators**

The following identifies the facility's primary and alternate emergency coordinators (EC):

Primary: John P. "Shawn" Lennon, Jr.  
General Manager  
(954)583-3795 (office)  
(954)296-3873 (cell/Home)

Work - 3701 S.W. 47<sup>th</sup> Avenue, Suite 109, Davie, FL 33314

Alternate: Steven T. Swett  
Operations Manager  
(954)791-1327 (office)  
(954)296-3871 (cell/Home)

Work - 3670 S.W. 47<sup>th</sup> Avenue, Davie, FL 33314

At all times, there will be at least one EC either at the facility or on call who is available to respond to an emergency by reaching the facility within a short period of time (1 hour drive) and has the responsibility of coordinating all emergency response activities. The EC will be familiar with all aspects of this plan, all operations, and activities at the facility, the location and characteristics of the waste handled, the location of all records within the facility, and the facility layout. Additionally, the EC has the authority to commit the resources needed to carry out this plan.

## **8.0 Emergency Procedures**

### **8.1 Identifying Releases and Hazards**

Whenever there is a release, fire, or explosion, the EC will immediately identify the characteristics, exact source, amount, and a real extent of any released material / waste. The EC will do this by observation or review of facility records/manifests and, if necessary, by chemical analyses.

Concurrently, the EC will assess possible hazards to human health or the environment that may result from a release, fire, or explosion. This assessment

will consider both direct and indirect effects of a release, fire, or explosion such as toxic gases, or the effect of any hazardous surface water runoff from water or chemical agents used to control the situation.

## **8.2 Notification and Reporting**

Whenever there is an imminent or actual emergency, the EC or his designee, will immediately activate the facility communication system and notify all facility personnel. The facility communication system includes a telephone, a two-way radio system, and horn signals. The EC will also notify the following agencies as indicated:

- a. Town of Davie Fire Department via 911 **(Immediately)**
- b. DPEP via 954/765-4900 **(within 24 hours)**
- c. Florida Dept. of Environmental Protection via 561/681-6600 **(within 24 hours)**
- d. Florida Division of Emergency Management (or Florida State Warning Point) via 850/413-9911 or 800/320-0519 **(within 24 hours)**

Notification of additional local authorities listed in Appendix B may be conducted, as deemed necessary by the EC.

If the EC determined that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility boundaries, he will report his findings as follows:

- a. If the EC's assessment indicated that the evacuation of the local area may be advisable, he will notify the local authorities identified above. Additional assistance from local authorities listed in Appendix B may be obtained as deemed necessary by the EC. The EC will be available to assist local authorities in deciding whether evacuation of the immediate area is needed.
- b. The EC will immediately notify the National Response Center at 800/424-8802 and report the following information:
  - i) Name and telephone number;
  - ii) Name and address of facility;
  - iii) Time and type of accident;
  - iv) Name and quantity of material involved and to the extent known;
  - v) Possible hazards to human health and the environment, outside the facility boundaries.

## **8.3 Emergency Procedures**

During an emergency, the EC will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, or spread to other hazardous material / waste at the facility. These measures may include stopping operation, collecting and containing released material / waste, and removing or

isolating containers. If the facility stops operating, the EC will monitor for leaks, pressure build up, or rupture in valves, pipes, etc...

After an emergency, the EC will provide for treatment, storage, and disposal of recovered material / waste including contaminated soil, water, or other material. The treatment, storage, and disposal of recovered material / waste will be conducted in accordance with applicable local, state, and federal regulations. Waste management companies utilized in the treatment, storage, and disposal of recovered material / waste will be chosen at the EC's discretion. The EC will ensure that, in the affected areas of the facility, no material/waste is incompatible with the released materials until clean-up procedures are completed. All emergency equipment listed in this plan (Appendix C) will be cleaned, if necessary, and fit for its intended use before operations are resumed.

#### **8.4 Emergency Equipment**

A list of emergency equipment available on site is contained in Appendix C.

#### **8.5 Evacuation of Facility**

The EC is responsible for determining which emergencies require evacuation. The EC may deviate from the evacuation procedures identified below if necessary to bring the situation under control. An evacuation route map and a site location map are illustrated in Appendix D and E respectively. In the event of a plant evacuation, the following steps will be taken:

- a. The signal for evacuation will be given which consists of three long blasts of the air horn. The two-way radio system will be used to notify/divert incoming drivers.
- b. All vehicle traffic within the Plant will cease. Visitors, contractors, and customers will no longer be allowed in the facility.
- c. All personnel, visitors, contractors, and customers will immediately leave through the main gate.
- d. No persons will be allowed to enter the plant without authorization from the EC and senior fire department representative.
- e. All persons evacuating the plant will assemble southwest of the plant on the west side of SW 47<sup>th</sup> Avenue at a point chosen by the EC. The assembly point will be within the vicinity of the location identified on the evacuation route map. (Appendix D).
- f. The EC will conduct a head count to confirm that all persons within the facility are present. Any person not accounted for will be immediately reported to the senior fire department representative.

- g. After the emergency, no personnel will be allowed to re-enter the plant until authorization is obtained from the senior fire department representative and the EC.

## **9.0 Recordkeeping**

The EC will submit a written closure plan to the Broward County Department of Planning and Environmental Protection within 5 days of the incident.

The EC will notify the Florida Department of Environmental Protection in writing before operations resume:

- a. In the affected area(s) of the facility, no material/waste is incompatible with the released material, and
- b. All emergency equipment listed in this plan is clean and fit for its intended use.

The EC will document in the facility's operating record the time, date, and details of any incident that required the implementation of this plan. Within 15 days after the incident, the EC will submit a written report on the incident to the Florida Department of Environmental protection. The report will include the following information:

- a. Name, address, and telephone number of the owner/operator.
- b. Name, address, and telephone number of the facility,
- c. Date, time, and type of incident,
- d. Name and quantity of materials involved,
- e. The extent of injuries, if any,
- f. An assessment of actual or potential hazards to human health and the environment, if any,
- g. Estimated quantity and disposition of recovered material resulting from the incident.

**Appendix A**  
**Correspondence with Local Authorities**

**Appendix B**  
**Emergency Contact List**



## Appendix B

### Phone Numbers of Local Authorities, Agencies, Etc.

Local Authority / Agency	Phone Numbers	Contact Period
Davie Fire Department Non-Emergency Number	911 (954) 797-1213	Immediately
Davie Police Department Non -Emergency Number	911 (954) 693-8200	Immediately
Emergency Medical Service	911	As Needed
Broward County Environmental Protection and Growth Management Department	(954) 519-1260	Within 24 hours
Florida Department of Environmental Protection – Southeast District	(561) 681-6600	Within 24 hours
Florida Division of Emergency Management (aka Florida State Warning Point)	(850) 413-9911 (800) 320-0519	Within 24 hours
National Response Center	(800) 424-8802	As Needed
Plantation General Hospital (Primary)	(954) 587-5010	As Needed
Broward General Hospital (2ndary)	(954) 355-4400	As Needed
Primary Emergency Coordinator John P. "Shawn" Lennon, Jr. General Manager	(954) 583-3795 (office) (954) 296-3873 (cell)	
Alternate Emergency Coordinator Steven T. Swett Operations Manager	(954) 583-3795 (office) (954) 296-3871 (cell)	

**Appendix C**  
**Facility Emergency Equipment**

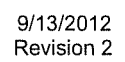
## Appendix C

### Facility Emergency Equipment

Equipment	Quantity	Type	Capabilities
Communication System	2	Telephone, Radio	Call Emergency Responders/Numbers. Alert workers
Fire Alarm	1	Horn	Warn incase of Fire
Fire Hydrants	2	Water	Put out fire
Fire Extinguisher	5	ABC (dry chemical)	Put out fire
Safety Shower	2	Water	Clean in case of emergency
Eye Wash	2	Water	Clean in case of emergency
Respirators	2	Full face with cartridges	Purify air
Spill Pads	1 roll	Synthetic	Clean up spill
Spill Kits	7 drums	Clay	Clean up spill
Empty Drums	25 to 100	1A1 Steel	Clean up spill, store material
Spill Pumps	2	Diaphragm	Pump up material
First Aid Kits	1	Industrial	Provide First AID
Pressure Washer	3	2,500 psi	Clean up area/spill

Refer to the enclosed referenced facility map for the location of the above referenced equipment.

**Appendix D**  
**Evacuation Route Map**



**Appendix E**  
**Site Location Map**  
**&**  
**Site Layout Photograph**

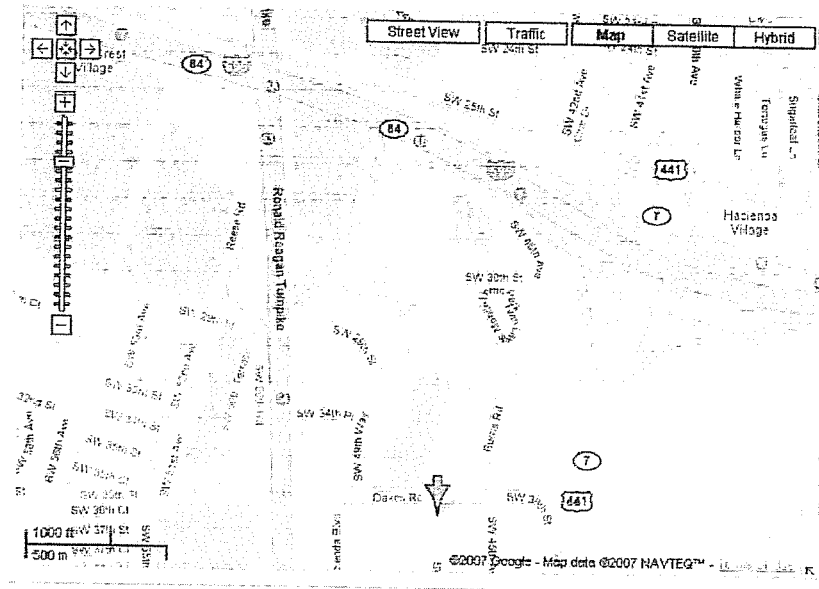
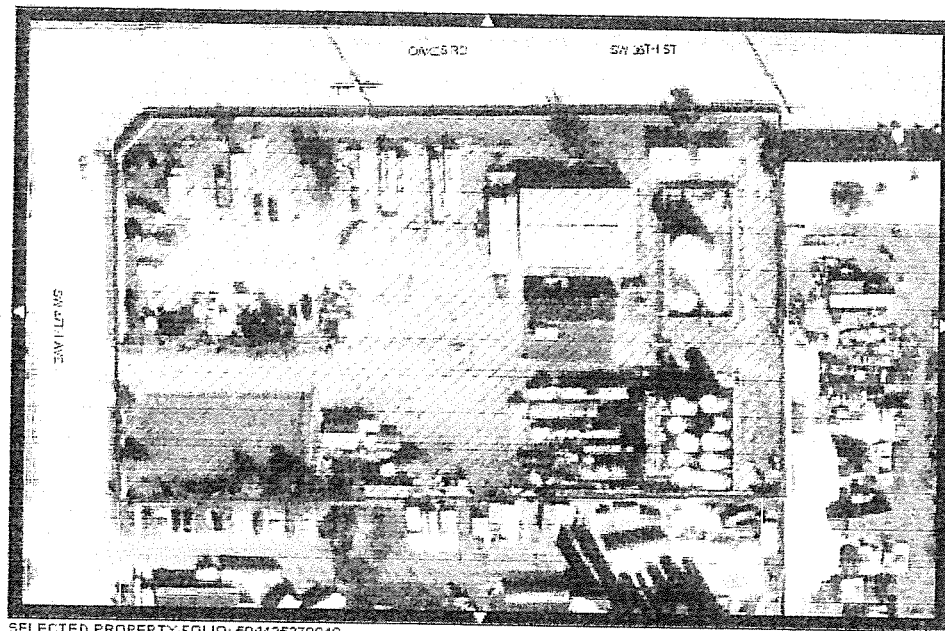


Figure 1A – Site Location Map



SELECTED PROPERTY-FOLIO: 604125270010

© Copyright 2003 Broward County Property Appraiser

0 38 ft

Figure 1B – Site Layout Photo

**Appendix F**  
**Material Inventory List**



## Appendix F

### Material Inventory List

Product	Time On-Site	Average Quantity
No. 5 Fuel Oil	Continuous	50,000 gallons
No. 2 Fuel Oil	Continuous	8,000 gallons
Diesel Fuel	Continuous	1,000 gallons
Paint & Paint Thinners	10 Days or Less	1,500 gallons

Note: Refer to attached material safety data sheet for information about the above referenced products.

**Appendix G**  
**Material Safety Data Sheets**



**No. 5 Fuel Oil** **MATERIAL SAFETY DATA SHEET** **MSDS No. 0332**

**EMERGENCY OVERVIEW**

**CAUTION!**

**COMBUSTIBLE LIQUID - SLIGHT TO MODERATE IRRITANT**  
**EFFECTS CENTRAL NERVOUS SYSTEM**  
**HARMFUL OR FATAL IF SWALLOWED**



NFPA 704 (Section)

Moderate fire hazard. Avoid breathing vapors or mists. May cause dizziness and drowsiness. May cause moderate eye irritation and skin irritation. Long-term, repeated exposure may cause skin cancer, if ingested, do NOT induce vomiting, as this may cause chemical pneumonia (fluid in the lungs).

**1. CHEMICAL PRODUCT and COMPANY INFORMATION**

Hess Corporation  
1 Hess Plaza  
Woodbridge, NJ 07065-0561

EMERGENCY TELEPHONE NUMBER (24 hrs):

CHEMTREC (800) 424-9300

COMPANY CONTACT (business hours):

Corporate EHS (732) 750-6000

MSDS Internet Website:

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

SYNONYMS: #5 Fuel Oil; 5 Oil; High and Low Sulfur No. 5 Fuel Oil

See Section 15 for abbreviations and acronyms.

**2. COMPOSITION and INFORMATION ON INGREDIENTS**

**INGREDIENT NAME (CAS No.)**

**CONCENTRATION PERCENT BY WEIGHT**

Fuel Oil, Residual (68476-33-6)

100

A complex combination of heavy (high boiling point) petroleum hydrocarbons. The amount of sulfur varies with product specification and does not affect the health and safety properties as outlined in this Material Safety Data Sheet.

**3. HAZARDS IDENTIFICATION**

**EYES**

Contact with eyes may cause mild to moderate irritation.

**SKIN**

May cause skin irritation with prolonged or repeated contact. Practically non-toxic if absorbed following acute (single) exposure. May cause dermal sensitization.

**INGESTION**

This material has a low order of acute toxicity. If large quantities are ingested, nausea, vomiting and diarrhea may result. Ingestion may also cause effects similar to inhalation of the product. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

**INHALATION**

Because of its low vapor pressure, this product presents a minimal inhalation hazard at ambient temperature. Upon heating, fumes may be evolved. Inhalation of fumes or mist may result in respiratory tract irritation and central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

Revision Date: 7/1/2006

Page 1 of 5



# MATERIAL SAFETY DATA SHEET

No. 5 Fuel Oil

MSDS No. 0332

containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks in Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

## WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use gasoline or solvents (naphtha, kerosene, etc.) for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

## OTHER/GENERAL PROTECTION

Petroleum industry experience indicates that a program providing for good personal hygiene, proper use of personal protective equipment, and minimizing the repeated and prolonged exposure to liquids and fumes, as outlined in this MSDS, is effective in reducing or eliminating the carcinogenic risk of high boiling aromatic oils (polynuclear aromatic hydrocarbons) to humans.

## FUEL OIL ASH PRODUCTS

Personnel exposed to ash should wear appropriate protective clothing (example, DuPont Tyvek®), wash skin thoroughly, launder contaminated clothing separately, and wear respiratory protection approved for use against toxic metal dusts (such as HEPA filter cartridges). Wetted-down combustion ash may evolve toxic hydrogen sulfide (H<sub>2</sub>S) - confined spaces should be tested for H<sub>2</sub>S prior to entry if ash is wetted.

## 8. EXPOSURE CONTROLS and PERSONAL PROTECTION

### EXPOSURE LIMITS

Components (CAS No.)	Source	Exposure Limits		Note
		TWA/STEL		
Fuel Oil (55475-13-5)	OSHA	5 mg/m <sup>3</sup> (as mineral oil dist.) TWA		
	ACGIH	0.2 mg/m <sup>3</sup> (as mineral oil) TWA		A2, skin

### ENGINEERING CONTROLS

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

### EYE/FACE PROTECTION

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

### SKIN PROTECTION

Gloves constructed of nitrile, neoprene, or PVC are recommended. Chemical protective clothing such as of E.I. DuPont Tyvek QCB®, Saranex®, TyChem®, or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

### RESPIRATORY PROTECTION

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection.

Revision Date: 7/1/2006

Page 4 of 5

**MATERIAL SAFETY DATA SHEET****No. 5 Fuel Oil****MSDS No. 0332**

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

**9. PHYSICAL and CHEMICAL PROPERTIES****APPEARANCE**

Black, viscous liquid

**ODOR**

Heavy, petroleum/asphalt-type odor

**BASIC PHYSICAL PROPERTIES**

BOILING RANGE: 370-700 °F (188-371 °C)  
VAPOR PRESSURE: <0.004 mm Hg @ 70 °F (21 °C)  
VAPOR DENSITY (air = 1): NA  
SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 0.887 – 0.9725 (API 28.0 – 14.0)  
PERCENT VOLATILES: Negligible  
EVAPORATION RATE: Negligible  
SOLUBILITY (H<sub>2</sub>O): Negligible

**10. STABILITY and REACTIVITY****STABILITY:** Stable. Hazardous polymerization will not occur**CONDITIONS TO AVOID and INCOMPATIBLE MATERIALS**

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

**11. TOXICOLOGICAL PROPERTIES****ACUTE TOXICITY**

Based on No. 6 Fuel Oil (a similar product):

Acute dermal LD50 (rabbits): &gt; 5 ml/kg

Acute oral LD50 (rats): 5.1 ml/kg

Primary dermal irritation: slightly irritating (rabbits)

Draize eye irritation: mildly irritating (rabbits)

Guinea pig sensitization: mildly sensitizing

**CHRONIC EFFECTS AND CARCINOGENICITY**

Carcinogenicity: OSHA: NO IARC: 2B (animal) NTP: YES ACGIH: A2

This material contains polynuclear aromatic hydrocarbons (PNAs), some of which are animal carcinogens. Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

The presence of carcinogenic PNAs indicates that precautions should be taken to minimize repeated and prolonged inhalation of fumes or mists.

**MUTAGENICITY (genetic effects)**

Materials of similar composition have been positive in mutagenicity studies

Revision Date: 7/1/2006

Page 5 of 8

**MATERIAL SAFETY DATA SHEET****No. 5 Fuel Oil****MSDS No. 0332****12. ECOLOGICAL INFORMATION**

Keep out of sewers, drainage and waterways. Report spills and releases, as applicable, under Federal and State regulations.

**13. DISPOSAL CONSIDERATIONS**

Consult federal, state and local waste regulations to determine appropriate disposal options. Combustion ash may be a characteristic hazardous waste.

**14. TRANSPORTATION INFORMATION**

PROPER SHIPPING NAME: Fuel Oil, No. 5      Placard:  
HAZARD CLASS and PACKING GROUP: 3, PG III  
DOT IDENTIFICATION NUMBER: NA 1993  
DOT SHIPPING LABEL: Flammable liquid  
May be reclassified for transportation as a COMBUSTIBLE LIQUID under the conditions of DOT 49 CFR 173.120(b)(2).

**15. REGULATORY INFORMATION****U.S. FEDERAL, STATE and LOCAL REGULATORY INFORMATION**

This product and its constituents listed herein are on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other regulations at the state and/or local level. Consult those regulations applicable to your facility/operation.

**CLEAN WATER ACT (OIL SPILLS)**

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) or, if not practical, the U.S. Coast Guard with follow-up to the National Response Center, as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

**CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)**

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.

**SARA SECTION 311/312 - HAZARD CLASSES**

<u>ACUTE HEALTH</u>	<u>CHRONIC HEALTH</u>	<u>FIRE</u>	<u>SUDDEN RELEASE OF PRESSURE</u>	<u>REACTIVE</u>
X	X	X	--	--

**SARA SECTION 313 - SUPPLIER NOTIFICATION**

According to the US EPA guidance documents for reporting Persistent Bioaccumulating Toxics (PBTs), this product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372 (US EPA does not provide data on No. 5 Fuel Oil which is a blend of 6 oil and 2 oil - the following are estimates based on typical blend ratios):



# MATERIAL SAFETY DATA SHEET

No. 5 Fuel Oil

MSDS No. 0332

INGREDIENT NAME (CAS NUMBER)	CONCENTRATION (PARTS PER MILLION (PPM) BY WEIGHT)
Polycyclic aromatic compounds (PAHs) Benz[a]p[h]i	1992
perylene (191-24-2)	16.8
Lead (7439-92-1)	0.66
Mercury (7439-97-6)	0.00079
Vanadium (7440-62-2)	0.33
Polychlorinated biphenyls (PCBs)	Though EPA estimates 10% of the residual fuel oil "pool" may have < 50 ppm PCBs (Ref 2), AHC has no reason to believe there are any PCBs in its residual fuel oil products.

## CALIFORNIA PROPOSITION 65 LIST OF CHEMICALS

This product contains the following chemicals that are included on the Proposition 65 "List of Chemicals" required by the California Safe Drinking Water and Toxic Enforcement Act of 1986:

INGREDIENT NAME (CAS NUMBER)	Date Listed
Residual Fuel Oil (no CAS Number listed)	12/6/1990

## CANADIAN REGULATORY INFORMATION (WHMIS)

Class B, Division 3 (Combustible Liquid)

## 16. OTHER INFORMATION

NFPA® HAZARD RATING	HEALTH	0
	FIRE:	2
	REACTIVITY:	0

Refer to NFPA 704 "Identification of the Fire Hazards of Materials" for further information

HMIS® HAZARD RATING	HEALTH	1	Slight
	FIRE:	2	Moderate
	PHYSICAL:	0	Negligible
			*Chronic

**SUPERSEDES MSDS DATED:** 02/25/01

### ABBREVIATIONS:

AP = Approximately < = Less than > = Greater than  
N/A = Not Applicable N/D = Not Determined ppm = parts per million

### ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	HMIS	Hazardous Materials Information System
AIHA	American Industrial Hygiene Association	IARC	International Agency For Research On Cancer
ANSI	American National Standards Institute (212)642-4900	MSHA	Mine Safety and Health Administration
API	American Petroleum Institute (202)882-5000	NFPA	National Fire Protection Association (617)770-3000
CERCLA	Comprehensive Emergency Response, Compensation, and Liability Act	NIOSH	National Institute of Occupational Safety and Health
DOT	U.S. Department of Transportation [General info: (800)467-4922]	NOIC	Notice of Intended Change (proposed change to ACGIH TLV)
EPA	U.S. Environmental Protection Agency	NTP	National Toxicology Program
		CRA	Oil Pollution Act of 1990

Revision Date: 7/1/2006

Page 7 of 8

**MATERIAL SAFETY DATA SHEET****No. 5 Fuel Oil****MSDS No. 0332**

OSHA	U.S. Occupational Safety & Health Administration	STEL	Short-Term Exposure Limit (generally 15 minutes)
FEL	Permissible Exposure Limit (OSHA)	TLV	Threshold Limit Value (ACGIH)
RCRA	Resource Conservation and Recovery Act	TSCA	Toxic Substances Control Act
REL	Recommended Exposure Limit (NIOSH)	TWA	Time Weighted Average (8 hr.)
SARA	Superfund Amendments and Reauthorization Act of 1986 Title III	WEEL	Workplace Environmental Exposure Level (AIHA)
SCBA	Self-Contained Breathing Apparatus	WHMIS	Canadian Workplace Hazardous Materials Information System
SPPC	Spill Prevention, Control, and Countermeasures		

**DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.





<b>MATERIAL SAFETY DATA SHEET</b>
<b>No. 2 Fuel Oil</b> <span style="float: right;"><b>MSDS No. 0088</b></span>

<b>EMERGENCY OVERVIEW</b> <b>CAUTION!</b> <b>OSHA/NFPA COMBUSTIBLE LIQUID - SLIGHT TO MODERATE IRRITANT -</b> <b>EFFECTS CENTRAL NERVOUS SYSTEM - HARMFUL OR FATAL IF</b> <b>SWALLOWED</b>	 NFPA 704 (Section 16)
<p>Moderate fire hazard. Avoid breathing vapors or mists. May cause dizziness and drowsiness. May cause moderate eye irritation and skin irritation. Long-term, repeated exposure may cause skin cancer.</p> <p>If ingested, do NOT induce vomiting, as this may cause chemical pneumonia (fluid in the lungs).</p>	

<b>1. CHEMICAL PRODUCT and COMPANY INFORMATION</b>
--

Hess Corporation  
1 Hess Plaza  
Woodbridge, NJ 07095-0961

EMERGENCY TELEPHONE NUMBER (24 hrs):      CHEMTREC    (800) 424-9300  
COMPANY CONTACT (business hours):          Corporate EHS (732) 750-6000  
MSDS Internet Website:                              [www.hess.com](http://www.hess.com)

**SYNONYMS:**    #2 Heating Oil; 2 Oil; Off-road Diesel Fuel

See Section 16 for abbreviations and acronyms.

<b>2. COMPOSITION and INFORMATION ON INGREDIENTS</b>
--

INGREDIENT NAME (CAS No.)	CONCENTRATION PERCENT BY WEIGHT
#2 Fuel Oil (68476-30-2)	100
Naphthalene (91-20-3)	Typically 0.1
A complex combination of hydrocarbons with carbon numbers in the range C9 and higher produced from the distillation of petroleum crude oil.	

<b>3. HAZARDS IDENTIFICATION</b>
----------------------------------

**EYES**  
Contact with eyes may cause mild irritation.

**SKIN**  
Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

**INGESTION**  
The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.



## MATERIAL SAFETY DATA SHEET

No. 2 Fuel Oil

MSDS No. 0088

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

### **INHALATION**

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

**WARNING:** the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

### **CHRONIC EFFECTS and CARCINOGENICITY**

Similar products have produced skin cancer and systemic toxicity in laboratory animals following repeated applications. The significance of these results to human exposures has not been determined - see Section 11 Toxicological Information.

### **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash).

## **4. FIRST AID MEASURES**

### **EYES**

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

### **SKIN**

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

### **INGESTION**

**DO NOT INDUCE VOMITING.** Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

### **INHALATION**

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

## **5. FIRE FIGHTING MEASURES**

### **FLAMMABLE PROPERTIES:**

FLASH POINT:	100 °F (38 °C) minimum FMOC
AUTOIGNITION POINT:	494 °F (257 °C)
LOWER EXPLOSIVE LIMIT (%):	0.6
UPPER EXPLOSIVE LIMIT (%):	7.6

### **FIRE AND EXPLOSION HAZARDS**

OSHA and NFPA Class 2 COMBUSTIBLE LIQUID (see Section 14 for transportation classification). Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.



## MATERIAL SAFETY DATA SHEET

No. 2 Fuel Oil

MSDS No. 0088

### **EXTINGUISHING MEDIA**

**SMALL FIRES:** Any extinguisher suitable for Class B fires, dry chemical, CO<sub>2</sub>, water spray, fire fighting foam, or Halon.

**LARGE FIRES:** Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

### **FIRE FIGHTING INSTRUCTIONS**

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment.

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA-approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

See Section 16 for the NFPA 704 Hazard Rating.

### **6. ACCIDENTAL RELEASE MEASURES**

#### **ACTIVATE FACILITY'S SPILL CONTINGENCY OR EMERGENCY RESPONSE PLAN**

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

### **7. HANDLING and STORAGE**

#### **HANDLING PRECAUTIONS**

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when this product is loaded into tanks previously containing low flash point products (such as gasoline) - see API Publication 2002, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Revision Date: 7/1/2006

Page 3 of 7



## MATERIAL SAFETY DATA SHEET

No. 2 Fuel Oil

MSDS No. 0088

### STORAGE PRECAUTIONS

Keep containers closed and clearly labeled. Use approved vented storage containers. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

### WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and laundry before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

## **8. EXPOSURE CONTROLS and PERSONAL PROTECTION**

### EXPOSURE LIMITS

Components (CAS No.)	Source	Exposure Limits	Note
		TWA/STEL	
#2 Fuel Oil (65475-30-2)	OSHA	5 mg/m <sup>3</sup> (as mineral oil mist) TWA	
	ACGIH	0.2 mg/m <sup>3</sup> (as mineral oil) TWA	A2, skin
	OSHA	10 ppm TWA	
Naphthalene (51-20-3)	ACGIH	10 ppm TWA / 15 ppm STEL	A4, skin

### ENGINEERING CONTROLS

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

### EYE/FACE PROTECTION

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

### SKIN PROTECTION

Gloves constructed of nitrile, neoprene, or PVC are recommended. Chemical protective clothing such as of E.I. DuPont TyChem®; Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

### RESPIRATORY PROTECTION

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Revision Date: 7/1/2005

Page 4 of 7

**MATERIAL SAFETY DATA SHEET****No. 2 Fuel Oil****MSDS No. 0088****9. PHYSICAL and CHEMICAL PROPERTIES****APPEARANCE**

Red or reddish/orange colored (dyed) liquid

**ODOR**

Mild, petroleum distillate odor

**BASIC PHYSICAL PROPERTIES**

BOILING RANGE: 340 to 700 °F (171 to 371 °C)

VAPOR PRESSURE: 0.009 psia @ 70 °F (21 °C)

VAPOR DENSITY (air = 1): &gt; 1.0

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): AP 0.67

PERCENT VOLATILES: 100 %

EVAPORATION RATE: Slow; varies with conditions

SOLUBILITY (H<sub>2</sub>O): Negligible**10. STABILITY and REACTIVITY****STABILITY:** Stable. Hazardous polymerization will not occur**CONDITIONS TO AVOID and INCOMPATIBLE MATERIALS**

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers; Viton ®; Fluorel ®

**HAZARDOUS DECOMPOSITION PRODUCTS**

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

**11. TOXICOLOGICAL PROPERTIES****ACUTE TOXICITY**Acute Oral LD<sub>50</sub> (rat): 14.5 ml/kgAcute Dermal LD<sub>50</sub> (rabbit): > 5 ml/kg

Guinea Pig Sensitization: negative

Primary dermal irritation: moderately irritating (Draize mean irritation score - 3.98 rabbits)

Draize eye irritation: mildly irritating (Draize score, 48 hours, unwashed - 2.0 rabbits)

**CHRONIC EFFECTS AND CARCINOGENICITY**

Carcinogenic: IARC: NO NTP: NO OSHA: NO ACGIH: A2

Dermal carcinogenicity: positive - mice

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

This product is similar to Diesel Fuel. IARC classifies whole diesel fuel exhaust particulates as probably carcinogenic to humans (Group 2A) and NIOSH regards it as a potential cause of occupational lung cancer based on animal studies and limited evidence in humans.

**MUTAGENICITY (genetic effects)**

Material of similar composition has been positive in a mutagenicity study.

**12. ECOLOGICAL INFORMATION**

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

Revision Date: 7/1/2006

Page 6 of 7



## MATERIAL SAFETY DATA SHEET

No. 2 Fuel Oil

MSDS No. 0088

**13. DISPOSAL CONSIDERATIONS**

Consult federal, state and local waste regulations to determine appropriate disposal options.

**14. TRANSPORTATION INFORMATION**

PROPER SHIPPING NAME: FUEL OIL, NO. 2  
HAZARD CLASS & PACKING GROUP: 3, PG III  
DOT IDENTIFICATION NUMBER: NA 1993  
DOT SHIPPING LABEL: FLAMMABLE LIQUID

Flacard:



May be reclassified for transportation as a COMBUSTIBLE LIQUID under conditions of DOT 49 CFR 173.120(b)(2).

**15. REGULATORY INFORMATION****U.S. FEDERAL, STATE, and LOCAL REGULATORY INFORMATION**

This product and its constituents listed herein are on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other regulations at the state and/or local level. Consult those regulations applicable to your facility/operation.

**CLEAN WATER ACT (OIL SPILLS)**

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

**CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)**

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.

**SARA SECTION 311/312 - HAZARD CLASSES**

<u>ACUTE HEALTH</u>	<u>CHRONIC HEALTH</u>	<u>FIRE</u>	<u>SUDDEN RELEASE OF PRESSURE</u>	<u>REACTIVE</u>
X	X	X	--	--

**SARA SECTION 313 - SUPPLIER NOTIFICATION**

This product may contain listed chemicals below the *de minimis* levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1988 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

**CALIFORNIA PROPOSITION 65 LIST OF CHEMICALS**

This product contains the following chemicals that are included on the Proposition 65 "List of Chemicals" required by the California Safe Drinking Water and Toxic Enforcement Act of 1986:

<u>INGREDIENT NAME (CAS NUMBER)</u>	<u>Date Listed</u>
Residual Fuel Oil (no CAS Number listed)	10/01/1990

**CANADIAN REGULATORY INFORMATION (WHMIS)**

Revision Date: 7/1/2006

Page 6 of 7



<b>No. 2 Fuel Oil</b>	<b>MATERIAL SAFETY DATA SHEET</b>	<b>MSDS No. 0088</b>
-----------------------	-----------------------------------	----------------------

Class B, Division 3(Combustible Liquid); Class D, Division 2, Subdivision B (Toxic by other means)

**NFPA® HAZARD RATING**

HEALTH:	0
FIRE:	2
REACTIVITY:	0

Refer to NFPA 704 "Identification of the Fire Hazards of Materials" for further information

**HMIS® HAZARD RATING**

HEALTH:	1 *	Slight
FIRE:	2	Moderate
PHYSICAL:	0	Negligible

\* Chronic

**SUPERSEDES MSDS DATED:** 05/24/02

**ABBREVIATIONS:**

AP = Approximately      < = Less than      > = Greater than  
 N/A = Not Applicable    N/D = Not Determined    ppm = parts per million

**ACRONYMS:**

<p>ACGIH American Conference of Governmental Industrial Hygienists</p> <p>AIHA American Industrial Hygiene Association</p> <p>ANSI American National Standards Institute (212) 642-4900</p> <p>API American Petroleum Institute (202) 682-8000</p> <p>CERCLA Comprehensive Emergency Response, Compensation, and Liability Act</p> <p>DOT U.S. Department of Transportation [General Info: (800) 487-4922]</p> <p>EPA U.S. Environmental Protection Agency</p> <p>HMIS Hazardous Materials Information System</p> <p>IARC International Agency For Research On Cancer</p> <p>MSHA Mine Safety and Health Administration</p> <p>NFPA National Fire Protection Association (617) 770-3000</p> <p>NIOSH National Institute of Occupational Safety and Health</p> <p>NOIC Notice of Intended Change (proposed change to ACGIH TLV)</p>	<p>NTP National Toxicology Program</p> <p>OFA Oil Pollution Act of 1990</p> <p>OSHA U.S. Occupational Safety &amp; Health Administration</p> <p>PEL Permissible Exposure Limit (OSHA)</p> <p>RCRA Resource Conservation and Recovery Act</p> <p>REL Recommended Exposure Limit (NIOSH)</p> <p>SARA Superfund Amendments and Reauthorization Act of 1996 Title III</p> <p>SCBA Self-Contained Breathing Apparatus</p> <p>SFCC Spill Prevention, Control, and Countermeasures</p> <p>STEL Short-Term Exposure Limit (generally 15 minutes)</p> <p>TLV Threshold Limit Value (ACGIH)</p> <p>TSCA Toxic Substances Control Act</p> <p>TWA Time Weighted Average (8 hr.)</p> <p>WEEL Workplace Environmental Exposure Level (AIHA)</p> <p>WHMIS Canadian Workplace Hazardous Materials Information System</p>
--	--

**DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

Revision Date: 7/1/2006

Page 7 of 7

# MATERIAL SAFETY DATA SHEET

## Diesel Fuel (All Types) MSDS No. 9909

Revision Date: 10/18/2006 Page 1 of 7

### EMERGENCY OVERVIEW

#### CAUTION!

**OSHA/NFPA COMBUSTIBLE LIQUID - SLIGHT TO MODERATE IRRITANT**

**EFFECTS CENTRAL NERVOUS SYSTEM**

**HARMFUL OR FATAL IF SWALLOWED**

Moderate fire hazard. Avoid breathing vapors or mists. May cause dizziness and drowsiness. May cause moderate eye irritation and skin irritation (rash).

Long-term, repeated exposure may cause skin cancer.

If ingested, do NOT induce vomiting, as this may cause chemical pneumonia (fluid in the lungs).

NFPA 704 (Section 16)

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Hess Corporation

1 Hess Plaza

Woodbridge, NJ 07095-0961

EMERGENCY TELEPHONE NUMBER (24 hrs): **CHEMTREC (800) 424-9300**

COMPANY CONTACT (business hours): Corporate Safety (732) 750-6000

MSDS INTERNET WEBSITE: [www.hess.com](http://www.hess.com) (See Environment, Health, Safety & Social Responsibility)

SYNONYMS: Ultra Low Sulfur Diesel (ULSD); Low Sulfur Diesel; Motor Vehicle Diesel Fuel; Diesel Fuel #2; Dyed Diesel Fuel; Non-Road, Locomotive and Marine Diesel Fuel; Tax-exempt Diesel Fuel

See Section 16 for abbreviations and acronyms.

### 2. COMPOSITION and CHEMICAL INFORMATION ON INGREDIENTS

#### INGREDIENT NAME (CAS No.) CONCENTRATION PERCENT BY WEIGHT

Diesel Fuel (68476-34-6) 100

Naphthalene (91-20-3) Typically < 0.01

A complex mixture of hydrocarbons with carbon numbers in the range C9 and higher. Diesel fuel may be dyed (red) for tax purposes. May contain a multifunctional additive.

### 3. HAZARDS IDENTIFICATION

#### EYES

Contact with liquid or vapor may cause mild irritation.

#### SKIN

May cause skin irritation with prolonged or repeated contact. Practically non-toxic if absorbed following acute (single) exposure. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

#### INGESTION

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

# MATERIAL SAFETY DATA SHEET

## Diesel Fuel (All Types) MSDS No. 9909

Revision Date: 10/18/2006 Page 2 of 7

### INHALATION

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

**WARNING:** the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

### CHRONIC EFFECTS and CARCINOGENICITY

Similar products produced skin cancer and systemic toxicity in laboratory animals following repeated applications. The significance of these results to human exposures has not been determined - see



## Section 11 Toxicological Information.

IARC classifies whole diesel fuel exhaust particulates as probably carcinogenic to humans (Group 2A). NIOSH regards whole diesel fuel exhaust particulates as a potential cause of occupational lung cancer based on animal studies and limited evidence in humans.

### **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash).

## **4. FIRST AID MEASURES**

### **EYES**

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

### **SKIN**

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops.

### **INGESTION**

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

### **INHALATION**

Remove person to fresh air. If person is not breathing provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

## **5. FIRE FIGHTING MEASURES**

### **FLAMMABLE PROPERTIES:**

FLASH POINT: > 125 °F (> 52 °C) minimum PMCC

AUTOIGNITION POINT: 494 °F (257 °C)

OSHA/NFPA FLAMMABILITY CLASS: 2 (COMBUSTIBLE)

LOWER EXPLOSIVE LIMIT (%): 0.6

UPPER EXPLOSIVE LIMIT (%): 7.5

### **FIRE AND EXPLOSION HAZARDS**

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

### **EXTINGUISHING MEDIA**

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO<sub>2</sub>, water spray, fire fighting foam, or Halon.

## **MATERIAL SAFETY DATA SHEET**

### **Diesel Fuel (All Types) MSDS No. 9909**

Revision Date: 10/18/2006 Page 3 of 7

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

### **FIRE FIGHTING INSTRUCTIONS**

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment.

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

See Section 16 for the NFPA 704 Hazard Rating.

## **6. ACCIDENTAL RELEASE MEASURES**

### **ACTIVATE FACILITY'S SPILL CONTINGENCY OR EMERGENCY RESPONSE PLAN.**

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal - caution, flammable vapors may accumulate in closed containers. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

## **7. HANDLING and STORAGE**

### **HANDLING PRECAUTIONS**

Handle as a combustible liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Diesel fuel, and in particular low and ultra low sulfur diesel fuel, has the capability of accumulating a static electrical charge of sufficient energy to cause a fire/explosion in the presence of lower flashpoint products such as gasoline. The accumulation of such a static charge occurs as the diesel flows through pipelines, filters, nozzles and various work tasks such as tank/container filling, splash loading, tank cleaning; product sampling; tank gauging; cleaning, mixing, vacuum truck operations, switch loading, and product agitation. There is a greater potential for static charge accumulation in cold temperature, low humidity conditions.

Documents such as 29 CFR OSHA 1910.106 "Flammable and Combustible Liquids, NFPA 77 Recommended Practice on Static Electricity, API 2003 "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents and ASTM D4865 "Standard Guide for Generation and Dissipation of Static

### **MATERIAL SAFETY DATA SHEET**

#### **Diesel Fuel (All Types) MSDS No. 9909**

Revision Date: 10/18/2006 Page 4 of 7

Electricity in Petroleum Fuel Systems" address special precautions and design requirements involving loading rates, grounding, bonding, filter installation, conductivity additives and especially the hazards associated with "switch loading." ["Switch Loading" is when a higher flash point product (such as diesel) is loaded into tanks previously containing a low flash point product (such as gasoline) and the electrical charge generated during loading of the diesel results in a static ignition of the vapor from the previous cargo (gasoline).]

Note: When conductivity additives are used or are necessary the product should achieve 25 picosiemens/meter or greater at the handling temperature.

### **STORAGE PRECAUTIONS**

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition. Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

### **WORK/HYGIENIC PRACTICES**

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

## **8. EXPOSURE CONTROLS and PERSONAL PROTECTION**

### **EXPOSURE LIMITS**

#### **Exposure Limits**

Components (CAS No.) Source TWA/STEL Note

Diesel Fuel: (68476-34-6)

OSHA

ACGIH  
5 mg/m, as mineral oil mist  
100 mg/m<sup>3</sup> (as totally hydrocarbon vapor) TWA A3, skin  
Naphthalene (91-20-3)  
OSHA  
ACGIH  
10 ppm TWA  
10 ppm TWA / 15 ppm STEL A4, Skin

### **ENGINEERING CONTROLS**

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

### **EYE/FACE PROTECTION**

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

### **SKIN PROTECTION**

Gloves constructed of nitrile, neoprene, or PVC are recommended. Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

## **MATERIAL SAFETY DATA SHEET**

### **Diesel Fuel (All Types) MSDS No. 9909**

Revision Date: 10/18/2006 Page 5 of 7

### **RESPIRATORY PROTECTION**

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

## **9. PHYSICAL and CHEMICAL PROPERTIES**

### **APPEARANCE**

Clear, straw-yellow liquid. Dyed fuel oil will be red or reddish-colored.

### **ODOR**

Mild, petroleum distillate odor

### **BASIC PHYSICAL PROPERTIES**

BOILING RANGE: 320 to 690 °F (160 to 366 °C)

VAPOR PRESSURE: 0.009 psia @ 70 °F (21 °C)

VAPOR DENSITY (air = 1): > 1.0

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 0.83 to 0.88 @ 60 °F (16 °C)

PERCENT VOLATILES: 100 %

EVAPORATION RATE: Slow; varies with conditions

SOLUBILITY (H<sub>2</sub>O): Negligible

## **10. STABILITY and REACTIVITY**

**STABILITY:** Stable. Hazardous polymerization will not occur.

### **CONDITIONS TO AVOID and INCOMPATIBLE MATERIALS**

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers; Viton®; Fluorel®

### **HAZARDOUS DECOMPOSITION PRODUCTS**

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

## **11. TOXICOLOGICAL PROPERTIES**

### **ACUTE TOXICITY**

Acute dermal LD50 (rabbits): > 5 ml/kg Acute oral LD50 (rats): 9 ml/kg

Primary dermal irritation: extremely irritating (rabbits) Draize eye irritation: non-irritating (rabbits)

Guinea pig sensitization: negative

### **CHRONIC EFFECTS AND CARCINOGENICITY**

Carcinogenic: OSHA: NO IARC: NO NTP: NO ACGIH: A3

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not

been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

#### **MUTAGENICITY (genetic effects)**

This material has been positive in a mutagenicity study.

### **MATERIAL SAFETY DATA SHEET**

#### **Diesel Fuel (All Types) MSDS No. 9909**

Revision Date: 10/18/2006 Page 6 of 7

#### **12. ECOLOGICAL INFORMATION**

Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable, under Federal and State regulations.

#### **13. DISPOSAL CONSIDERATIONS**

Consult federal, state and local waste regulations to determine appropriate disposal options.

#### **14. TRANSPORTATION INFORMATION**

PROPER SHIPPING NAME: Diesel Fuel Placard (International Only):

HAZARD CLASS and PACKING GROUP: 3, PG III

DOT IDENTIFICATION NUMBER: NA 1993 (Domestic)

UN 1202 (International)

DOT SHIPPING LABEL: None

Use Combustible Placard if shipping in bulk domestically

#### **15. REGULATORY INFORMATION**

##### **U.S. FEDERAL, STATE, and LOCAL REGULATORY INFORMATION**

This product and its constituents listed herein are on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other regulations at the state and/or local level. Consult those regulations applicable to your facility/operation.

##### **CLEAN WATER ACT (OIL SPILLS)**

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

##### **CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)**

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.

##### **SARA SECTION 311/312 - HAZARD CLASSES**

**ACUTE HEALTH CHRONIC HEALTH FIRE SUDDEN RELEASE OF PRESSURE REACTIVE**

**X X X -- --**

##### **SARA SECTION 313 - SUPPLIER NOTIFICATION**

This product may contain listed chemicals below the *de minimis* levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

##### **CALIFORNIA PROPOSITION 65 LIST OF CHEMICALS**

This product contains the following chemicals that are included on the Proposition 65 "List of Chemicals" required by the California Safe Drinking Water and Toxic Enforcement Act of 1986:

**INGREDIENT NAME (CAS NUMBER) Date Listed**

Diesel Engine Exhaust (no CAS Number listed) 10/01/1990

##### **CANADIAN REGULATORY INFORMATION (WHMIS)**

Class B, Division 3 (Combustible Liquid) and Class D, Division 2, Subdivision B (Toxic by other means)

### **MATERIAL SAFETY DATA SHEET**

#### **Diesel Fuel (All Types) MSDS No. 9909**

Revision Date: 10/18/2006 Page 7 of 7

#### **16. OTHER INFORMATION**

**NFPA® HAZARD RATING HEALTH: 0**

**FIRE: 2**

REACTIVITY: 0

Refer to NFPA 704 "Identification of the Fire Hazards of Materials" for further information

**HMIS® HAZARD RATING HEALTH:** 1 \* \* Chronic

FIRE: 2

PHYSICAL: 0

**SUPERSEDES MSDS DATED:** 02/28/2001

**ABBREVIATIONS:**

AP = Approximately < = Less than > = Greater than

N/A = Not Applicable N/D = Not Determined ppm = parts per million

**ACRONYMS:**

ACGIH American Conference of Governmental  
Industrial Hygienists

AIHA American Industrial Hygiene Association

ANSI American National Standards Institute  
(212) 642-4900

API American Petroleum Institute  
(202) 682-8000

CERCLA Comprehensive Emergency Response,  
Compensation, and Liability Act

DOT U.S. Department of Transportation  
[General info: (800) 467-4922]

EPA U.S. Environmental Protection Agency  
HMIS Hazardous Materials Information System

IARC International Agency For Research On  
Cancer

MSHA Mine Safety and Health Administration  
NFPA National Fire Protection Association  
(617)770-3000

NIOSH National Institute of Occupational Safety  
and Health

NOIC Notice of Intended Change (proposed  
change to ACGIH TLV)

NTP National Toxicology Program

OPA Oil Pollution Act of 1990

OSHA U.S. Occupational Safety & Health  
Administration

PEL Permissible Exposure Limit (OSHA)

RCRA Resource Conservation and Recovery  
Act

REL Recommended Exposure Limit (NIOSH)

SARA Superfund Amendments and  
Reauthorization Act of 1986 Title III

SCBA Self-Contained Breathing Apparatus

SPCC Spill Prevention, Control, and  
Countermeasures

STEL Short-Term Exposure Limit (generally  
15 minutes)

TLV Threshold Limit Value (ACGIH)

TSCA Toxic Substances Control Act

TWA Time Weighted Average (8 hr.)

WEEL Workplace Environmental Exposure  
Level (AIHA)

WHMIS Canadian Workplace Hazardous  
Materials Information System

**DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES**

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or

third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

## **Attachment J**

### **Spill Control and Emergency Procedures (SPCC)**

---

# **SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN**

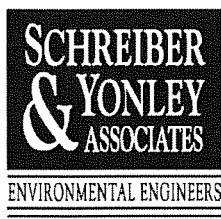
**Triumvirate Environmental (Florida) Inc.**

**May 2007  
Updated July 6, 2012**

**Prepared for:**

**Triumvirate Environmental (Florida), Inc.  
(Former Perma-Fix of Ft. Lauderdale, Inc.)  
3670 SW 47<sup>th</sup> Avenue  
Davie, Florida 33312**

**Project No. 070060**





**DOCUMENTATION OF REVIEW**  
**OF SPCC PLAN**  
**IN ACCORDANCE WITH 40 CFR 112.5(b)**

A review and evaluation of the Spill Prevention, Control, and Countermeasure (SPCC) Plan must be completed at least once every five years.

I have completed a review and evaluation of the Spill Prevention, Control, and Countermeasure Plan for Triumvirate Environmental (Florida) Inc. and will amend the Plan if required.

REVIEW DATE	WILL AMEND	WILL NOT AMEND	NAME, TITLE, AND SIGNATURE OF PERSON REVIEWING THIS PLAN
5/18/2012	X		Sara Gilbert, ETSC
7/6/2012	x		John Wyluda, Lab Services/Compliance Coordinator
9/13/2012	X		John Wyluda, Lab Services/Compliance Coordinator

## PROFESSIONAL ENGINEER'S CERTIFICATION

I hereby certify that I, or my authorized representative, have examined the **Perma-Fix of Ft. Lauderdale, Inc.** facility and, being familiar with the provisions of 40 CFR 112, attest that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practices.

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.

Signature:



Printed Name:

Nancy Morgan, P.E.

Title:

Environmental Engineer III

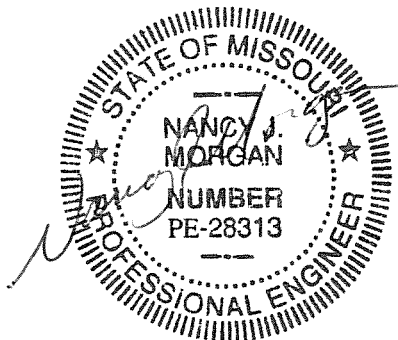
Company:

Schreiber, Yonley & Associates

P.E. License No.:

MO E-28313

Date:



## REVISION HISTORY

Revision #	Date	Description of Change	Pages Affected
0	05/21/2007	Initial Release	
1	05/18/2012	<p>Updated Name Change,</p> <p>Added Revision History Page</p> <p>Added Management Approval Page</p> <p>Added Lat/Long to Section 2</p> <p>Added Facility Phone Number</p> <p>Section 2.III 2<sup>nd</sup> paragraph first word, changed from drummed to containerized</p> <p>Changed All Personnel to Oil-Handling Personnel</p> <p>Removed reference to Training Form in Appendix D and detailed TEFI Training Record Management through Intellex</p> <p>Detailed perimeter fencing</p> <p>Added statement about certification of substantial harm</p> <p>Added FI-specific spill notification statements (5.) to Section 4.I and V</p> <p>Added cooking oil totes and used oil filter containers to inspection procedures</p> <p>Added Local Emergency Contact Phone Numbers, Removed Pager Numbers</p> <p>Added facility specific information to Spill Reporting Form and Discharge Report Form</p>	<p>Several</p> <p>Page iv</p> <p>Page i</p> <p>Page 2</p> <p>Page 2</p> <p>Page 3</p> <p>Page 13</p> <p>Several</p> <p>Page 14</p> <p>Page 19</p> <p>Pages 21, 22</p> <p>Appendix A</p> <p>Appendix B</p> <p>Appendix C</p>
2	July 6, 2012	<p>Removed Containment 6 as containment, replaced with Drum Storage Area (old containment 8)</p> <p>Removed optional inspections</p>	<p>Several</p> <p>Appendix D</p>
3	September 13, 2012	Added Transformer to inspection list	Several

## **TABLE OF CONTENTS**

<b><u>Title</u></b>	<b><u>Page</u></b>
MANAGEMENT APPROVAL.....	i
DOCUMENTATION OF REVIEW OF SPCC PLAN .....	ii
PROFESSIONAL ENGINEER’S CERTIFICATION .....	iii
REVISION HISTORY.....	iv

### **Section**

1	INTRODUCTION .....	1
2	FACILITY IDENTIFICATION .....	2
3	FACILITY CONFORMANCE.....	9
4	SPILL RESPONSE PROCEDURES.....	20
	I.    Spill Notification Procedure .....	20
	II.   Response Preparation.....	21
	III.  Response Procedure.....	21
	IV.  Written Agency Notification.....	22
5	SPCC PLAN UPDATES .....	23

### **TABLES**

TABLE 1	SUMMARY OF STORAGE LOCATIONS.....	4
TABLE 2	POTENTIAL SPILLS.....	5
TABLE 3	SECONDARY CONTAINMENTS.....	6

### **FIGURES**

FIGURE 1	FACILITY LOCATION MAP .....	7
FIGURE 2	SITE LAYOUT AND DRAINAGE .....	8

### **APPENDICES**

APPENDIX A	BULK FUEL TRANSFER AND CONTAINER HANDLING PROCEDURES
APPENDIX B	EMERGENCY NOTIFICATION LIST
APPENDIX C	FLORIDA DISCHARGE REPORTING FORM 62-761.900(1) and SPILL RESPONSE NOTIFICATION FORM
APPENDIX D	FACILITY INSPECTION PROCEDURE AND FORM
APPENDIX E	TRAINING RECORDS

APPENDIX F SECONDARY CONTAINMENT DRAINAGE PROCEDURE AND LOG  
APPENDIX G CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

# SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN

## SECTION 1

### INTRODUCTION

In December 1973, the United States Environmental Protection Agency (U.S. EPA) promulgated regulations that established procedures and required equipment to prevent the discharge of oil from non-transportation-related facilities into or upon the navigable waters of the United States. These regulations, which are codified in 40 CFR 112, were issued pursuant to Section 311(j)(1)(c) of the Federal Water Pollution Control Act (as amended). These regulations underwent a major revision on July 17, 2002, and were amended several times since then, including December 5, 2008, with the compliance date being extended several times. The regulations apply to facilities that store petroleum materials in excess of 1,320 gallons above ground (only containers of 55 gallons or more used for storage are counted) and/or facilities that store greater than 42,000 gallons of petroleum materials under ground. This Spill Prevention, Control, and Countermeasure Plan (SPCC Plan or Plan) has been prepared for the petroleum storages within the Triumvirate Environmental (Florida) Inc. facility in Davie, Florida. **Table 1** provides a summary of the petroleum product storages provided at this facility. **Figure 1** shows the facility location. **Figure 2** shows the site layout and petroleum storage areas.

Section 2 of this Plan provides detailed information regarding the facility and its storage locations. Section 3 provides a discussion of facility conformance to the regulations in the format of the regulations. Section 4 provides spill response procedures to be implemented in the event of a spill. Finally, Section 5 provides information regarding the necessity and timing required for SPCC Plan updates.

## SECTION 2

### FACILITY IDENTIFICATION

<b>FACILITY:</b>	Triumvirate Environmental (Florida), Inc.
------------------	---

**FACILITY NAME & LOCATION:** Triumvirate Environmental (Florida), Inc.  
3670 SW 47<sup>th</sup> Avenue  
Davie, Florida 33314

**FACILITY PHONE NO.** 954-791-1327

**NAME OF RESPONSIBLE PERSON AT THE FACILITY:** John (Shawn) Lennon, General Manager

**DESCRIPTION OF ACTIVITIES:** Facility conducts used oil storage/processing and provides temporary storage (10 days) for hazardous wastes.

**PETROLEUM STORAGE CAPACITY:** 365,000 gallons, largest tank is 100,000 gallons

**GEOGRAPHIC LOCATION:** Latitude 26° 4' 36.6745"  
Longitude 80° 12' 32.8696"

**DESCRIPTION OF NEARBY NAVIGABLE WATER THAT COULD BE IMPACTED:** No navigable waters of the United States are located nearby that could be impacted by this facility. A pond and wetland are located to the northwest of the facility.

**DATE OF INITIAL OPERATION** 1987

#### I. Facility Description

Triumvirate Environmental (Florida) Inc. (TEFL) is located within an industrial area of Davie, Florida. The facility covers approximately 2.5 acres, of which approximately 50 percent is covered by concrete, concrete structures, and/or buildings. The remaining portions of the facility are covered by grass and a gravel-surfaced parking area.

TEFL operations consists primarily of two activities: 1) used oil storage/material processing subject to 40 CFR 279 of the Resource Conservation and Recovery Act (RCRA) and 2) the temporary storage (10 days) of hazardous waste subject to 40 CFR 262 of RCRA. The layout of the facility is described by **Figure 2**.

Generators that send to TEFL include automotive repair/maintenance shops/facilities, industrial facilities, paint shops, marinas and ship facilities, environmental cleanup sites, etc.

## **II. Waste Loading, Unloading, and Storage**

Upon entering the facility, trailers and tankers are staged in the concrete parking area of the facility while awaiting access to the loading/unloading stations. Bulk liquids (i.e. oil and/or wastewater) are loaded and off-loaded at the stations located at the southeast end of the facility. Liquids are stored in the tank storage area located in the southeast portion of the facility. Drummed hazardous waste is received and temporarily stored in the 10-day transfer building located on the north side of the office trailer. The building is under roof and secondarily contained by a concrete pad.

## **III. Waste Processing**

Bulk liquids are off-loaded and transferred to various aboveground storage tanks for subsequent processing. Total storage capacity is approximately 365,000 gallons. Processing consists of the conversion of used oil into a fuel oil. Fuel oil is subsequently shipped to properly permitted industrial furnaces.

Oily water, off-specification fuel, oil filters, used antifreeze, cooking oil, and other non-hazardous wastes and wastewaters are received at the facility and containerized. The facility also collects used oil filters, which may be in containers from 55 gallons up to 500 gallon capacity. Wastes may be sorted in tanker trucks, drums, totes, dump trailers, and roll-off containers. Drummed non-hazardous waste is shipped to TEFL located in Orlando, Florida for processing and disposal, or is consolidated in roll-offs located on-site for subsequent shipment to approved industrial landfills or incinerators.

The loading stations, aboveground storage tanks, and drum storage areas are provided with secondary containment. Transfer piping is either located in secondary containment areas or is constructed of double-walled piping.



**TABLE 1**  
**SUMMARY OF STORAGE LOCATIONS**

Location	Capacity (gals)	Product Stored	Installation Date	Tank Diameter & Length	Tank Shell Thickness	Secondary Containment
AST #T1	8,000	Used Oil	01/89	8'x21.5' H	3/8"	#1
AST #T2	8,000	Used Oil	01/89	8'x21.5' H	3/8"	#1
AST# T3	6,000	Used Oil	04/89	8'x16' H	3/8"	#1
AST #T4	6,000	Used Oil/Oily Water	04/89	8'x16' H	3/8"	#1
AST # T5	10,000	Used Oil	06/87	10'x18' H	3/8"	#1
AST #T6	9,500	Waste Diesel	06/87	10.5'x14.6' H	3/8"	#1
AST #T8	20,000	Used Oil and Waste Diesel	06/87	10.5'x31' V	3/8"	#1
AST #T9	20,000	Used Oil/Oily Water	03/89	10.5'x31' V	3/8"	#1
AST #T10	20,000	Used Oil	06/87	10.5'x31' V	3/8"	#1
T11	20,000	Used Oil	06/87	10.5'x31' V	3/8"	#1
T12	20,000	Used Oil	03/89	10.5'x31' V	3/8"	#1
T13	20,000	Used Oil	03/89	10.5'x31' V	3/8"	#1
T14	20,000	Used Oil/Oily Water	03/89	10.5'x31' V	3/8"	#1
T15	20,000	Used Oil/Oily Water	04/89	10.5'x31' V	3/8"	#1
T16	20,000	Used Oil/Oily Water	04/89	10.5'x31' V	3/8"	#1
T17	20,000	Used Oil/Oily Water	04/89	10.5'x31' V	3/8"	#1
T18 or Mixer	6,500	Out of Service	04/89	8.5'x16' V	3/8"	#1
T7	10,000	Used Oil/Oily Water	01/93	8'x26' H	3/8"	#2
T20	1,000	Truck Diesel	02/92	5.33'x6' H	3/8"	#5
Drum Storage Building	55-550	Hazardous and non-hazardous waste, occasionally 1-20 drums of oil filters or other petroleum materials; Cooking Oil Totes 250 gal to 550 gal	N/A	Variable	Variable	#6
Storage Area	55-550	Cooking Oil Totes, Oil Filter or Other Petroleum Materials	N/A	Variable	Variable	#3
FP&L Transformer	55+	Mineral Oil	1990's	Owned and operated by FPL	Owned and Operated by FPL	Owned and Operated by FPL
T21	100,000	Used Oil/Oily Water	06/96	20'x31' V	3/8"	#4

H = horizontal tank

V = vertical tank

\*FPL would not acknowledge requests for information

TABLE 2

## POTENTIAL SPILLS

Source of Spill	Location	Potential Type Of Failure	Estimated Quantity (gallons)	Rate of Spill (gal/hr)	Direction Of Spill	Secondary Containment	Potential for Occurrence
Drum/Container	Storage Area in Building	Complete spillage or rupture of drum	5 to 55	5 to 55	Inside building containment area	Containment #6, concrete	Low as drums are secured
		Leak/puncture	5 to 55	Less than 55			Low to moderate as drums/containers are secured when moved around and are inspected daily
Loading and Unloading Tank Storages	At loading/unloading ramp	Transfer hose uncoupling or breakage	Varies	Varies	Concrete Containment	Containment #3, concrete	Low to personnel are always present
Drum/Container	Outside Storage Area	Complete spillage or rupture of drum	5 to 55	5 to 55	Inside building containment area	Containment #6, concrete	Low as drums are secured
		Leak/puncture	5 to 55	Less than 55			Low to moderate as drums/containers are secured when moved around and are inspected daily
Aboveground Storage	At ASTs	Overfilling or tank leakage	100,000 gallons oily water	Varies	Concrete Containment	Containment #1, 2, 4, & 5	Low as personnel are present during filling, high-level alarms provided, and daily volume checks conducted
Transfer Pumps	At ASTs	Discharge/leak	Varies	Varies	Concrete Containment	Containment #1, 2, 4, & 5	Low as personnel are always present
Internal Heating Coils	AST #T7	Discharge/leak	Varies	Varies	Concrete Containment	Containment #2	Low

**TABLE 3**  
**SECONDARY CONTAINMENTS**

<b>Containment No.</b>	<b>Description</b>	<b>Gross Capacity</b>	<b>Net Capacity</b>	<b>Largest Tank</b>	<b>Freeboard</b>
1	Filled and sealed concrete block walls on concrete slab	74,700	44,400	20,000	10 inches of rainfall
2	Filled and sealed concrete block walls on concrete slab	16,000	14,300	10,000	8 inches of rainfall
3	Concrete walls on concrete slab	36,000	36,000	5,000	10 inches of rainfall
4	Filled and sealed concrete block walls on concrete slab	135,800	132,000	100,000	14 inches of rainfall
5	Concrete walls on concrete slab	1,400	1,400	970	13 inches of rainfall
6	Concrete Blocks inside warehouse	>220	>220	220	NA - Indoors

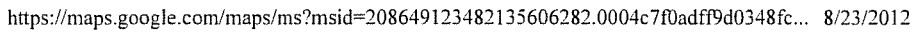
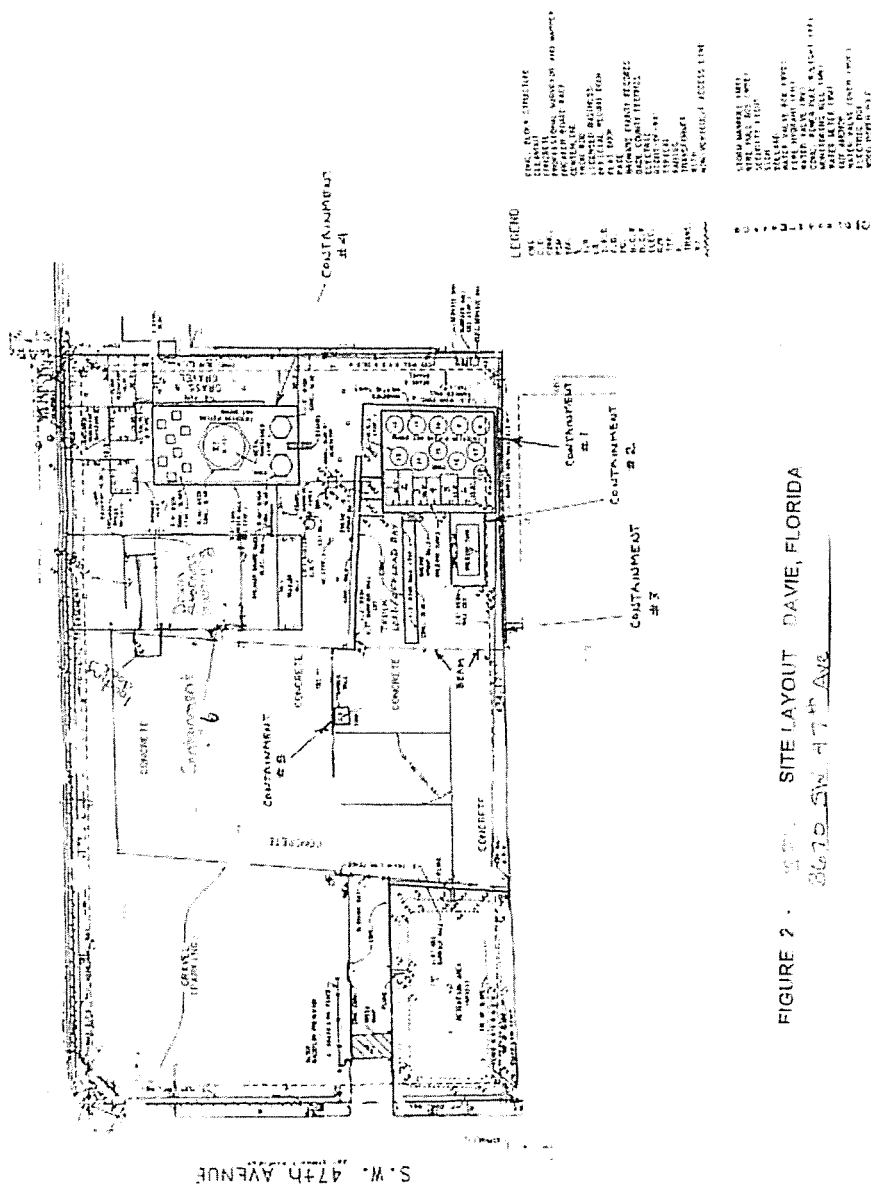


FIGURE 2 • 400' SITE LAYOUT DAVIE, FLORIDA  
36670 SW 47<sup>th</sup> Ave



## **FACILITY CONFORMANCE**

**Section 112.4 requires certain notifications be made if a facility has a discharge of more than 1,000 gallons of oil in a single discharge or more than 42 gallons of oil in each of two discharges. This section also requires a facility amend the Plan if the Regional Administrator requests amendments to the Plan.**

This facility will make required notification when appropriate and will either amend the Plan when requested by the Regional Administrator or will appeal.

**Section 112.5(a) requires the amendment of the SPCC Plan when there is a change to the facility design, construction, operation, or maintenance that materially affects its potential for discharge. This includes adding, moving and decommissioning of containers (including tanks) piping and secondary containment. This also includes a change in product or service or the revision of a standard operating or maintenance procedure.**

This requirement is discussed in Section 5, SPCC Plan Updates.

**Section 112.5 (b) requires a review and evaluation of the SPCC Plan at least once every five years. The completion of the review must be documented and a statement as to whether the Plan will be amended.**

The five-year review is discussed in Section 5. The signed statement for this review is provided in the Plan's cover documents.

**Section 112.5(e) requires a Professional Engineer certify any Technical Amendments to this Plan.**

Any Technical Amendments to this Plan will be certified by a Professional Engineer.

**Section 112.6: This regulation provides an option to prepare and self-certify the SPCC Plan for qualified facilities meeting criteria specified in Section 112.3(g).**

This facility does not qualify for the self-certification option.

**Section 112.7(a)(1) requires a discussion of the facility's conformance with SPCC Plan requirements.**

The Plan developed herein shall conform to the regulatory format provided by the regulation. Full approval of management is included in the Plan's cover documents.

**Section 112.7(a)(2) requires a description of non-conforming issues, the reasons for non-conformance and the measures to achieve equivalent environment protection adopted by the facility.**

Any issues of non-conformance are described in the discussion provided in response to the specific requirement.

**Section 112.7(a)(3) requires a physical description of the facility, including site diagrams showing container storage locations and contents, transfer stations, piping, and buried tanks;**

This information is provided in Section 2 of this Plan, with specific reference to **Figures 1 and 2**. There are no buried petroleum storage tanks at this facility.

**i) information defining the types and capacities of oil storage;**

This information is provided by **Table 1** in Section 2 of this Plan.

**ii) a procedure for the prevention of discharge during routine handling procedures;**

This information is provided in **Appendix A** in a format that may be copied and laminated for posting and reference in product-handling areas.

**iii) a description of secondary containment around storage sites;**

This information is provided by **Table 3** of Section 2.

**iv) procedures for the discovery of, control of, and response to a discharge;**

These procedures are provided by Section 4 of this Plan.

**v) methods of disposal of recovered materials; and**

Methods for disposal of recovered material are also considered in Section 4.

**vi) and, a contact list and phone numbers for appropriate individuals and agencies to be notified in the event of a spill.**

This contact list is provided in **Appendix B** and may be copied and laminated for posting in key areas.

**Section 112.7(a)(4) Unless facility has submitted a response plan under 112.20, provide information and procedures to enable person to accurately report a discharge.**

**Appendix C** provides a form that addresses each required data subject. Facility personnel are trained in completing the form and communicating to the relevant agencies. Use of this form is discussed in Section 4 of this Plan.

**Section 112.7(a)(5) requires Plan organization that describes procedures to be used when a discharge occurs in a way that makes them readily usable in an emergency, and include appropriate supporting material as appendices..**

This Plan incorporates training and the use of one-page sections that can be easily referenced and used. TEFL uses an electronic training database to manage personnel training requirements. Training certificates documenting training activities are provided in **Appendix D**.

**Section 112.7(b) requires a prediction of spill flow direction, rates of flow, and quantities that could be discharged.**

Experience indicates there is a low potential of tank failure (such as overflow, rupture, and leakage) at the facility. This can be attributed to several factors:

1. Tanks operate at ambient temperature and pressure and are equipped with the level gauges and an overflow alarm and secondary containment.
2. Piping and valves are not in areas exposed to vehicular traffic.
3. The tanks, pumps, valves, and piping are inspected daily with inspection findings recorded in facility inspection logs.
4. All tanks were thickness tested by a professional engineer in 2002.

Spillage of material is most likely to occur during tank transfer. However, the quantity of material that would typically be spilled is small. Personnel are required to be present during transfer, and transfer activities are conducted in contained areas provided with concrete barriers and elevation controls to prevent migration and to facilitate cleanup. In the unlikely event of a release of material and failure of the secondary containments, it appears that a spill would flow toward the retention pond to the southwest.

**Table 2** and the site layout sketch (**Figure 2**) provide information on the potential for spills.

**Section 112.7(c) requires provision of containment system and/or diversionary structures or equipment capable of containing a spill and must be constructed so that any discharge from a primary containment system will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following or its equivalent: dikes, berms, retaining walls, curbing, drip pans, sumps and collection systems, culverting, gutters, weirs, booms, other barriers, spill diversion ponds, retention ponds, or sorbent materials.**

This facility provides secondary containment as follows:

- Tanks 1 through 6, and 8 through 18, are served by Containment #1.
- Tank 7 is served by Containment #2.



- The tanker truck load/off-load bays are served by Containment #3.
- Tank 21 is served by Containment #4.
- Tank 20 is served by Containment #5.
- The drum storage building is served by Containment #6.

**Section 112.7(d) requires a clear explanation if you determine that installation of certain specified structures or equipment is not practicable. For bulk containers, conduct both periodic integrity testing of the containers, conduct periodic integrity and leak testing of valves and piping, development of an oil spill contingency plan in cooperation with local authorities, and a written commitment of adequate response resources if structural secondary containment can not be provided.**

This action is considered unnecessary due to the secondary containment provided.

**Section 112.7(e) requires written procedures and records for periodic inspection and tests of the storage areas and containers.**

**Appendix E** provides an inspection procedure and form for conducting inspections aimed at preventing and detecting spill threats. Records of inspections are kept on file for a minimum of three years. Similarly, records of tests such as container integrity tests are kept on site for a minimum of three years. The General Manager is responsible for implementation of the inspection program, as well as directing corrective measures.

The inspection program is intended to provide a mechanism to prevent and detect system malfunctions, equipment deterioration, and operator errors, and to provide early warning of the potential for such events in order that corrective and preventative actions may be taken. The inspection program focuses on safety, emergency equipment, and environmental monitoring. The program is intended to be implemented by qualified and trained individuals assigned the responsibility to detect any unsafe conditions at the facility and to help prevent adverse consequences. The designated individuals have the training and authority to:

1. Implement the required inspections;
2. Perform necessary evaluations and hazard assessments; and
3. Recommend appropriate corrective or remedial actions.

The inspection is performed daily. Each item listed on the inspection form is evaluated in such a manner and on such a frequency necessary to alert facility personnel prior to the development of a serious problem. The level of response to a problem is determined by the nature and seriousness of the problem identified, with the protection of personnel and the prevention of adverse impact on the environment being of paramount concern.

**Section 112.7(f)(1), (2), and (3) require training of oil-handling personnel at least annually and designation of a person at the facility accountable for discharge prevention.**

The Operations Manager is the designated person accountable for discharge prevention. However, the Triumvirate Environmental, Davie Lab Services/Compliance Coordinator or his/her designee must instruct personnel in the proper operation and maintenance of equipment to prevent petroleum spills. Initial training and annual briefings are provided.

Newly hired operational personnel participate in the TEFL spill prevention and control training program. All employees participate in a regularly scheduled review of the SPCC Plan and its procedures. Facility personnel are trained in general orientation and operation of the facility. An on-the-job training program related to the specific duties of each job function is specifically provided in combination with the standardized written, visual, and audible training. In addition, every operational employee participates in the continuing training to maintain proficiency, to learn new techniques and procedures, and to reinforce safety and quality consciousness.

TEFL conducts annual employee meetings that are used as a forum to reinforce understanding of SPCC Procedures. Past spill events (if applicable) and failures are described, malfunctioning components are discussed, and recently developed or changed precautionary measures are addressed. Copies of training certificates and a sample training presentation are provided in **Appendix E**. The following summarizes the training program:

**Spill Prevention and Countermeasures Plan:** Appropriate oil-handling personnel have been instructed in the following spill prevention and countermeasure requirements.

- No tanks, drums, or compartments are to be filled without first checking levels.
- No bulk product deliveries are to be conducted unattended.
- Documented inspections of containers (drums, totes and tanks) used for oil storage or transfer are to be conducted monthly on any appropriate form.
- Accumulated precipitation shall be inspected for the presence of an oil sheen prior to removing pumping accumulation into drum or tank for disposal. Inspection must be documented on form in **Appendix F**.
- Containers are to be checked daily for any signs of leaks, deterioration, or vandalism. Visual daily checks of piping, valves, pumps, and hoses are to be made for signs of leaks.
- No phase of material transferring or processing shall be conducted unattended by personnel.

All personnel are trained in:

- The location of emergency response materials;
- Containment procedures;
- Fire and explosion response;
- Shutdown of liquid handling equipment; and
- Spill notification procedures.

**Section 112.7(g)(1) requires facilities handling, processing, and storing oil to be fully fenced with entrance gates locked or guarded, when the facility is unattended.**

All waste-handling and storage facilities are located within the general perimeter of the facility. The facility has an 8 foot tall security fence on the sides facing the roads. The remainder of the facility is surrounded by an eight foot tall steel security fence topped with 3 strands of barbed wire. Normal and routine access to the facility is monitored by plant personnel.

**Section 112.7(g)(2) requires the securing of valves, which may permit direct outward flow of the containers contents to the surface, to assure remaining in the close position when not in operation.**

No water draws or drain valves for the secondary containment exist at the facility. Accumulation is removed by pump to a drum, vacuum truck, or if no sheen is present the water is discharged.

**Section 112.7(g)(3) requires the pump starter controls to be locked in the “off” position and to be located at a site accessible only to authorized personnel when the pump is not operating.**

All containment systems, valves, piping, and electrical control systems are located within the areas controlled by the security fence. There are no special delivery pipelines to the facility.

**Section 112.7(g)(4) requires adequate lighting to prevent vandalism and to aid in the discovery of discharges during night hours.**

Adequate lighting is provided at all loading, unloading, and processing areas that are operated during nighttime hours.

**Section 112.7(h)(1) requires use of quick drainage systems when drainage from loading/unloading areas not provided with catchment.**

The loading/unloading area is located in Containment #3, which provides approximately 36,000 gallons of secondary containment.

**Section 112.7(h)(2) requires measures to prevent vehicles from departing before complete disconnection of transfer lines.**

Loading and unloading procedures meet the requirements of the Department of Transportation (DOT) for the transfer of hazardous and non-hazardous materials. Personnel are trained in accordance with DOT and OSHA requirements. A copy of these procedures is provided in **Attachment A**.

**Section 112.7(h)(3) requires inspection of the lower-most drain and all outlets prior to filling and departure of any tank truck to prevent spillage on site or during transit from the site.**

The inspection is required by the bulk load/unloading procedures of **Appendix A**.

**Section 112.7(i) requires evaluation of a container for risk of failure due to brittle fracture upon repair, alteration, reconstruction, or change of service.**

If an aboveground tank undergoes a repair or alteration that might affect the risk of a discharge due to brittle failure, the tank will be evaluated prior to being placed back in service. Repairs, alterations, and evaluations are typically conducted by a qualified contractor rather than facility maintenance personnel.

**Section 112.7(j) requires discussion of more stringent State rules.**

The Florida DEP's regulation 62-762.501(2)(c)3.b states, "*Dike field areas with secondary containment shall...contain a minimum of 110% of the maximum capacity of the tank or of the largest single walled tank within the dike field area.*"

All secondary containment areas are of sufficient size to contain at minimum 110% of the maximum capacity of the largest tank within the containment area.

**Section 112.8(a) requires compliance with Sections 112.7 provisions.**

As previously addressed, compliance with Section 112.7 provisions has been established.

**Section 112.8(b)(1) requires control of drainage from diked storage areas.**

No outfalls are present at the facility. Surface water drainage patterns for the facility prevent entry of drainage from unbermed areas into waters of the United States. Rainwater and/or minor spills within secondary containment areas and truck loading areas are pumped to storage for proper management and disposal. Pumps are manually activated. The Secondary Containment Drainage Procedure is provided in **Appendix F**. The drum storage building is roofed and minimal

accumulation of liquids (i.e. rainwater which may enter through facility doors) may be removed by absorbent materials.

**Section 112.8(b)(2) limits valve use to manual, open-and-closed design valves. Flapper-type drain valves are not allowed.**

No drain valves are provided for the containments.

**Section 112.8(b)(3) requires design of facility drainage systems for undiked areas subject to discharge to flow into catchment basins. Catchment basins may not be located in areas subject to periodic flooding.**

This section is not applicable to the facility.

**Section 112.8(b)(4) requires that a diversion system be provided if Section 112.8(b)(3) cannot be met.**

This section is not applicable to the facility.

**Section 112.8(b)(5) requires fail-safe design for systems requiring pumped transfer within treatment systems for drainage waters.**

All pumped transfer systems are manually activated and controlled.

**Section 112.8(c)(1) requires the use of containers constructed of oil-compatible materials.**

All tanks are constructed of carbon steel, which is an oil-compatible material. Stored materials are stored at ambient temperature and pressure.

**Section 112.8(c)(2) requires provision of secondary containment for bulk storage tank installations for the capacity of the largest container to be stored plus precipitation freeboard.**

Secondary containment structures constructed of concrete and masonry are provided at the facility for all oil storage tanks. Loading areas are located in secondary containment. The drum storage building is roofed and is not subjected to the precipitation freeboard however the containment exceeds the largest container. Outside drum storage is also provided with secondary containment. All containment areas are of sufficient size to contain the contents of the largest tank or compartment plus an accumulation of 6 inches or more of precipitation.

**Section 112.8(c)(3) requires all dike water discharges to be controlled by: keeping bypass valve closed, inspecting retained rainwater prior to discharge, open and close the valve under responsible management, and keep records of such events.**

Dike wall drain valves are maintained in the closed position when not in use. Dike water is observed for sheen or oil presence. If contamination is present, the oily

**Section 112.8(c)(3) requires all dike water discharges to be controlled by: keeping bypass valve closed, inspecting retained rainwater prior to discharge, open and close the valve under responsible management, and keep records of such events.**

Dike wall drain valves are maintained in the closed position when not in use. Dike water is observed for sheen or oil presence. If contamination is present, the oily water is pumped into a tanker and brought to an off-site water treatment facility. If no sheen or oil presence is observed, the water may be discharged. **Appendix F** provides a form for recording such events, in the event the dike water discharges are deemed acceptable.

**Section 112.8(c)(4)&(c)(5) require protection of buried and partially buried metallic storage tanks from corrosion by coatings or cathodic protection backed by periodic leak testing.**

There are no underground tanks used for the storage of oil at this facility.

**Section 112.8(c)(6) requires integrity testing of aboveground containers by frequent visual inspections and by regularly scheduled non-destructive methods. All inspections and test must be recorded.**

All tanks are inspected on a regular basis to assess tank integrity by the Facility Manager or other qualified personnel, as assigned by the Facility Manager to assess tank integrity. Formal daily inspections record:

- Evidence of leaks or spills;
- Condition of tanks;
- Condition of piping and pumps; and
- Condition of secondary containment areas.

These inspections utilize the form provided in **Appendix E**.

Ultrasonic testing of tank shell thicknesses was conducted October 16-28, 2002 to confirm tank integrity. This testing resulted in engineer certification for continued use of all tanks. Recertification of tanks will occur every 10 years.

**Section 112.8(c)(7) requires monitoring for oil contamination of internal heating coil discharges to open watercourses or the provision of predischARGE storage or treatment.**

Internal heating coils are only used on Tank #7. These coils are located inside secondary containment. Steam return is not discharged to open watercourses.

**Section 112.8(c)(8) requires engineering of containers to provide for high level alarms, high liquid level pump cutoff, or manning direct level reading devices. Regular testing of liquid level sensing devices is required.**

The possibility of a significant discharge is reduced by the following equipment/processes:

- Direct visual tank level gauges;
- Audible overflow alarm and ancillary overflow containment tank;
- Manned transfer operations; and,
- Regular inspections of tanks and ancillary equipment.

**Section 112.8(c)(9) requires observation of effluent treatment facilities frequently enough to detect possible system upsets that could cause a harmful discharge.**

There are no plant effluents at this facility.

**Section 112.8(c)(10) requires prompt correction of visible discharges.**

If it is determined that the integrity of a tank or ancillary equipment is compromised, the tank or equipment is taken out of service, the problem evaluated, and appropriate steps taken to correct the deficiencies.

**Section 112.8(c)(11) requires provision of secondary containment for mobile containers.**

Tanker trucks containing waste materials are parked in the area served by Containment #3

**Section 112.8(d)(1) requires cathodic protection and protective wrapping and coating of piping installed or replaced on or after 8/16/02. Inspection for corrosion of buried piping exposed for any reason is required. Corrosion damage must be repaired.**

The facility uses no underground piping for petroleum materials.

**Section 112.8(d)(2) requires capping or blank flanging of transfer piping when not in service. The transfer piping must also be marked as to the origin.**

Out-of-service piping shall be removed, capped, or blank flanged.

**Section 112.8(d)(3) requires proper design of piping supports to minimize abrasion and corrosion and allow for expansion and contraction.**

Piping supports are designed to allow for expansion and contraction while minimizing abrasion and corrosion.

**Section 112.8(d)(4) requires regular inspection of valves, piping, and appurtenances.**

All valves and fittings are periodically inspected for leaks (**Appendix E**). Pipelines, valves, and piping are manned during material transfers.

**Section 112.8(d)(5) requires signs warning vehicles entering the facility of the presence of overhead piping.**

No overhead piping in traffic ways is present at the facility.

**Section 112.20(a) requires the owner or operator of a facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging oil into navigable waters to submit a facility response plan to the Regional Administrator. Section 112.(f)(1) and Attachment C-1 provide criteria to determine if the facility “could reasonably be expected to cause substantial harm.”**

The “Certification of Substantial Harm Determination Form” in **Appendix G** demonstrates that a Facility Response Plan is not required for this facility.



## SECTION 4

### SPILL RESPONSE PROCEDURES

Response to spills is conducted according to the procedures detailed in the following subsections. It must be noted that, if several personnel respond to an incident, many of the following procedures can be conducted concurrently. For example, while one person is following the emergency notification procedures, other personnel could be implementing actions to contain the spill.

#### **I. Spill Notification Procedure**

Upon the discovery of a spill, the following notifications must be made.

1. The Facility Manager (Primary Emergency Coordinator) must be notified immediately. If he/she cannot be located, then one of the Alternate Emergency Coordinators or the Company Environmental Coordinator should be called. (See **Attachment B** for phone numbers.) The person who discovers the spill should be prepared to give the following information:
  - his/her name and position with the company;
  - material spilled and estimated amount;
  - source and cause of the spill, if known;
  - area affected;
  - time the spill was first observed; and
  - actions initially taken.
2. The Primary Emergency Coordinator (Facility Manager), First Alternate Emergency Coordinator (Operations Manager), and the Designated Company Environmental Coordinators are the only persons authorized to make agency notifications. If the facility has released petroleum materials off site in harmful quantities as defined in 40 CFR 110.3 (i.e., it has caused a sheen or discoloration on any water body), an authorized person shall report the incident to the regulatory agencies listed in the Emergency Notification Sheet in **Appendix B**. In reporting, the authorized person shall be prepared to give the following information:
  - his/her name and position with the company;
  - facility name, location, and phone number;
  - material spilled and amount;
  - source and cause of the spill, if known (do not speculate);
  - area affected;
  - time the spill was first observed;
  - extent of injuries, if any;
  - any evacuation precautions taken;
  - response actions conducted, including containment and cleanup underway;

- estimated time to complete remediation;
  - potential hazards to human health or the environment; and
  - names of other individuals and organizations contacted.
3. For a release greater than 42 gallons into the environment (i.e., soil, water), the authorized person shall determine if the emergency response contractor should be contacted for cleanup assistance.
4. If the facility has discharged oil into or onto the navigable waters of the United States in any of the following quantities:
- more than 1,000 gallons in a single spill event, or
  - more than 42 gallons in each of two spill events within a 12-month period,
- an authorized company representative must submit a written report as described in subsection IV of this Section.
5. Florida has specific reporting requirements:
- a) A discharge of any amount of a pollutant (this includes oil) that enters, or threatens to enter, waters of the state must be reported as soon as possible, but no later than one hour after the discovery of the occurrence to the NRC and the FL State Warning Point phone number in **Appendix B**.
- b) A discharge of 25 gallons of oil or more to a “pervious” surface must be reported as soon as possible, but no later than 24 hours.

## **II. Response Preparation**

Appropriate containment/spill response equipment is kept in close proximity to all potential spill areas. A sufficient supply of this material should be available to all locations to ensure that potential off-site migration pathways can be adequately protected. The materials to be located near potential spill areas include:

- a small (20 to 30-gallon) drum containing:
  - materials suitable for absorbing petroleum products (e.g. kitty litter, corn cobs, oil-dri, absorbant socks or pads, etc);
  - plastic (or other non-sparking material) shovel or scoop;
  - chemical resistant gloves, protective aprons, safety glasses or goggles, and/or other appropriate personal protective equipment;
- sandbags;
- fire extinguishers;
- shovels; squeegees, and brooms, pipe wrench, drum plug wrench;
- salvage drums and overpacks.

## **III. Response Procedure**

Upon detection of a spill, personnel responding will immediately:

- put on proper personal protective equipment, which, at a minimum, includes chemical-resistant gloves and a rubber apron (or equivalent);
- identify the source and cause of the spill;
- take appropriate measures to stop the flow of material (e.g., reconnect hose, plug hole, shut valve, transfer liquid to an empty drum, etc.);
- quickly estimate the magnitude of the spill;
- using absorbent material, sandbags, or similar material, block drainage ways, if there is a potential for material to flow off the property;
- contain any material, using cleanup and containment equipment, that may have escaped the storage vessel;
- recover and containerize spilled material (as much as possible) into a drum or container and dispose of properly to a landfill permitted for such material, to a recycler capable of processing off-specification oil, or to a recycler permitted for disposal;
- decommission the tank (if the spill was from a tank) and schedule it for repair after the cause of the spill or failure has been determined; and
- obtain assistance from a spill cleanup contractor if it is determined that a spill is uncontrollable and/or contamination outside the facility has occurred.

After the spill has been contained and cleaned up, the Primary Emergency Response Coordinator (Facility Manager), the Alternate Emergency Response Coordinator (Operations Manager), or the designated Company Environmental Coordinator must ensure that all spill response equipment is restocked and ready for usage.

#### **IV. Written Agency Notification**

If the facility has released petroleum materials off site in harmful quantities, which means it has caused a sheen or discoloration on any navigable waters of the United States, the Company Environmental Coordinator should report the incident to the National Response Center using one of the forms provided in **Appendix C**.

If the facility has discharged oil into or on the navigable waters of the United States in any of the following quantities:

- more than 1,000 gallons in a single spill event, or
- more than 42 gallons in each of two spill events within a 12-month period,

The Company Environmental Coordinator (or designee) must submit a written report to the Regional Administrator of the Environmental Protection Agency, Region IV within 60 days. The report shall contain the information provided by the form in **Appendix C**.

Florida has specific reporting requirements. These include:

- a) A discharge of any amount of a pollutant (this includes oil) that enters, or threatens to enter, waters of the state, and
- b) A discharge of 25 gallons or more of oil to a “pervious” surface.

The written report must be submitted on Florida Discharge Report Form 62-761.900(1), which is provided in **Appendix C**. A copy of any report sent to the Regional Administrator must also be submitted to the Florida Department of Environmental Protection.

## SECTION 5

### SPCC PLAN UPDATES

**Section 112.5(a) requires the amendment of the SPCC Plan when there is a change to the facility design, construction, operation, or maintenance that materially affects its potential for discharge. This includes adding, moving and decommissioning of containers (including tanks) piping and secondary containment. This also includes a change in product or service or the revision of a standard operating or maintenance procedure. Section 112.5(b) requires a review and evaluation of the SPCC Plan at least once every five years. The completion of the review must be documented.**

The SPCC Plan shall be updated:

- within six months after significant changes occur in the facility operations;
- if the Plan fails to provide the desired degree of protection;
- when a period of five (5) years has elapsed since the last revision(s) and the review indicates that a revision is necessary; or
- as required by changes in the 40 CFR 112 regulations.

## **APPENDIX A**

### **LOADING/UNLOADING PROCEDURES**

### **Bulk Fuel Transfer Procedure**

1. Smoking is prohibited while offloading petroleum or fueling vehicles.
2. Verify that all valves in the secondary containment berm are closed. Move the truck into the unloading area, stop the engine, (unless required to operate a pump), set the hand brake, place wheel chocks, and connect a grounding cable between the tank and the truck frame. Verify sufficient volume in tank (if unloading truck) or in the truck (if loading truck) prior to starting transfer.
3. Drivers must be present during all petroleum transfers. No petroleum will be transferred to or from a storage tank unattended. The driver must be awake, have an unobstructed view of the tank and be within 25 feet of the truck. All transfer operations must be shut down if the driver leaves area.
4. All employees and all drivers must have knowledge of the nature of the materials they are handling and must have been trained on the procedures to be followed in an emergency.
5. Hose connections, valves, and pumps must be visually inspected continually during transfers to check for leaks or drips. All leaks must be stopped immediately or contained in a drip pan.
6. All areas, including loading/unloading area, truck parking area, etc. are to be kept free of petroleum materials and excessive residue.
7. To minimize the release of any material during transfer operations, drip pans or buckets should be used under all hose connections. Drip pans and buckets must be cleaned up before leaving the area. Oil dry, rags, shovels, etc. are available at the facility for cleanup in the event of a spill or drip.
8. The available capacity in the storage tank must be checked and confirmed before material is transferred from a truck to the tank to ensure the storage tank is not overfilled.
9. All spills must be reported to the facility manager.
10. Drivers have the responsibility to keep the transfer area clean and free of petroleum materials, to prevent spills from occurring, to immediately and thoroughly cleanup any material spilled, and to report spills to the facility operator.
11. After unloading or unloading is finished, disconnect and secure all hoses, disconnect the grounding cable, assure that the vehicle's lowermost drain and outlets are closed and secured, and assure that tank valves and other closures are closed and free of leaks before removing the wheel chocks and driving the truck from the transfer area.

### **Container Handling Procedure**

1. Company policy prohibits smoking in petroleum product container storage areas.
2. All containerized materials must be secured prior to moving.
3. During loading and unloading containers from a truck, the truck should be moved into the unloading area with the engine stopped and hand brake set.
4. Personnel using or handling containers must be aware of the materials they are handling and must be trained in the procedures to follow in an emergency, such as rupture or puncture of the container.
5. All containers must be labeled as to content.
6. All areas, including concrete containment and storage rooms or trailers, are to be kept free of spilled material.
7. All spills must be reported to the facility manager.

**APPENDIX B**

**EMERGENCY CONTACT LIST**



## EMERGENCY CONTACT LIST

Local Authority/Agency		Phone Number	Contact Period
Davie Fire Department		911	Immediately
Davie Police Department		911	Immediately
Emergency Medical Service		911	As Needed
DPEP		954-519-1260	24 Hours
FDEP		651-681-6600	24 Hours
Florida Bureau of Disaster Preparedness		850-413-9911	24 Hours
National Response Center		800-424-8802	As Needed
Plantation General Hospital (primary)		954-587-5010	As Needed
Broward General Hospital (secondary)		954-355-4400	As Needed
Emergency Coordinator: John P. "Shawn" Lennon, Jr General Manager	Office Cell	954-583-3795 954-296-3873	
Secondary Coordinator Steven T. Swett Operations Manager	Office Cell	954-583-3795 945-296-3871	
Cleanup Contractor - Cliff Berry		1800-899-7745	As Needed

**APPENDIX C**

**FLORIDA DISCHARGE REPORTING FORM 62-761.900(1)  
SPILL RESPONSE NOTIFICATION FORM**

## SPILL RESPONSE NOTIFICATION FORM

Reporter's Full Name: \_\_\_\_\_

Position: \_\_\_\_\_

Phone Numbers: Day \_\_\_\_\_

Evening \_\_\_\_\_

Company: Triumvirate Environmental (Florida) Inc..

Address: 3670 SW 47<sup>th</sup> Avenue

City, State, Zip: Davie, FL 33314

Facility Longitude: 80° 12' 32.8696" N

Facility Latitude: 26° 4' 36.6745" W

### INCIDENT DESCRIPTION

Incident Address/Location: \_\_\_\_\_

Container Type: \_\_\_\_\_

Date and Time of Discharge: \_\_\_\_\_ AM/PM

Material Discharged: \_\_\_\_\_

Discharged Quantity: \_\_\_\_\_ Gallons

Did Material Reach Water? \_\_\_\_\_ (Y/N) If so, What Quantity? \_\_\_\_\_ Gallons

Media Affected? Air? Y or N Water? Y or N Land? Y or N

Description of Medium Affected: \_\_\_\_\_

Source and/or Cause of Incident: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### RESPONSE ACTION AND IMPACTS

Actions Taken to Correct, Control, or Mitigate Incident: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Number of Injuries: \_\_\_\_\_ Number of Deaths: \_\_\_\_\_

Evacuation Required? \_\_\_\_\_ (Y/N) Number Evacuated: \_\_\_\_\_

Damage Incurred: \_\_\_\_\_ (Y/N) Damage Cost Estimate: \$ \_\_\_\_\_

### NOTIFICATIONS

USEPA? \_\_\_\_\_ (Y/N) STATE? \_\_\_\_\_ (Y/N) Other? See Notification List

ADDITIONAL INFORMATION: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Discharge Reporting Form

PLEASE PRINT OR TYPE

DEP Form # 62-761.900(1)

Form Title Discharge Reporting Form

Effective Date \_\_\_\_\_

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)

<input type="checkbox"/> Liquid detector (automatic or manual)	<input type="checkbox"/> Internal inspection	<input type="checkbox"/> Closure/Closure Assessment
<input type="checkbox"/> Vapor detector (automatic or manual)	<input type="checkbox"/> Inventory control	<input type="checkbox"/> Groundwater analytical samples
<input type="checkbox"/> Tightness test	<input type="checkbox"/> Monitoring wells	<input type="checkbox"/> Soil analytical tests or samples
<input type="checkbox"/> Pressure test	<input type="checkbox"/> Automatic tank gauging	<input type="checkbox"/> Visual observation
<input type="checkbox"/> Statistical Inventory Reconciliation	<input type="checkbox"/> Manual tank gauging	<input type="checkbox"/> Other _____

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

<input type="checkbox"/> Unknown	<input type="checkbox"/> Used/waste oil	<input type="checkbox"/> Jet fuel	<input type="checkbox"/> Heating oil	<input type="checkbox"/> New/lube oil
<input type="checkbox"/> Gasoline	<input type="checkbox"/> Aviation gas	<input type="checkbox"/> Diesel	<input type="checkbox"/> Kerosine	<input type="checkbox"/> Mineral acid
<input type="checkbox"/> Hazardous substance - includes CERCLA substances from USTs above reportable quantities, pesticides, ammonia, chlorine, and derivatives (write in name or Chemical Abstract Service (CAS ) number) _____				
<input type="checkbox"/> Other _____				

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

<input type="checkbox"/> Dispensing system	<input type="checkbox"/> Pipe	<input type="checkbox"/> Barge	<input type="checkbox"/> Pipeline	<input type="checkbox"/> Vehicle
<input type="checkbox"/> Tank	<input type="checkbox"/> Fitting	<input type="checkbox"/> Tanker ship	<input type="checkbox"/> Railroad tankcar	<input type="checkbox"/> Airplane
<input type="checkbox"/> Unknown	<input type="checkbox"/> Valve failure	<input type="checkbox"/> Other Vessel	<input type="checkbox"/> Tank truck	<input type="checkbox"/> Drum
<input type="checkbox"/> Other _____				

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

<input type="checkbox"/> Loose connection	<input type="checkbox"/> Puncture	<input type="checkbox"/> Spill	<input type="checkbox"/> Collision	<input type="checkbox"/> Corrosion
<input type="checkbox"/> Fire/explosion	<input type="checkbox"/> Overfill	<input type="checkbox"/> Human error	<input type="checkbox"/> Vehicle Accident	<input type="checkbox"/> Installation failure
<input type="checkbox"/> Other _____				

11. Actions taken in response to the discharge: \_\_\_\_\_

12. Comments: \_\_\_\_\_

### 13. Agencies notified (as applicable):

<input type="checkbox"/> State Warning Point (904) 488-1320	<input type="checkbox"/> National Response Center 1-800-424-8802	<input type="checkbox"/> Fire Department	<input type="checkbox"/> County Tanks Program	<input type="checkbox"/> DEP (district/person)
--	---	--	---	--

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. \_\_\_\_\_

## **INSPECTION PROCEDURE FOR SPCC PLAN**

An optional inspection form is provided in this appendix. However, as long as equivalent inspections are conducted and documented per the RCRA permit, this inspection form need not be used. The following items, if present, must be inspected by trained personnel:

OBSERVE for puddles of product or an oil sheen on any standing water.

ABOVEGROUND PIPING: Liquid bulk fill lines will be inspected for leaks, evidence of leaks, and evidence of potential leaks.

TANKS and PARKED TRUCKS: All bulk storage containers and associated piping will be visually inspected for leaks, overflows, and signs of potential problems. Special emphasis will be placed on the inspection of seams, patches, piping connections, sight glasses, and other openings. Valves should be in their proper position and locked or sealed, if required.

SECONDARY CONTAINMENT: Secondary containment areas will be inspected for adequate capacity and leaks, cracks, or other signs of failure.

SECONDARY CONTAINMENT RAINWATER ACCUMULATION: Diked areas must be kept reasonably free of rainwater accumulation. Secondary containment drains **MUST** be closed and sealed when not in use. The drain must be manned whenever it is open. Any drainage of rainwater from secondary containment areas must be **INSPECTED** and **RECORDED** on a Secondary Containment Drainage Log (See Appendix F).

TRANSFER PUMPS: Transfer pumps will be inspected for leaks around the housing. Associated piping will be inspected for leaks at the pump connections.

DRUMS: Drums will be inspected when received for condition. Drums will not be accepted if there is evidence of leaks or mishandling. Drums in storage will be examined for leaks, with special attention given to the bottom seam.

DRAINS: Drains should be inspected for blockage and accumulation of debris that would impede the free flow of liquids.

DRAIN PANS OR DRIP CONTAINERS: The liquid level in drip pans or drain containers should be checked and emptied as needed.

TANK OVERFILL ALARMS: Overfill alarm systems should be tested periodically for proper function.

DISPENSING HOSES: Dispensing hoses should be inspected for leaks and hose deterioration.

SPILL RESPONSE EQUIPMENT: Check spill response equipment to make sure that it is fully stocked and in good condition. Replace or upgrade as needed.

COOKING OIL TOTES: Will be inspected when received for condition. Oil Totes will not be accepted if there is evidence of leaks or mishandling. Oil Totes in storage will be examined for leak.

USED OIL FILTER CONTAINERS: All bulk used oil filter storage containers will be examined for leaks or overfill.

## SPCC MONTHLY FACILITY INSPECTION FORM

Oil Storage Description	Tank/Truck/ Container in Good Condition?	Tank Piping, Hoses, Valves, Supports, Appurtenances, etc. in Good Condition?	Secondary Containment in Good Condition, No Liquid?	Date Problem Corrected and Employee Initials
Used Oil Tank				
Tank Truck				
Vacuum Truck No. 1				
Vacuum Truck No. 2				
Used Oil Drums in HW Storage Area		NA		
Cooking Oil Totes				
Used Oil Filter Containers				

Transformer (owned and operated by FPL) in good condition?	Y	N
Spill Response Equipment: Seal in Place or Inventory Complete?	Y	N
Physically Test Tank Alarm – Functional?	Y	N

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

To the best of my knowledge, I have personally verified that the information on this report is true, accurate, and complete.

Inspector's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**APPENDIX E**  
**TRAINING RECORDS**



## **APPENDIX F**

### **SECONDARY CONTAINMENT DRAINAGE PROCEDURE AND LOG**

## SECONDARY CONTAINMENT DRAINAGE PROCEDURE

1. Inspect secondary containment on a monthly basis or as necessary for drainage.
2. Visually inspect the secondary containment. Indicate the condition of the accumulated water.
4. Record the depth of accumulation.
5. Follow the appropriate drainage procedure.
  - A. Observe the water surface for a sheen or oil presence.
  - B. If the water is possibly contaminated, take a sample for closer observation and possible testing.
  - C. If the water is considered contaminated, call the facility operator or emergency coordinator to direct cleanup or further action.
  - D. If in doubt of the appropriate action, contact a facility operator or emergency coordinator immediately.
6. Sign, date, and file the form. Drainage Logs are to be retained at the facility for a minimum period of three (3) years.
7. Return the completed inspection form to the facility manager or designee.

**Containment #** \_\_\_\_\_

[illegible]

**Condition:**

1. Accumulation clear & free of oil, sheen, or discoloration.
2. Accumulation has very small quantity of oil, film, sheen, or discoloration.
3. Accumulation has heavy oil content.

**Procedure:**

1. Entire accumulation pumped to drum or tank truck for disposal.

**NOTE:** If in doubt on procedure or condition, contact facility operator immediately

**APPENDIX G**

**CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM**

## CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

FACILITY NAME: Triumvirate Environmental (Florida) Inc.

FACILITY ADDRESS: 3670 SW 47<sup>th</sup> Avenue, Davie, Florida 33314

1. Does the facility have a maximum storage capacity greater than or equal to 42,000 gallons and do the operations include over water transfer of oil to or from vessels?

Yes \_\_\_\_\_ No X \_\_\_\_\_

2. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility without secondary containment for each aboveground storage area sufficiently large to contain the capacity of the largest aboveground storage tank and precipitation within the storage area?

Yes \_\_\_\_\_ No X \_\_\_\_\_

3. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III or an alternative formula\* considered acceptable by the RA) such that a discharge from the facility could cause injury to fish, wildlife, and sensitive environments?

Yes \_\_\_\_\_ No X \_\_\_\_\_

4. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III or an alternative formula\* considered acceptable by the RA) such that a discharge from the facility would shut down a public drinking water intake?

Yes \_\_\_\_\_ No X \_\_\_\_\_

5. Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and, within the past 5 years, has the facility experienced a reportable spill in an amount greater than or equal to 10,000 gallons?

Yes \_\_\_\_\_ No X \_\_\_\_\_

\*If an alternative formula is used, documentation of the reliability and analytical soundness of the alternative formula must be attached to this form.

### CERTIFICATION – INCLUDES ALL SUBSTATIONS

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

John (Shawn) Lennon

Name (please type or print)

General Manager

Title

Date

5/18/12

## **Attachment K**

### **Closure Plan**

# Closure Plan

## Solid Waste Processing Facility

### 4.0 Introduction

#### 4.1 Purpose

This closure plan is prepared in accordance with rule 62-701.320(7) for TEIFL, also a solid waste processing facility in addition to being a used oil processing facility.

#### 1.2 Scope

This closure plan describes the manner in which the solid waste processing area of the facility will be closed in order to satisfy the requirements of closure performance pursuant to 62-701.320(7), F.A.C.

#### 1.3 Facility Information

TEIFL is a used oil processor, transporter, and oil filter recycler. TEIFL is also a permitted solid waste processing facility.

Facility Location:       Triumvirate Environmental (Florida) Inc., (TEIFL)  
                                  3670 SW 47<sup>th</sup> Avenue  
                                  Davie, FL 33314

EPA ID No:                FLD 981 018 773

### 5.0 Closure Performance Standards

TEIFL, as owner/operator of the facility, shall close the solid waste processing area of the facility in a manner that:

1. Minimizes the need for further maintenance;
2. Provides for the removal of non-hazardous wastes stored in the area;
3. Provides for the disposal of storage and processing equipment from the site;
4. Demonstrates no contamination of the soil has resulted from the facility's operation

### 6.0 Closure Plan

Upon Closure, the solid waste processing area of the facility shall be closed. This area consists of one 20 cubic yard roll-off container and drums of non-hazardous waste stored at the time of closure.

#### 6.1 Non-Hazardous Waste Disposal

The maximum storage capacity of the one roll-off is 20 cubic yards. A maximum storage limit for drum non-hazardous waste is not recommended at this time. A storage limited for drummed

non-hazardous waste will be provided if deemed necessary by the Department. All non-hazardous waste, whether in drums or the roll-off at the time of closure shall be transported to a municipal landfill permitted by the Florida Department of Environmental Protection.

### **Secondary Containment Decontamination**

The secondary containment serving the drums and roll-off containing non-hazardous waste is the same containment used for loading/unloading used oil / oily waste water. The secondary containment will be closed in accordance with the closure plan for used oil activities.

### **6.2 Environmental Monitoring & Analysis**

At the time of closure, soil and groundwater will be monitored in accordance with the closure plan for the used oil processing facility. Groundwater monitor wells located in the vicinity of the used oil management activities shall be sampled in accordance with SW-846 protocols. The water sampled shall be tested for the presence of used oil by methods 8010, 8020, 8270, and 418.1 (or their equivalent). Additionally four soils samples shall be obtained from the areas in the vicinity of the used oil management activities. Samples shall be taken in accordance with SW-846 protocols and tested by Methods 8010, 8020, 8270, and 418.1 (or their equivalent). If the test results from the groundwater and soil samples do not exceed regulatory levels, "clean closure will be assumed.



**Attachment L**  
**Employee Training**

## **Attachment L**

### **Employee Training**

Training in accordance with the facility SPCC plan is conducted annually. A copy of the SPCC plan is included in this application as Attachment J. Training is also conducted to familiarize all employees with the facility Contingency Plan which is enclosed in this application as Attachment I.

RCRA (Resource Conservation and Recovery Act) training is conducted to educate employees on what kinds of materials are hazardous wastes and universal wastes so that these materials are not accepted as non-hazardous wastes and are not processed into the non-hazardous waste consolidation roll-off.

TEIFL has developed a Hazardous Materials DOT and Health and Safety Training program that was established to comply with OSHA and USDOT requirements while at the facility and while transporting hazardous materials. Descriptions of the OSHA or DOT trainings are available if requested by Department Staff. It is not presented at this time so emphasis can be given to training required under this used oil and solid waste permit application.

## Figures

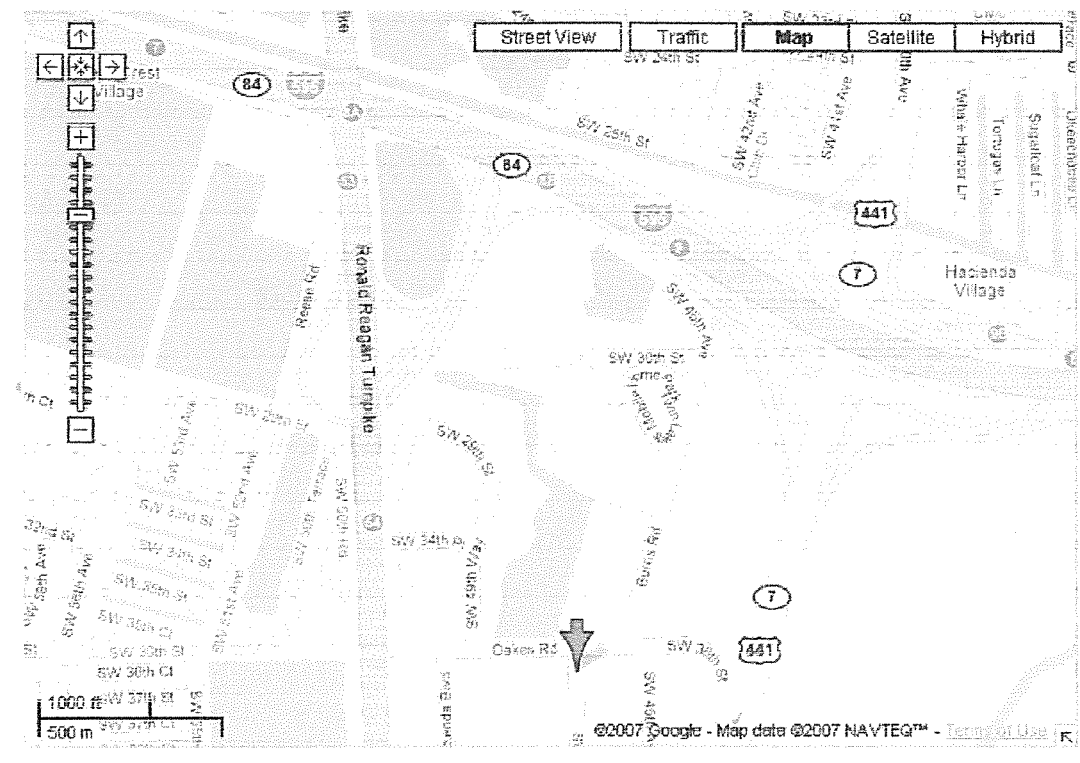


Figure 1A – Site Location Map



SELECTED PROPERTY-FOLIO: 504125270010

© Copyright 2003 Broward County Property Appraiser

0 38 ft

Figure 1B – Site Layout Photo

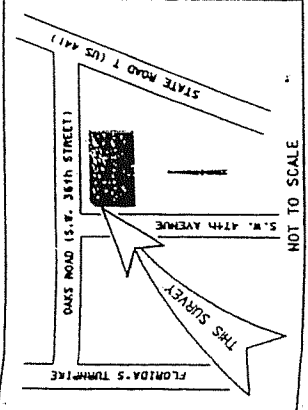


DATE	REVISIONS

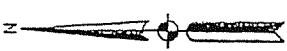
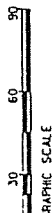
DATE: JANUARY 27, 2000  
SCALE: 1" = 30'  
FIELD BK. 930 B1020  
DWG. BY: ST  
CHECKED BY: LMA

BOUNDARY AND TOPOGRAPHIC SURVEY  
PERMA-FIX  
PARCEL "A", "I.R.R. PLAT" P.B. 158, PG. 4, B.C.R.  
BROWARD COUNTY, FLORIDA  
TOWN OF DAVIE

SHEET NO. 1  
OF 1 SHEETS  
PROJECT NO. 16339C



NOT TO SCALE



LEGEND

- CONC. BLOCK STRUCTURE
- CONC. WALL
- PROFESSIONAL SURVEYOR AND MAPPER
- BREAKER BOARD RACK
- CENTERLINE
- IRON ROD
- LICENSED BUSINESS
- OFFICIAL RECORD BOOK
- PLAT BOOK
- BROWARD COUNTY RECORDS
- DADE COUNTY RECORDS
- ELECTRIC
- RIGHT-OF-WAY
- TYP.
- RADIUS
- TRANSFORMER
- NON-VEHICULAR ACCESS LINE
- STORM MANHOLE (MH)
- WIRE PULL BOX (WPB)
- SECURITY LIGHT
- ROCK LARD
- WATER VALVE BOX (WVB)
- FIRE HYDRANT (FH)
- WATER VALVE (WV)
- CONC. POWER POLE W/LIGHT (PP)
- MONITORING WELL (MW)
- WATER METER (WM)
- WATER ANCHOR
- WATER COVER (WC)
- ELECTRIC BOX
- WOOD POWER POLE

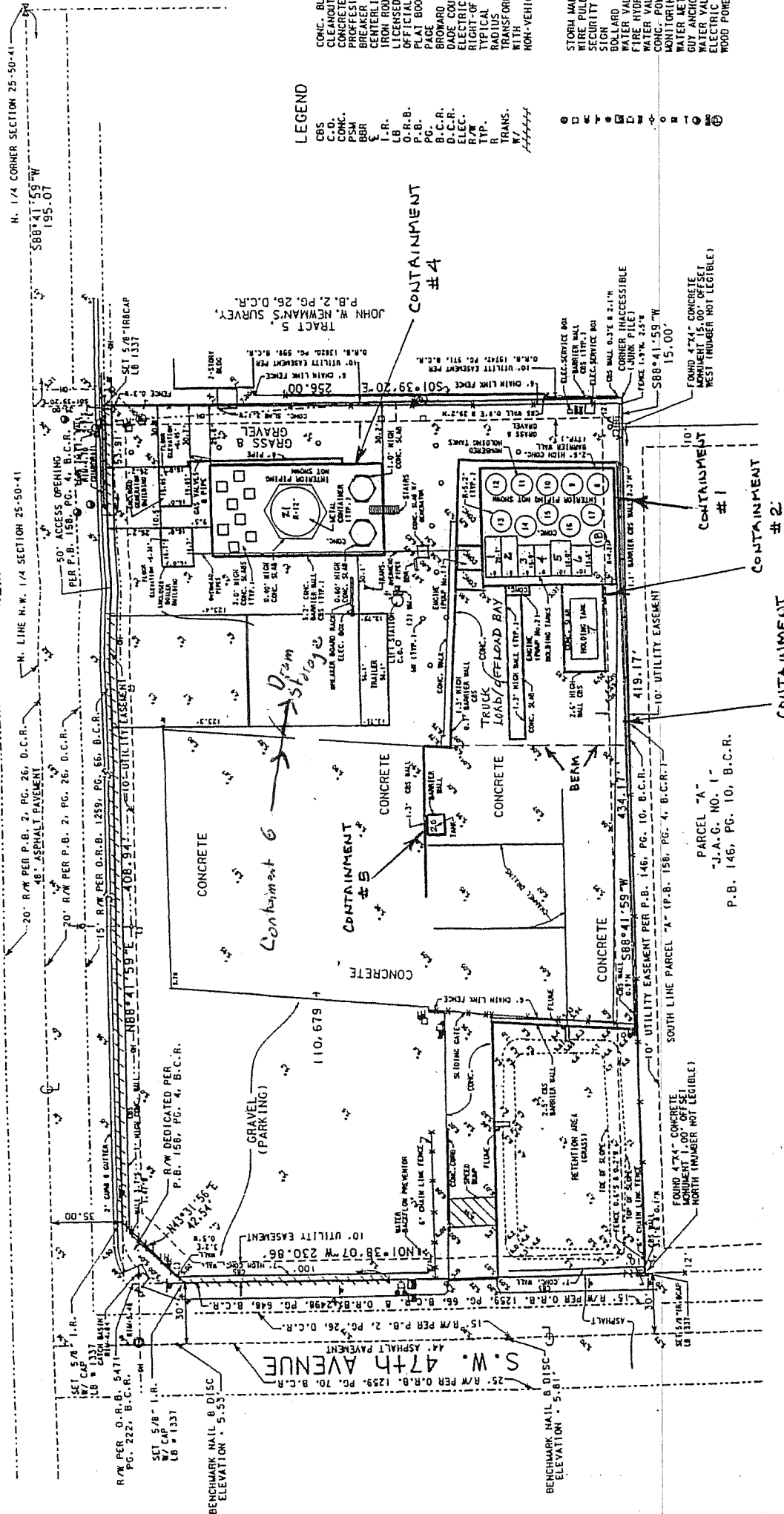
FIGURE 1C

CERTIFICATE:

I HEREBY CERTIFY THAT THE ATTACHED BOUNDARY AND TOPOGRAPHIC SURVEY OF THE HEREON DESCRIBED PROPERTY IS DEPICTED TO THE BEST OF MY KNOWLEDGE, BELIEF, AND INFORMATION ON JANUARY 27, 2000. I FURTHER CERTIFY THAT THIS BOUNDARY AND TOPOGRAPHIC SURVEY MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPMAKERS, CHAPTER 6107-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTIONS 6107.01, 6107.02, 6107.03, 6107.04, 6107.05, 6107.06, 6107.07, 6107.08, 6107.09, 6107.10, 6107.11, 6107.12, 6107.13, 6107.14, 6107.15, 6107.16, 6107.17, 6107.18, 6107.19, 6107.20, 6107.21, 6107.22, 6107.23, 6107.24, 6107.25, 6107.26, 6107.27, 6107.28, 6107.29, 6107.30, 6107.31, 6107.32, 6107.33, 6107.34, 6107.35, 6107.36, 6107.37, 6107.38, 6107.39, 6107.40, 6107.41, 6107.42, 6107.43, 6107.44, 6107.45, 6107.46, 6107.47, 6107.48, 6107.49, 6107.50, 6107.51, 6107.52, 6107.53, 6107.54, 6107.55, 6107.56, 6107.57, 6107.58, 6107.59, 6107.60, 6107.61, 6107.62, 6107.63, 6107.64, 6107.65, 6107.66, 6107.67, 6107.68, 6107.69, 6107.70, 6107.71, 6107.72, 6107.73, 6107.74, 6107.75, 6107.76, 6107.77, 6107.78, 6107.79, 6107.80, 6107.81, 6107.82, 6107.83, 6107.84, 6107.85, 6107.86, 6107.87, 6107.88, 6107.89, 6107.90, 6107.91, 6107.92, 6107.93, 6107.94, 6107.95, 6107.96, 6107.97, 6107.98, 6107.99, 6108.00.

KEITH AND SCHNARS, P.A.  
ENGINEERS-PLANNERS-SURVEYORS  
BY: MICHAEL AL. LOSSETT, P.S.M.  
FLORIDA REGISTRATION NO. 5860

OAKS ROAD (S.W. 36th STREET)



SURVEY NOTES:

- NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPMAKER.
- LANDS SHOWN HEREON ARE BASED ON THE NATIONAL GEODETIC DATUM OF 1983, AND WERE ESTABLISHED FROM THE BROWARD COUNTY ENGINEERING DIVISION, BENCHMARK NO. 3089, BRASS DISK SET IN CONC. HEADWALL ON THE SOUTH SIDE OF A TWO STORY PUMP HOUSE, 145' SOUTH OF ORANGE DRIVE, 300' WEST OF STATE ROAD 7, ELEV. -8.035 FEET.
- BEARINGS SHOWN HEREON ARE BASED ON THE "I.R.R. PLAT" (P.B. 158, PG. 4, B.C.R.) REFERENCE BEARING OF SOUTH 88°41'59" WEST ALONG THE SOUTHERLY LINE OF THE SOUTHERLY LINE OF THE LAND SHOWN HEREON, AND ENCROACHMENTS NOT LOCATED OR SHOWN.
- ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP (FIRM) NO. 17011C0302 F, COMMUNITY PANEL NO. 120035 0302 F, EFFECTIVE DATE OCTOBER 2, 1997, THIS PROPERTY LIES IN ZONE AE, BASE FLOOD ELEVATION 8 FEET.
- THE SIZE OF SOME FEATURES HAS BEEN EXAGGERATED FOR CLARITY.
- THE EASEMENTS SHOWN HEREON ARE BASED ON THE "I.R.R. PLAT" (P.B. 158, PG. 4, B.C.R.) RECORDS.
- OTHERWISE NOTED.

SITE LAYOUT DAVIE, FLORIDA

FIGURE 2

Triumvirate  
Civil, Mechanical  
(Florida) LLC

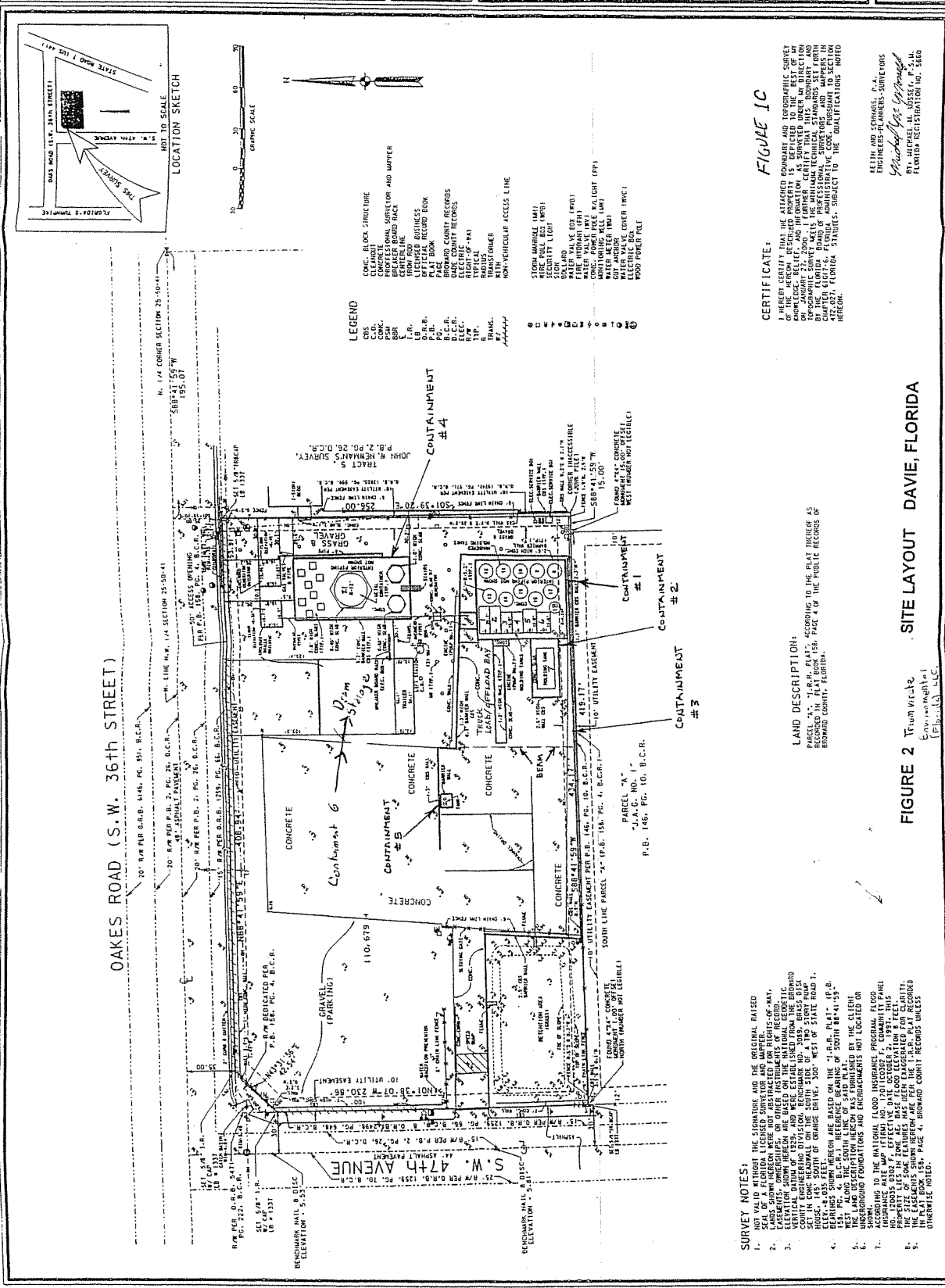




Figure 2A - ~~Triumvirate Environmental~~ of Ft. Lauderdale, Inc.  
Facility Entrance



Figure 2B = Secure Entrance Gate (Automatically Shuts)





Figure 2C – Facility's Storm Water Collection Area  
(Grassy Area in the Foreground)



Figure 2D – Truck Parking Area



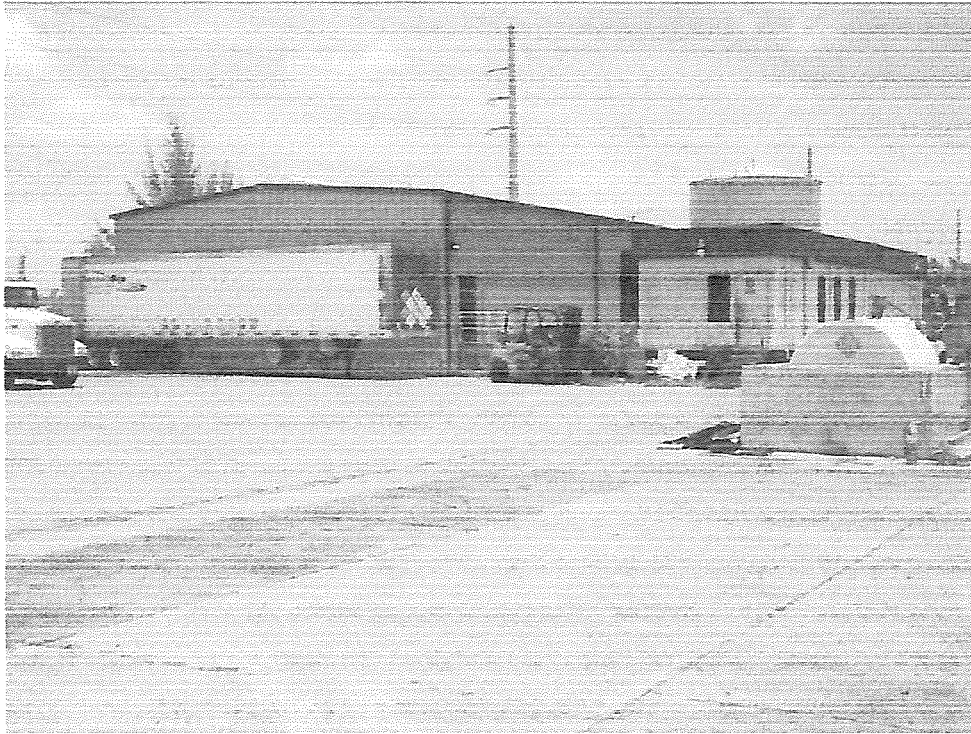


Figure 2E – Additional Truck / Trailer Parking  
(10 Day Transfer Waste Building (left) and  
Office Trailer (right) and Diesel Tank In Foreground



Figure 2F – Non-Hazardous Waste  
Consolidation / Solidification Rolloff  
and Non-Hazardous Waste Drums  
Waiting to be Placed into Rolloff.  
Black Tanks in Background Belong to Neighbor



Figure 2G – 20,000 Gallon Used Oil/Oily Wastewater  
Tanks In the Background



Figure 2H – Same 20,000 Gallon Tanks  
as in Figure 2G Above

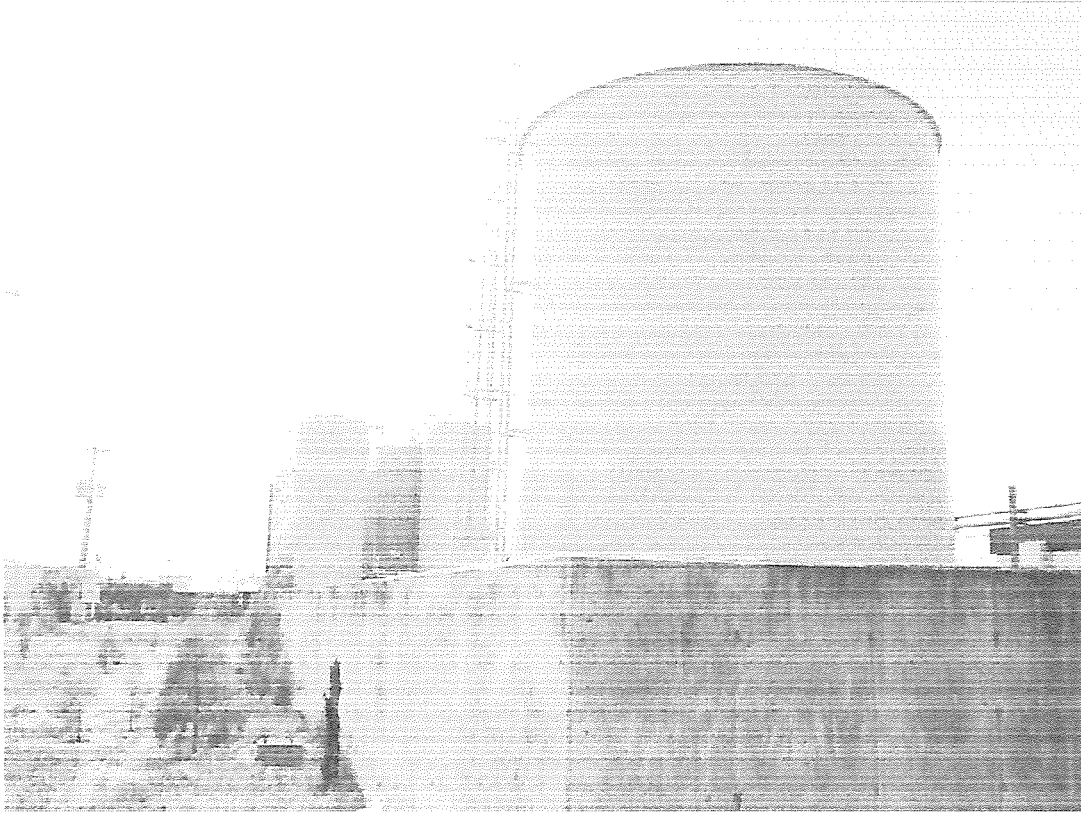


Figure 2I – 100,000 Gal Tank in Foreground  
20,000 Gallon Tanks in Background

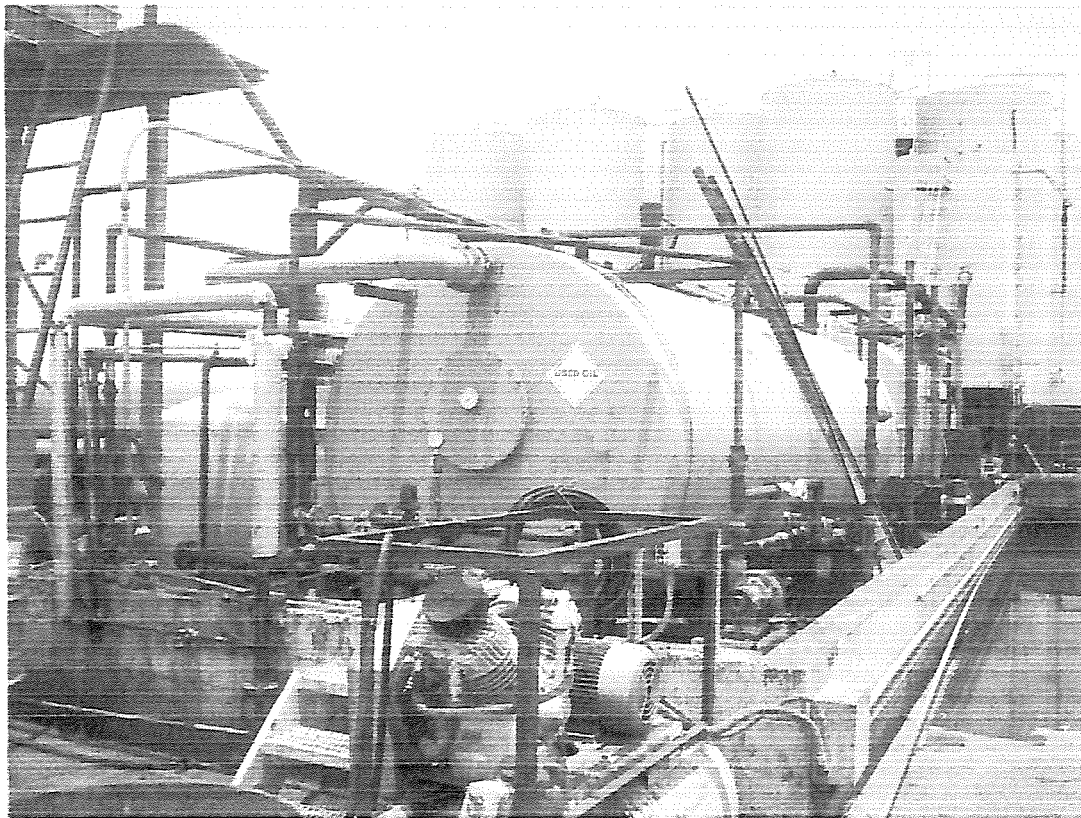


Figure 2J – Heated Treatment Tank  
Separates Oil from Water





Figure 2K – Contained Area for Bulk Loading / Unloading  
of Used Oil / Oily Wastewater

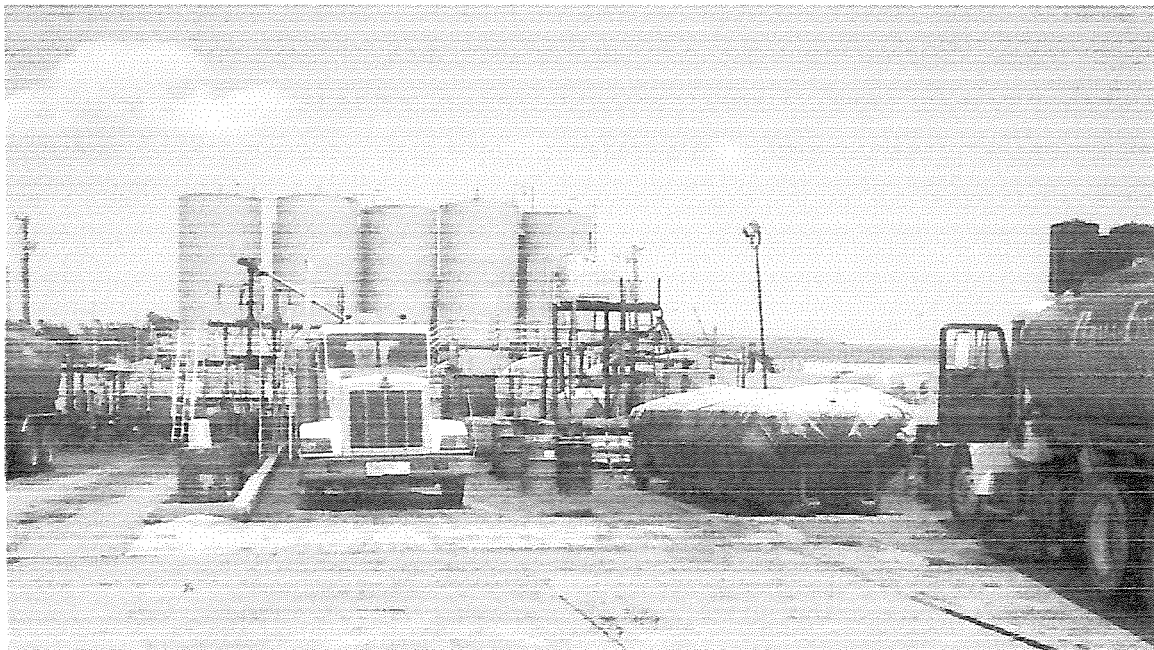


Figure 2L – Another Contained Area for Bulk  
Loading / Unloading of Used Oil / Oily Wastewater

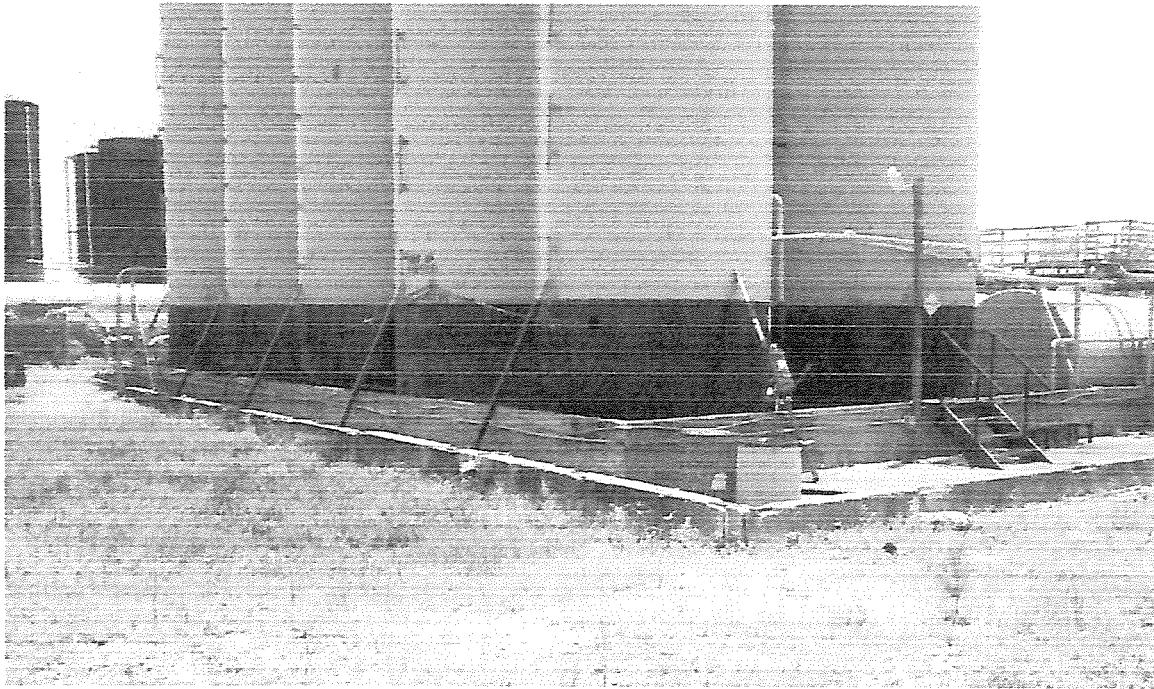


Figure 2M – Secondary Containment for  
Vertical Tanks

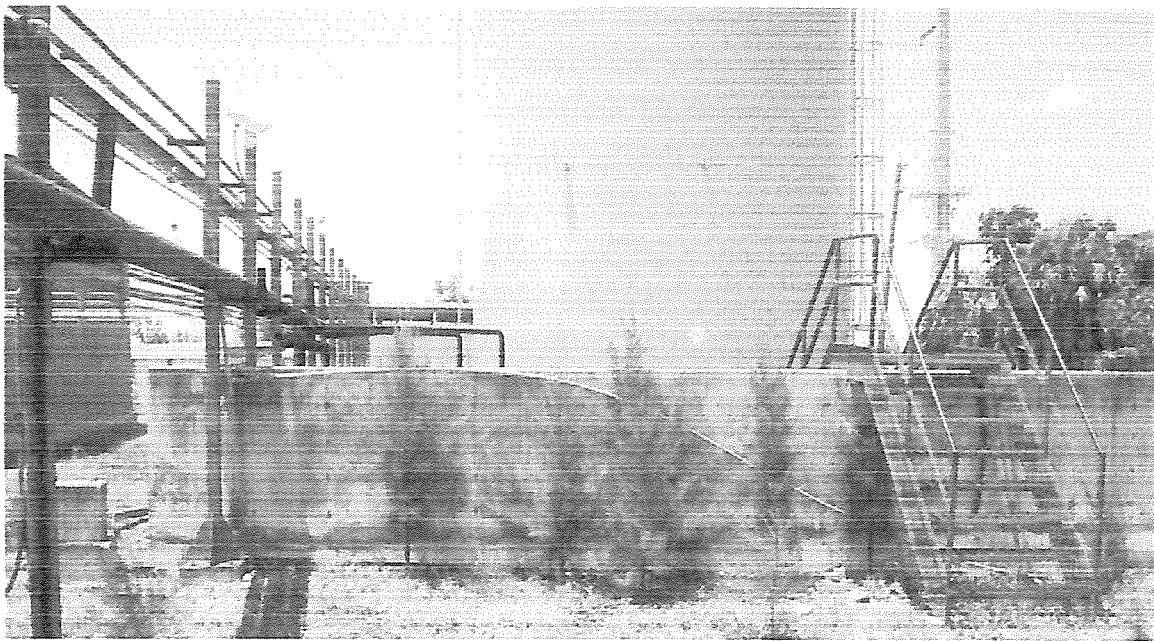


Figure 2N – Secondary Containment for  
100,000 Gal Tank

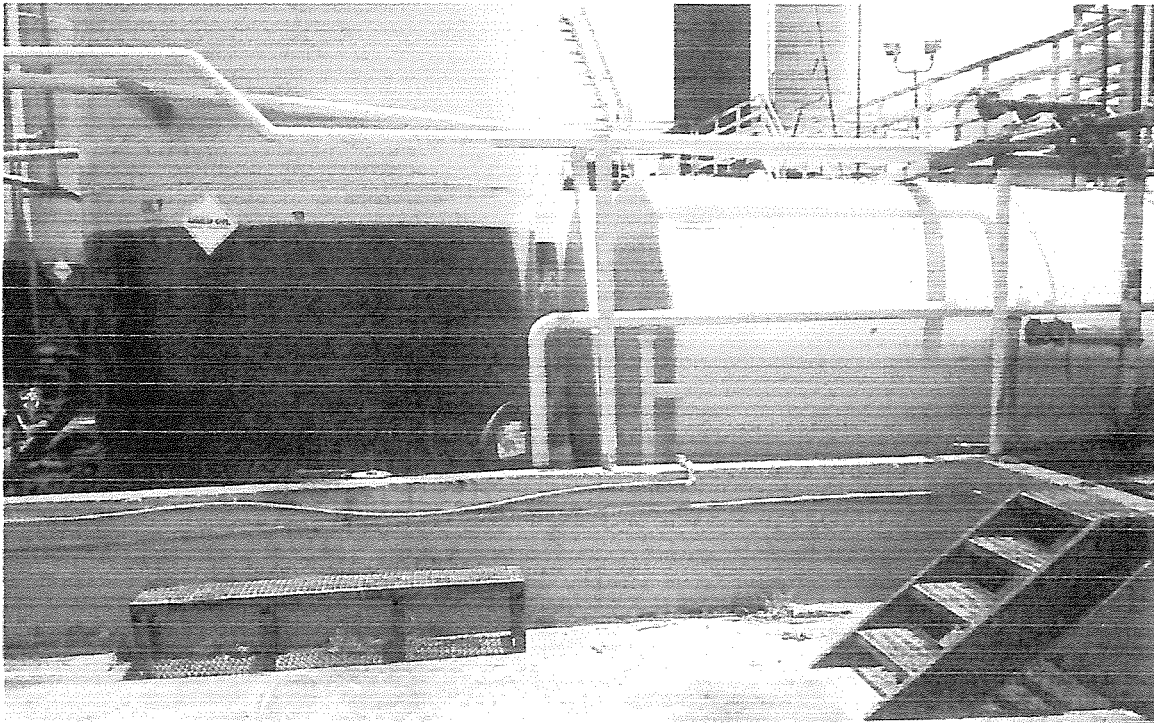


Figure 20 –Vertical and Horizontal Tanks  
Share Secondary Containment

## **Appendix A**

### **Facility Emergency Equipment**



## Facility Emergency Equipment

Equipment	Quantity	Type
Communication System	2	Telephone, Nextel Radios
Fire Alarm	1	Horn
Fire Hydrants	2	water
Fire Extinguishers	5	ABC Dry Chemical
Safety Showers	2	Water
Eye Wash Stations	2	Water
Respirators	1	Full Face with cartridges
Spill Pads	1 roll	synthetic absorbent
Spill Kits	9 drums	clay/verm/absorbents/soap
Empty Drums	0-75	open head drums
Spill pumps	2	diaphragm pumps
First Aid Kit	1	industrial kit

Refer to the enclosed facility map for the location of the above referenced equipment. Actual quantity of safety equipment may vary from time to time.

**Appendix B**  
**Daily Inspection Log**

[illegible]

*Integrated Resource Recovery, Inc., 4001 S.W. 47th Ave., Davie, FL 33314*

**Appendix 1**  
**List of Facility Tanks**

# Appendix 1 - List of Tanks

Location	Capacity (gals)	Product Stored	Installation Date	Tank Diameter & Length	Tank Shell Thickness	Secondary Containment
AST #T1	8,000	Used Oil	01/89	8'x21.5' H	3/8"	#1
AST #T2	8,000	Used Oil	01/89	8'x21.5' H	3/8"	#1
AST #T3	6,000	Used Oil	04/89	8'x16' H	3/8"	#1
AST #T4	6,000	Used Oil/Oily Water	04/89	8'x16' H	3/8"	#1
AST #T5	10,000	Used Oil	06/87	10'x18' H	3/8"	#1
AST #T6	9,500	Waste Diesel	06/87	10.5'x14.6' H	3/8"	#1
AST #T8	20,000	Used Oil and Waste Diesel	06/87	10.5'x31' V	3/8"	#1
AST #T9	20,000	Used Oil/Oily Water	03/89	10.5'x31' V	3/8"	#1
AST #T10	20,000	Used Oil	06/87	10.5'x31' V	3/8"	#1
T11	20,000	Used Oil	06/87	10.5'x31' V	3/8"	#1
T12	20,000	Used Oil	03/89	10.5'x31' V	3/8"	#1
T13	20,000	Used Oil	03/89	10.5'x31' V	3/8"	#1
T14	20,000	Used Oil/Oily Water	03/89	10.5'x31' V	3/8"	#1
T15	20,000	Used Oil/Oily Water	04/89	10.5'x31' V	3/8"	#1
T16	20,000	Used Oil/Oily Water	04/89	10.5'x31' V	3/8"	#1
T17	20,000	Used Oil/Oily Water	04/89	10.5'x31' V	3/8"	#1
T18 or Mixer	6,500	Out of Service	04/89	8.5'x16' V	3/8"	#1
T7	10,000	Used Oil/Oily Water	01/93	8'x26' H	3/8"	#2
T20	1,000	Truck Diesel	02/92	5.33'x6' H	3/8"	#5
Drum Storage Building	55-550	Hazardous and non-hazardous waste, occasionally 1-20 drums of oil filters or other petroleum materials; Cooking Oil Totes 250 gal to 550 gal	N/A	Variable	Variable	#6
Storage Area	55-550	Cooking Oil Totes, Oil Filter or Other Petroleum Materials	N/A	Variable	Variable	#3
FP&L Transformer	55+	Mineral Oil	1990's	Owned and operated by FPL	Owned and Operated by FPL	Owned and Operated by FPL
T21	100,000	Used Oil/Oily Water	06/96	20'x31' V	3/8"	#4

H = horizontal tank

V = vertical tank

\*FPL would not acknowledge requests for information

## **Appendix 2**

### **Examples of Waste Analysis Plan Methodologies**

EPA HAZARDOUS WASTE NO.	CONTAMINANT	CHEMICAL ABSTRACTS SERVICE NUMBER	REGULATORY LEVEL (MG/L)	METHOD OF ANALYSIS
D004	Arsenic	7440-38-2	5.0	1311/7061
D005	Barium	7440-39-3	100.0	1311/7080
D006	Cadmium	7440-43-9	1.0	1311/7130
D007	Chromium	7440-47-3	5.0	1311/7190
D008	Lead	7439-92-1	5.0	1311/7421
D009	Mercury	7439-97-6	0.2	1311/7470
D010	Selenium	7782-49-2	1.0	1311/7741
D011	Silver	7440-22-4	5.0	1311/7760
D018	Benzene	71-43-2	0.5	1311/8250
D019	Carbon Tetrachloride	56-23-5	0.5	1311/8250
D021	Chlorobenzene	109-90-7	100	1311/8250
D022	Chloroform	67-66-3	6.0	1311/8250
D027	1,4-Dichlorobenzene	106-46-7	7.5	1311/8250
D028	1,2-Dichloroethane	107-06-2	0.5	1311/8250
D029	1,1-Dichloroethylene	75-35-4	0.7	1311/8250
D035	Methyl Ethyl Ketone	78-93-9	200.0	1311/8250
D039	Tetrachloroethylene	127-18-4	0.7	1311/8250
D040	Trichloroethylene	75-01-6	0.5	1311/8250
D043	Vinyl Chloride	75-01-4	0.2	1311/8250
D020	Chlordane	57-75-9	0.03	1311/8270
D023	o-Cresol	95-48-7	200.0	1311/8270
D024	m-Cresol	108-39-4	200.0	1311/8270
D025	p-Cresol	106-44-5	200.0	1311/8270
D026	Cresol	—	200.0	1311/8270
D030	2,4-Dinitrofluorene	121-14-2	0.13	1311/8270
D012	Endrin	72-20-8	0.02	1311/8270
D031	Heptachlor (and its hydroxide)	76-44-8	0.008	1311/8270
D032	Hexachlorobenzene	118-74-1	0.13	1311/8270
D033	Hexachlorobutadiene	87-68-3	0.5	1311/8270
D034	Hexachlorocyclopentadiene	67-72-1	3.0	1311/8270
D013	Lindane	58-89-9	0.4	1311/8270
D014	Methoxychlor	72-43-5	10.0	1311/8270
D036	Nitrobenzene	98-95-3	2.0	1311/8270
D037	Pentachlorophenol	87-86-5	100.0	1311/8270
D038	Pyridine	110-86-1	5.0	1311/8270
D015	Toxaphene	8001-35-2	0.5	1311/8270
D041	2,4,5-trichlorophenol	95-95-4	400.0	1311/8270
D042	2,4,6-trichlorophenol	88-06-02	2.0	1311/8270
D016	2,4-D	94-75-7	10.0	1311/8150
D017	2,4,5-TP (silvex)	93-72-1	1.0	1311/8150

METHODOLOGY TITLE	EPA/STANDARD METHODS TEST METHOD		
	DRINKING WATER	NON- POTABLE WATER	OTHER**
Purgeable Organics	502.2	601&602/8021	8010&20/8021
Purgeable Halocarbons	502.2	601/8021	8010/8021
Purgeable Aromatics	502.2	602/8021	8020/8021
Purgeable Organics by GC/MS	524.2	624/8260	8260
EDB, DBCP	504	8011	8011
Organochlorine Pesticides	505	608	8080
PCBs (ONLY)	508A	608	8080
Nitrogen, Phosphorus & Triazine Pesticides	507	619	-
Organophosphorus Pesticides	-	614	8141
Chlorophenoxy Herbicides	515.1	615	8150
Carbamate Pesticides	531.1	-	-
Glyphosate	547	-	-
Endothal	548	-	-
Diquat/Paraquat	549	-	-
Chlorination Disinfection Byproducts	551	-	-
Nonhalogenated Solvents	-	8015	8015
Phenols	-	604*	*
Benzidines	-	605*	*
Phthalate Esters	-	606*	*
Nitrosamines	-	607*	*
Nitroaromatics and Isophorone	-	609*	*
Polynuclear Aromatic Hydrocarbons	-	610*	*
Haloethers	-	611*	*
Chlorinated Hydrocarbons	-	612*	*
Semi-Volatile Extractable Compounds	625	625/8270	8270
"Tentatively Identified" Compounds* (Volatile)	524.2 Library Search	8260 Library Search	8260 Library Search
"Tentatively Identified Compounds" (Semi-Volatile)	625 Library Search	8270 Library Search	8270 Library Search



INORGANIC CONSTITUENT	EPA/STANDARD METHODS TEST METHOD	
	WATER	OTHER
Acidity	305.1	-
Acids, % and Type	Combined	Combined
Alkalinity (CaCO <sub>3</sub> )	310.1	-
Alkalinity, Phenolphthalein	310.1	-
Biochemical Oxygen Demand (BOD-5)	405.1	-
Boron	212.3	-
BTU	PARR	PARR
Chemical Oxygen Demand	410.1	-
Chloride	325.3	9252
Chlorine, Residual	330.3	-
Chromium, Hexavalent	SM 312B	7196
Coliform, Fecal	SM 909C	-
Coliform, Total	SM 909A	-
Color	110.3	Description
Conductivity	120.1	-
Corrosivity (RCRA)	Index	Index
Corrosivity (Towards Steel)	1110	1110
Cyanide, Total	335.3	9010
Cyanide, Amenable to Chlorination	335.3	9010
Flashpoint (PMCC)	ASTM D-93-79	ASTM D-93-79
Fluoride	340.2	-
Formaldehyde	PG2118	PG2118
Gross Alpha	900.0	-
Gross Beta	900.0	-
Halogens, Total	325.3 (MOD)	5050/9252
Halogens, Organic	325.3 (MOD)	5050/9252
Hardness, Total	130.2	-
Hardness, Calcium	130.2	-
Hydrocarbons, Total Recoverable Petroleum	418.1	9073
Hydrogen Sulfide	376.1	9030

## **Appendix 3**

### **Profile Forms**



# TRIUMVIRATE ENVIRONMENTAL

## TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC.

3701 S.W. 47TH AVENUE, SUITE 109 • DAVIE, FL 33314

BROWARD (954) 583-3795 FAX (954) 583-8017

TOLL FREE (800) 959-9543

Waste Oil/Oily Wastewater Characterization

NO.

### A GENERAL INFORMATION

Billing/Broker Name \_\_\_\_\_

Billing Address \_\_\_\_\_

Customer Contact Person \_\_\_\_\_

Customer Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_

USEPA ID# \_\_\_\_\_

Purchase Order No. for Test Sample \_\_\_\_\_

Generator Name (if different) \_\_\_\_\_

Pick up Address \_\_\_\_\_

☐ Check here if same as billing address SIC# \_\_\_\_\_

*Note: P.O. Box unacceptable for pick-up address*

Generator Contact Person \_\_\_\_\_

Facility Name \_\_\_\_\_

Pick-up Address \_\_\_\_\_

*Note: P.O. Box unacceptable for pick-up address*

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_

USEPA ID# \_\_\_\_\_

### B WASTE DESCRIPTION

NAME OF WASTE \_\_\_\_\_

PROCESS GENERATING WASTE \_\_\_\_\_

### C GENERAL CHARACTERISTICS (at 70°F unless otherwise specified)

COLOR \_\_\_\_\_ ODOR \_\_\_\_\_ ☐ NONE ☐ MILD ☐ STRONG ☐ LIQUID \_\_\_\_\_ % FREE

☐ SOLID ☐ SLUDGE ☐ POWDER Phases: ☐ Single Layer ☐ Double Layer ☐ Multilayer *If multi, how many? \_\_\_\_*

COMMENTS:

### D SHIPPING INFORMATION

PROPER SHIPPING NAME \_\_\_\_\_

HAZARD CLASS \_\_\_\_\_ ID# \_\_\_\_\_ R/Q \_\_\_\_\_

ANTICIPATED VOLUME \_\_\_\_\_ Gal. \_\_\_\_\_ Yds. \_\_\_\_\_ Lbs.

\_\_\_\_\_ Drums(s) \_\_\_\_\_ Bulk

\_\_\_\_\_ One time \_\_\_\_\_ Mtly \_\_\_\_\_ Yrly Other \_\_\_\_\_

Types and size of container: \_\_\_\_\_

Weight/container: \_\_\_\_\_ /gallon \_\_\_\_\_

Test Method: EPA Test Method SW-846, 9077, Total Halogens and/or Hydroclor-Q, both tests for chlorine.

RESULTS: \_\_\_\_\_

Analyst: \_\_\_\_\_

Print Name/Signature

Date

I certify that to the best of my knowledge the used oil/oily wastewater to be transported and recycled by Triumvirate Environmental (Florida), Inc has not been mixed with any halogenated solvent.

Owner/Operator \_\_\_\_\_

Date \_\_\_\_\_

3701 SW 47<sup>th</sup> Avenue, Suite 109, Davie, Florida 33314

**Waste Characterization / Profile Form for  
Petroleum Contact Water (PCW)**

1. Generator Name: \_\_\_\_\_
2. Generator Address: \_\_\_\_\_
3. Generator EPA ID Number: \_\_\_\_\_
4. Generator Contact:
 

Name/Title: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_
5. Is generator certifying wastewater is a PCW through process knowledge? (Check one)  

Yes \_\_\_\_ No \_\_\_\_
6. Does the waste meet the definition of Petroleum Contact Water as defined in 62-740.030, Florida Administrative Code? (Check one)  

Yes \_\_\_\_ No \_\_\_\_
7. From which source below was the PCW generated? (Check one)
 

a. Condensate from a petroleum UST or AST ..... \_\_\_\_\_  
 b. Water bottoms or drawdown water from a petroleum tank system ..... \_\_\_\_\_  
 c. Water mixed with petroleum product, displaying a visible sheen, from secondary containment or spill containment systems associated with petroleum storage, transportation or distribution. Does not include water containing diesel ..... \_\_\_\_\_  
 d. Petroleum tank filler sump and dispenser sump water ..... \_\_\_\_\_  
 e. Water mixed with petroleum tank products from emergency response / spill clean up actions ..... \_\_\_\_\_  
 f. Above ground tank seal leakage water ..... \_\_\_\_\_  
 g. Pumpable liquids from petroleum tank cleaning operations ..... \_\_\_\_\_  
 h. Other (Describe here) \_\_\_\_\_  
 \_\_\_\_\_
8. Is the PCW managed as a product? (Check one)  

Yes \_\_\_\_ No \_\_\_\_
9. Does the PCW contain a recoverable product? (Check one)  

Yes \_\_\_\_ No \_\_\_\_
10. **CERTIFICATION:**

Signing below means the above information is true and correct to the best of my knowledge. Furthermore, as the authorized representative of the generator, I assure that the PCW does not contain levels of hazardous constituents above those found in the petroleum source of the PCW or hazardous constituents not normally found in PCW. This certification must be updated/renewed every 3 years per rule 62-740, FAC.

Generator Signature / Date: \_\_\_\_\_  
 Print Name / Title: \_\_\_\_\_

**Waste Profile Sheet**

**Triumvirate Environmental (Merrimack), Inc.**  
**263 Howard Street**  
**Lowell MA 01852**  
**Phone (978) 453-7772 Fax (978) 453-7775**

**Approval Number:** \_\_\_\_\_

<b>A. Generator Information:</b>			<b>Customer Information:</b>		
Generator Name:			Customer Name: Triumvirate Environmental		
Mail Address:			Address: 61 Inner Belt Road		
City:	State:	Zip:	City: Somerville	State: MA	Zip: 02143
Contact:	Title:		Contact: Michael Farrell	Title: Disposal Coordinator	
Site Phone:	EPA ID:		Customer Phone: 617-628-8098	Sic Code:	
Site Address:			Customer Fax: 617-628-8099		
<b>B. COMMON NAME OF WASTE:</b>			<b>MSDS / Analytical (Y/ N )      SAMPLE</b>		
Process generating waste:					
Shipment Method: Drum (size):      / (type):      Bulk:      Quantity:      /mo. <input type="checkbox"/> qtr. <input type="checkbox"/> yr. <input type="checkbox"/> one time <input type="checkbox"/>					
<b>C. Physical Properties:</b> Color:      Total Halogens (%)      Odor: none <input type="checkbox"/> mild <input type="checkbox"/> strong <input type="checkbox"/>					
Liquids (%)      Solids (%)      Sludge (%)      Powder (%)      Debris:      Specific Gravity:					
PH:      BTU/Lb: <input type="checkbox"/> <5000 <input type="checkbox"/> <10,000 <input type="checkbox"/> >10,000      Flash Point (f): <input type="checkbox"/> <100 <input type="checkbox"/> <140 <input type="checkbox"/> <200 <input type="checkbox"/> >200					

<b>D. Waste Composition (list all haz &amp; non-haz components)</b>			<b>G. Metals: None <input type="checkbox"/> TCLP <input type="checkbox"/> TOTAL <input type="checkbox"/></b>		
		-	%	D004 Arsenic 5mg/l:	D005 Barium 100mg/l:
		-	%		
		-	%	D006 Cadmium 1mg/l:	D007 Chromium 5mg/l:
		-	%		
		-	%	D008 Lead 5mg/l:	D009 Mercury 0.2 mg/l:
		-	%	D010 Selenium 1mg/l:	D011 Silver 5mg/l:
		-	%	Copper:	Nickel:
		-	%	Zinc:	

<b>E. Hazardous Properties:</b>				<b>H. Other Compounds: TCLP <input type="checkbox"/> Total <input type="checkbox"/></b>			
None <input type="checkbox"/>	Water Reactive <input type="checkbox"/>	Shock Sensitive <input type="checkbox"/>	Radioactive <input type="checkbox"/>	D012 Endrin <input type="checkbox"/>	D029 Dichloroethylene <input type="checkbox"/>		
Dioxins <input type="checkbox"/>	Benzene Neshap <input type="checkbox"/>	Air Sensitive <input type="checkbox"/>	Pyrophoric <input type="checkbox"/>	D013 Lindane <input type="checkbox"/>	D030 2,4-Dinitrotoluene <input type="checkbox"/>		
Explosive <input type="checkbox"/>	Etiological <input type="checkbox"/>	Polymerizable <input type="checkbox"/>	Pathogen <input type="checkbox"/>	D014 Methoxychlor <input type="checkbox"/>	D031 Heptachlor/epoxide <input type="checkbox"/>		
Biological <input type="checkbox"/>	Pesticide/Herbicide/Insecticide <input type="checkbox"/>			D015 Toxaphene <input type="checkbox"/>	D032 Hexachlorobenzene <input type="checkbox"/>		
Special Handling/Compatibility Concerns:				D016 2,4-Dichlorophenoxyacetic Acid <input type="checkbox"/>			
				D017 2,4,5 TP (Silvex) <input type="checkbox"/>			
Cyanides <input type="checkbox"/>	Sulfides <input type="checkbox"/>	Amines <input type="checkbox"/>	PCB's <input type="checkbox"/>	Phenols <input type="checkbox"/>	D033 Hexachlorobutadiene <input type="checkbox"/>		
<b>F. DOT Shipping Name:</b>				D018 Benzene <input type="checkbox"/>			
				D019 Carbon Tetrachloride <input type="checkbox"/>			
Additional Description:				D020 Chlorodane <input type="checkbox"/>			
Hazard Class:      UN/NA :      Packing Group:				D021 Chlorobenzene <input type="checkbox"/>			
EPA Code:      State Code:				D022 Chloroform <input type="checkbox"/>			
				D023 o-Cresol <input type="checkbox"/>			
				D024 m-Cresol <input type="checkbox"/>			
Is this material a Hazardous Waste under 40CFR 261.3 <input type="checkbox"/> Yes <input type="checkbox"/> No				D025 p-Cresol <input type="checkbox"/>			
Is this a Hazardous Substance/Marine Pollutant per 49 CFR (DOT) <input type="checkbox"/> Yes <input type="checkbox"/> No				D026-cresol <input type="checkbox"/>			
Form Code:      Source Code:      Subpart CC (voc>500ppm):				D027 1,4-Dichlorobenzene <input type="checkbox"/>			
				D028 1,2 Dichloroethane <input type="checkbox"/>			
				Notes:			

**Generator Certification:** I hereby certify that the waste identified or described on this waste profile conforms with the identifications or descriptions provided, and with analytical data or other specifications provided to the TSDF. To the extent the waste does not conform, the Generator agrees to indemnify Triumvirate Environmental (Merrimack), Inc. from all liability and damages arising therefrom. No deliberate or willful omissions of composition or properties exist and that all known or suspected hazards have been disclosed. I also certify that the obtained sample is representative of the waste material described above and give this TSDF permission and consent to make amendments and corrections.

<b>Name:</b>	<b>Title:</b>
<b>Signature:</b>	<b>Date:</b>

**Waste Certification:**  
 Required by 310 CMR 30.512(2) of Massachusetts Hazardous Waste Regulations, Triumvirate Environmental, (Merrimack) Inc. certifies that they possess the proper current licenses required by the US Environmental Protection Agency and the Massachusetts Department of Environmental Protection to accept and store the waste listed above. The generator will be notified in writing within seven days of any changes in license status affecting the ability of Triumvirate Environmental (Merrimack), Inc. to accept the above waste.

**(For Triumvirate Environmental Use Only)**

<b>Authorized Signature:</b>	<b>Printed Name:</b>	<b>Date:</b>	<b>Title:</b>
<b>Off Site Codes:</b>	<b>Disposal Restrictions:</b>		

## **Appendix 4**

### **Monthly Fuel Analysis and Facility Inventory Logs**

# PRECISION PETROLEUM LABS, INC.

## CERTIFICATE OF ANALYSIS

<b>LABORATORY ADDRESS</b> 5915 Star Lane, Houston, TX 77057 Ph. 713-680-9425 Fax: 713-680-9564 Website: precisionlabs.org	<b>Client Name:</b> Triumvirate Environmental <b>Street Address:</b> 3701 SW 47 <sup>th</sup> Ave <b>City, State, Zip:</b> Davie, FL 33314
--	--

INVOICE No.	54080	DATE RECEIVED	07-26-2012
LAB REFERENCE No.	2012-07-615	DATE/TIME COLLECTED	07-23-2012
AUTHORIZED BY	Shawn Lennon	MATRIX TYPE	Liquid
PRODUCT ID	#5 Fuel		

<u>PARAMETER</u>	<u>TEST METHOD</u>	<u>REPORTING LIMIT</u>	<u>TEST RESULT</u>
Total halogen, PPM	S.W.9075	200	404
Organic halogen, PPM	S.W.9075	100	388
Inorganic halogens, PPM	Calculation	100	BRL
Gravity API @ 60°F	D-287	-----	29.1
Heat of combustion, BTU/Gal	D-240	2,150	135,903
Viscosity SUS @ 100°F	D-445	1	307
Flash point, °F	S.W. 1010	-10°F	> 200
Ash, Wt%	D-482	0.001	0.704
PCB's, PPM	S.W. 8082	0.50	BRL
Sulfur, Wt%	D-4294	0.020	0.3338

### TOTAL HEAVY METALS, PPM

		<u>PREPARATION METHOD</u>		
Arsenic	EPA-6010	EPA-3040/3050	1.00	BRL
Cadmium	EPA-6010	EPA-3040/3050	1.00	BRL
Chromium	EPA-6010	EPA-3040/3050	1.00	BRL
Lead	EPA-6010	EPA-3040/3050	2.00	7.18

Daniel Zabihi  
QA Manager

Date: 07-27-2012

  
 PRIMARY ACCREDITATION TCEQ, #T104704203-TX  
 ARIZONA LICENSE # AZ0630

QUALIFIERS & ABBREVIATIONS: BRL - Below Reporting Limit; SCL - Test performed by an approved subcontract laboratory; B - Analyte was detected in the associated method blank; Matrix spike/matrix spike duplicate (M), Laboratory control sample (L), Calibration criteria (C), and Surrogate (S) recoveries were outside acceptance limits. Test deviation applied to Method 8260 (VOCs).

COMMENTS: There were no quality assurance anomalies associated with these tests.

PRECISION PETROLEUM LABS, INC.'S RESPONSIBILITY FOR THE ABOVE ANALYSIS, OPINIONS OR INTERPRETATIONS IS LIMITED TO THE INVOICE AMOUNT. RESULTS ARE REPORTED ON AN "AS IS" BASIS, UNLESS OTHERWISE NOTED. THE TEST RESULTS RELATE ONLY TO THE SUBMITTED SAMPLE IDENTIFIED ON THIS REPORT. TEST RESULTS MEET ALL REQUIREMENTS OF NELAC FOR TESTS LISTED ON THE LABORATORY'S CURRENT FIELDS OF ACCREDITATION (EPA 1010, 6010, 8082, 8260, and 9075).





[illegible][illegible]

## **Appendix 5**

### **Used Oil Manifest and Facility Logs**



# TRIUMVIRATE ENVIRONMENTAL

**TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC.**  
3701 S.W. 47TH AVENUE, SUITE 109 • DAVIE, FL 33314  
BROWARD (954) 583-3795 FAX (954) 583-8017  
TOLL FREE (800) 959-9543

**Manifest Document**

No. 56059

Visit Our Website @ [www.triumvirate.com](http://www.triumvirate.com)

HAZARDOUS SCREENING

☐ PASS ☐ FAIL

## Used Product Shipping Manifest

Truck #  Trailer #

1. Generator/Shipper Name		2. EPA Identification No.		3. Generator Phone No.		4. Purchase Order No.			
5. Generator/Shipper Address		6. City		7. State		8. Zip Code			
10. Bill To Name		11. Address		12. City		13. State			
14. Zip Code									
15. Transporter Name TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC.		16. Phone Number 954-583-3795		17. EPA Identification Number FLD 981018773		<input type="checkbox"/> COD <input type="checkbox"/> CASH <input type="checkbox"/> CHECK <input type="checkbox"/> VISA <input type="checkbox"/> MASTERCARD <input type="checkbox"/> DIRECT BILL <input type="checkbox"/> CREDIT <input type="checkbox"/>			
18. Transporter Address 3701 S.W. 47TH AVE., #109		19. City DAVIE		20. State FLORIDA				21. Zip Code 33314	
22. Designated Facility Name TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC.		23. Phone Number 954-583-3795		24. EPA Identification Number FLD 981018773					
25. Designated Facility Address 3670 S.W. 47TH AVENUE		26. City DAVIE		27. State FLORIDA				28. Zip Code 33314	
29. Comments									

30. US DOT Proper Shipping Description			CONTAINERS					CHARGES
HM		SHIPPING NAME	NO.	TYPE	TOTAL QTY	UNIT WT/VOL	UNIT PRICE	TOTAL PRICE
X	a	Combustible Liquid, N.O.S. Combustible Liquid NA 1993, PG III (Petroleum Distillates)						
	b	Non-Hazardous Material (used oil filters)						
	c	Non-Hazardous Material (rags & absorbent material)						
	d	Spent Mercury Lamps for Recycle (used fluorescent bulbs)						
	e	Non-Hazardous Material (oily water)						
	f	Non-Hazardous Material (soils)						
	g	Non-Hazardous Material (sludge)						
	h	Non-Hazardous Material (anti-freeze/coolant)						
	i	USED OIL (NON-DOT REGULATED)						
X	j	Diesel Fuel, 3, NA, 1993, PG III						
	k	Transportation Surcharge						
	l	Recovery Fee						
	m							

**Important:** Payment due upon receipt of invoice. A service charge of 1½% per month (18% annum) will be charged on balances over 30 days past due. All past due accounts subject to a minimum service charge of \$1.50 per month. In the event it shall become necessary to the herein above described sums, or any part thereof, the purchaser agrees to pay all costs thereof, including reasonable attorney's fees.

Total Due

31. Special Handling Instructions and Additional Information <b>IN CASE OF EMERGENCY CALL 800-966-9282</b>		Handling Codes	
32. <b>GENERATOR'S CERTIFICATION:</b> 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	
33. Transporter Acknowledgement of Receipt of Materials			
Printed/Typed Name		Signature	
Discrepancy Indication Space for Designated Facility			
35. Designated Facility Owner/Operator Acknowledgement of Receipt of Materials			
Printed/Typed Name		Signature	

DISTRIBUTION: WHITE - ACCOUNTING

YELLOW - CUSTOMER SERVICE

PINK - COPY

GOLDENROD - GENERATOR