# TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC.

# PART B PERMIT RENEWAL BINDER

# 2013

***FACILITY ADDRESS:***

10100 ROCKET BLVD ORLANDO, FL 32824

**TRIUMVIRATE**
**ENVIRONMENTAL**

Triumvirate Environmental (Florida) Inc.,
10100 Rocket Boulevard
Orlando, FL 32824

Florida Department of Environmental Quality
Mail Station 4560 2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Florida DEP,

Enclosed is the entire renewal application for the Triumvirate Environmental Part B that is set to expire in November of this year. Per conversations with Merlin Russell electronic copies are being sent to Anthony Tripp, and Merlin Russell. Two hard copies are being sent, with original stamps. One is being sent to Merlin Russell and Anthony Tripp and the other is being sent to Janine Kraemer. The check, for $10,000, is being sent from our corporate office to Florida Department of Environmental Protection.

Sincerely,

John Wyluda

**Book Organization:**

This permit application has been prepared using forms and following instruction contained in the Hazardous Waste Facility Permit Application Instructions and Forms, published by the State of Fiorida Department of Environmental Protection (DEP). This document is required to be used by entities when applying for hazardous waste facility permits and permit renewals. The DEP document is divided into part I and Part II. Part I is a form equivalent to EPA's Part A. Part II is equivalent to EPA's Part B. Part II consists of a questionnaire listing the requirements the facility needs to address to complete the application.

This application addresses the questions contained in Part II in the order listed in the DEP document. Each question is shown in italics followed by the response printed in regular type. The application divides Part II several parts each corresponding a specific section from the instructions. Triumvirate Environmental plans have been included a subpart of the application with the figures and maps. Additionally, for convenience, prominent figures and maps are included at the end of the application.

| | |
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**Maps & Figures:**

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## Description and Location of Section for Hazardous Waste Facility Permit Application
## Triumvirate Environmental Florida – Orlando

## Orlando, Florida


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Part I

Print Form

| Revision Number |
|---|
| Date5/1/2013 |
| Page 1 of 4 |

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

**Signature and Certification**

Facility Name Triumvirate Environmental (Florida)

EPA/DEP I.D. No. FLD 980 559 728

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

**1. Facility Operator**

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

Signature of the Operator or Authorized Representative*

John McQuillan, President and CEO
Name and Title (Please type or print)

Date 5/1/2013

Telephone (617) 628-8098

- **Attach a letter of authorization**

| Revision Number |
| --- |
| Date 5/1/2013 |
| Page 2 of 4 |

**2. Facility Owner**

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

John T. McQuillan, J.

Signature of the Facility Owner or Authorized Representative*

John McQuillan, President and CEO

Name and Title (Please type or print)

Date 5/1/2013

Telephone (617) 628-8098

*** Attach a letter of authorization**

**3. Land Owner**

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

John T. McQuillan, J.

Signature of the Land Owner or Authorized Representative*

John McQuillan, President and CEO

Name and Title (Please type or print)

Date 5/1/2013

Telephone (617) 628-8098

*** Attach a letter of authorization**

| Revision Number |
| --- |
| Date 5/10/13 |
| Page 3 of 4 |

**4. Professional Engineer Registered in Florida**

Complete this certification when required to do so by Chapter 471, F.S., or when not exempted by Rule 62-730.220(7), F.A.C.

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

Victoriano L. San Agustin, Jr.

Signature

Victoriano L. San Agustin, Jr.

Name (please type)

Florida Registration Number 40226

Mailing Address FECC, Inc., 3652 Old Winter Garden Road

street or P.O. Box

Orlando, Florida 32805

city state zip

Date 5-10-13

Telephone (813)8.425.520

**(PLEASE AFFIX SEAL)**

**5. Professional Geologist Registered in Florida**

Complete this certification when required to do so by Chapter 492, F.S., or when not exempted by Rule 62-730.220(8), F.A.C.

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

Signature

Michael J. Geden

Name (please type)

Florida Registration Number 000408

Mailing Address 3532 Maggie Blvd
street or P.O. Box

Orlando FL 32811
city state zip

Date May 9, 2013

Telephone (407)423-0504

**(PLEASE AFFIX SEAL)**

| | |
|---|---|
| Revision Number | 1 |
| Date | 6/28/2013 |
| Page | I-1 of |

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

Please Type or Print

**A. General Information**

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

- ☐ DISPOSAL
  - ☐ Landfill ☐ Land Treatment ☐ Surface Impoundment
  - ☐ Miscellaneous Units Type of Unit _____
- ☒ STORAGE
  - ☒ Containers ☐ Tanks ☐ Piles
  - ☐ Surface Impoundment ☐ Containment Building
  - ☐ Miscellaneous Unit Type of Unit _____
- ☒ TREATMENT
  - ☐ Tanks ☐ Piles ☐ Surface Impoundment
  - ☐ Incineration ☐ Containment Building
  - ☐ Boiler / Industrial Furnace Type of Unit _____
  - ☐ Miscellaneous Unit Type of Unit _____

2. Type of application:

- ☐ Temporary Operation Permit (TOP)
- ☐ Construction Permit
- ☒ Operation Permit
- ☐ Construction & Operation Permit
- ☐ Research, Development & Demonstration (RD&D) Permit
- ☐ Postclosure Permit
- ☐ Clean Closure Plan
- ☐ Subpart H Remedial Action Plan
- ☐ Equivalency Demonstration

3. Revision Number: 1

4. Date current operation began, or is expected to begin: 01 / 01 / 1985

5. Facility Name Triumvirate Environmental Inc.

6. EPA/DEP I.D. No. FLD 980 559 728

7. Facility location or street address 10100 Rocket Boulevard Orlando, FL 32824

8. Facility mailing address 10100 Rocket Boulevard
(street or P.O. Box)
Orlando (city) Florida (state) 32824 (zip)

9. Contact person James Green Telephone (407 )859-4441

Title Vice President, Florida

Mailing address 10100 Rocket Boulevard
(street or P.O. Box)
Orlando (city) FL (state) 32824 (zip)

E-mail address jgreen@triumvirate.com

10. Operator's name John McQuillan Telephone (407 )859-4441

Mailing address 10100 Rocket Boulevard
(street or P.O. Box)
Orlando (city) FL (state) 32824 (zip)

11. Facility owner's name Rockett Boulevard Properties LL( Telephone (407 )859-4441

Mailing address 10100 Rocket Boulevard
(street or P.O. Box)
Orlando (city) FL (state) 32824 (zip)

12. Legal structure

☒ Corporation ☐ Non-profit corporation ☐ Partnership ☐ Individual
☐ Local government ☐ State government ☐ Federal government ☐ Other

13. If an individual, partnership, or business is operating under an assumed name, specify the county and state where the name is registered.

County Not Applicable State Not Applicable

14. If the legal structure is a corporation, indicate the state of incorporation.

State of incorporation Florida

15. If the legal structure is an individual or partnership, list the owners.

Name

Address
(Street or P.O. Box) (city) (state) (zip)

Name

Address
(Street or P.O. Box) (city) (state) (zip)

16. Site ownership status

☐ Owned ☐ To be purchased ☒ To be leased 100 years

☒ Presently leased; the expiration date of the lease is 9/30/2020.

If leased, indicate land owner's name Rockett Boulevard Properties LLC

Address 200 Inner Belt Rd. (Street or P.O. Box) Somerville (city) MA (state) 02143 (zip)

17. Name of engineer Victor San Agustin Registration No. 40226

Address 3652 Old Winter Garden Rd (Street or P.O. Box) Orlando (city) FL (state) 32805 (zip)

Associated with FECC Inc.

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

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

| NAME OF PERMIT | AGENCY | PERMIT NUMBER | DATE ISSUED | EXPIRATION DATE |
|---|---|---|---|---|
| See Attached Shee | | | | |
| | | | | |
| | | | | |
| | | | | |

**B. Site Information**

1. The facility is located in Orange County.

The nearest community to the facility is Taft.

Latitude 28° 25' 04" N Longitude 81° 23' 10" W

Method and datum Google Earth, wgs84

2. The area of the facility site is 6.123 acres.

3. Attach a scale drawing and photographs of the facility showing the location of all past, present, and future treatment, storage and disposal areas. Also show the hazardous wastes traffic pattern including estimated volume and control.

4. Attach a topographic map which shows all the features indicated in the instructions for this part.

5. Is the facility located in a 100-year flood plain? ☐ Yes ☒ No

6. The facility complies with the wellhead protection requirements of Rule 62-730.521, F.A.C. ☒ Yes ☐ No

**C. Land Use Information**

1. The present zoning of the site is Industrial (IND-4).

2. If a zoning change is needed, what should the new zoning be? NA.

**D. Operating Information**

1. Is waste generated on-site? ☒ Yes ☐ No

2. List the NAICS codes (5 to 6 digits) 562211 _____ _____ _____ _____

_____ _____ _____ _____ _____ _____ _____

3. Use the codes and units provided in the instructions to complete the following table. Specify:

   a. Each process used for treating, storing or disposing of hazardous waste (including design capacities) at the facility, and

   b. The hazardous waste(s) listed or designated in 40 CFR Part 261, including the annual quantities, to be treated, stored, or disposed by each process at the facility.

| PROCESS CODE | PROCESS DESIGN CAPACITY AND UNITS OF MEASURE | HAZARDOUS WASTE CODE | ANNUAL QUANITY OF HAZARDOUS WASTE AND UNITS OF MEASURE |
|---|---|---|---|
| See Table I.D.3 | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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

| Name of Permit | Agency | Permit Number | Date Issued | Expiration Date |
|---|---|---|---|---|
| Septic Tank Permit Operating & Industrial Manufacturing | Florida Department of Health | 48-QO-00412 | 12/31/2013 | 12/31/2013 |
| Operating Permit Biomedical Waste - Storage | Florida Department of Health | 48-64-1374849 | 10/2/2012 | 9/30/2013 |
| Annual Registration Biomedical Waste - Transporter | Florida Department of Health | 48-64-1374857 | 10/2/2012 | 9/30/2013 |
| Restricted Drug Distributor/Destruction Facility | Florida Department of Business & Professional Regulation | 5326 | 12/15/2011 | 12/31/2013 |
| Solid Waste Permit - Transfer Station/Volume Reduction Facility/Waste Processing Facility | Florida Department of Environmental Protection | SO 48-0288830-001 | 10/14/2011 | 1/9/2014 |
| RCRA Hazardous Waste Permit | Florida Department of Environmental Protection | 26916-HO-006 | | 11/6/2013 |
| Registration as Transporter of Hazardous Wastes | Florida Department of Environmental Protection | FLD 980559728 | 12/27/2012 | 12/31/2013 |
| Registration as Transporter, Transfer Facility, and Small Quantity Handler Facility for Universal Waste Lamps and Devices | Florida Department of Environmental Protection | FLD 980559728 | 2/5/2013 | 3/1/2014 |
| Registration as Used Oil Transporter, Transfer Facility, Marketer, Filter Transporter, Filter Transfer Facility, Filter Processor | Florida Department of Environmental Protection | FLD 980559728 | 4/30/2012 | 6/30/2013 |
| Notice of Intent to Use Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity | Florida Department of Environmental Protection | | 10/17/2011 | 10/16/2016 |

## Part I – General Facility Information

**A. General Information:** 1 Through 18: Completed in pages I-1 through I-3 of the form

**Part I – General Facility Instructions**: 19 Through 21: Completed on page I-3 and I-5

**B. Site Information:**

**1 and 2**: Completed in page I-3 of the form.

**3.** *Attach a scale drawing and photographs of the facility showing the location of all past, present, and future treatment, storage, and disposal areas. Also show the hazardous wastes traffic pattern, including estimated volume and control.* Photos I.B.3-1 through I.B.3.-3 show copies of aerial photographs taken in January 1981, November 1984, and February 1994, respectively. The 1981 photo shows the general area, which was a vacant field. The 1984 photo shows the facility at its present location. Photographs I.B.3.-1 through I.B.3.-3 were prepared by the Florida Department of Transportation, and they were distributed by Orange County in the State of Florida. These aerial photographs indicate past uses of the site before the facility was built on it in 1984. Photos I.B.3.-4 through I.B.3.-7 are aerial views taken in 1995 by a private company that show the Chemical Conservation Corporation facility, which is now Triumvirate of Orlando, Florida. Photos I.B.3.-8 through I.B.3.-18 shows various treatment and storage areas. Figure I B 1 shows the hazardous waste management areas at the facility. Photos I.B.3.-8 through I.B.3.-17 contains views of the areas indicated in Figure II.A.5. The latest aerial map obtained from the State of Florida in October 2002 is included as Photo I.B.3.-18. Figure II.A.5 contains traffic patterns of vehicles entering and exiting the facility, as well as traffic volume and control information.

**4.** *Attach topographic maps which show all the features indicated in the instruction sheet for this part.* Figure I B 3 is a computer-generated composite of a section of two maps named "Lake Jessamine" and "Pine Castle" (reference codes 28081-D4-TF-024 and 28081-D3-TF-024, respectively), published by the U.S. Geological Survey (USGS) in a 7 5-minute quadrangle. Both maps were needed because a small portion of the eastern area encompassed by a 1-mile radius from the facility site is contained in the "Pine Castle" map, while the remainder of the circled area is shown in the "Lake Jessamine" map. Figure I B 3 contains the following features and information, in accordance with instructions in the permit application form:

**a.** *Map scale and date.* The 7.5-minute quadrangle, is provided in a 1:24,000 scale, which is equivalent to a 1-inch-to 2,000-feet scale. Both the "Lake Jessamine" and "Pine Castle" maps were last revised in 1980.

**b.** *100-year floodplain area.* Floodplain areas are shown in Figure I B 4, which is a copy of the Flood Insurance Rate Map (FIRM), Panel 420 of 750 (Community Map Number 12095C 0420 F).

The FEMA flood map is also attached from 2009 as I.B.5. This map is provided because it shows the majority of both lots of the Triumvirate Environmental Orlando facility outside the 100-year floodplain.

**c.** *Orientation of map.* North orientation is indicated on each of the aerial photographs and the flood plain map.

**d.** *Surface water bodies within 1/4 mile of the facility property boundary.* Except for Boggy Creek, which runs north to south at the northeast of the site and storm water ponds to the west and southwest of Triumvirate Environmental Inc., there are no bodies of water of sufficient proximity and magnitude to exert a significant influence on the groundwater system beneath the Triumvirate Environmental site. The creek traces a diagonal line in the upper right hand corner of Photo I.B.3.-3, while the ponds are shown at the center of the left hand margin and at the lower left hand corner.

**e.** *Surrounding land uses.* On the east side of the Triumvirate Environmental Inc., facility is an open, vacant lot. To the west is Cook Composites & Polymer. To the south, across Rocket Boulevard, are warehouses and small businesses. To the north are industrial facilities.

**f.** *Legal boundaries of the facility.* The map scale for Figure I B 4 reduces the facility site area to a size too small to show distances and bearings of the property boundaries in a legible manner. However, information of distances and bearings of legal boundaries for the facility are shown in Figure II.A.5.

**g.** *Injection wells used by the facility within one mile of the facility property boundaries.* The facility does not use injection wells.

**h.** *Drinking water wells listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundary.* There are no known drinking water wells within ¼ mile of the facility property line.

**i.** *Intake and discharge structures within one mile.* Storm water collected in the general area of the facility discharges into Boggy Creek at a point directly east of the facility site.

**5 and 6** Completed on page I-4 of the form.

**C. Land Use Information**:
**1 through 3:** Completed on page I-4 of form.

**D. Operating Information:**
**1 through 3**: Completed on page I-4 of the form

As explained on page i of this application, the organization of the permit application follows a format established in a booklet published by the State of Florida Department of Environmental Protection (DEP) titled Hazardous Waste Facility Permit Application Instructions and Forms dated 5/15/1996. The application has followed the booklet's format to ensure that it addresses all of the booklet's requirements. Even though the booklet does not require it, a brief description of the facility operations is provided below to develop a better understanding of the topics addressed in the application.

## FACILITY OPERATIONS

The Triumvirate Environmental Inc., facility at Orlando is presently permitted for the storage and consolidation of hazardous and solid (i.e., non-hazardous) waste. Triumvirate Environmental Inc., is also a transporter of hazardous waste and operates a hazardous waste transfer facility at the site. The storage and consolidation operations are authorized by a Hazardous Waste Facility Construction and Operating Permit issued on January 28, 2009. This permit allows the facility to store up to 824 55-gallon containers in the container storage unit, to consolidate waste with other compatible wastes, and to stabilize wastes. The facility may use the container storage unit to hold waste regulated under the transfer facility provisions for short periods of time. The transfer facility provisions allow a hazardous waste transporter to hold waste at the transfer facility for ten days or less while in transportation to another facility. The Triumvirate Environmental Inc., facility on Rocket Boulevard is also registered with the FDEP as a used oil transfer facility.

## FACILITY OPERATION DESCRIPTIONS

The following discussion of the facility operations includes:

- Waste Evaluation — Procedures used to evaluate waste streams for receipt by Triumvirate Environmental;
- Inspection and Testing of Incoming Wastes — Procedures used to inspect and test waste upon arrival at the facility;
- Waste Receipt and Distribution — Routing of waste within the facility upon its acceptance;
- Evaluation of Waste before Shipment — Description of procedures utilized to characterize different wastes prior to shipment to off-site facilities.
- Container Storage Unit — Description of the container storage area and its use;
- Consolidation of Wastes — Discussion of methods used to reduce the number of containers processed.
- Stabilization of Wastes — Discussion of solidification and chemical stabilization (chemical fixation) of wastes; and
- Storage of Non-Hazardous Wastes

**Waste Evaluation:** These procedures begin with the waste approval process found in the Waste Analysis Plan, which contains methods employed to evaluate waste streams. Results from this evaluation determine whether to grant or deny approval to ship the waste stream to the Triumvirate Environmental Inc. facility. The process consists of obtaining a completed waste profile form from the generator that describes the type and composition of the waste, as well as its physical and chemical characteristics. The form also states the environmental and transportation regulatory status for the waste based on the source, composition, and characteristics of the waste. The waste approval process describes the rationale used to review profiles and supporting documents that may accompany the profile form. Guidance describing circumstances under which supporting documents must be submitted is provided in the Waste Analysis Plan. Waste codes and types that are permitted and prohibited at the facility are described in the Waste Analysis Plan.

An important part of the waste evaluation process is the assignment of a process code every waste stream approved for shipment to the facility. The Profile contains a process code to determine how the facility will handle the waste on the inbound side and a process code is selected for the waste on the outbound side. Before a waste is shipped to Triumvirate Environmental Inc. it is assigned an inbound process code which will determine how it will be handled at the facility. The profile is reviewed by knowledge person(s) who assign the process code at Triumvirate Environmental Inc. This is conducted with the help of Safety Data Sheets (SDSs), chemical dictionaries, and methods established to determine waste compatibility. Besides preventing incompatible wastes from being commingled, the process code also indicates whether the waste coming to the facility is to be consolidated with other wastes, or stored at a specific location while waiting to be shipped to an off-site facility. Lab pack drums are not assigned a consolidation code; however, every item contained inside a lab pack drum is assigned one. Specific procedures for evaluation of lab packs are provided in the Waste Analysis Plan.

Modifications made to the profile as a result of the evaluation process, and decisions made with respect to granting or denying an approval to a waste stream are recorded and maintained in the profile review form, which shows the process code and the outbound process code. The process code is used to identify the outbound waste stream in which the waste will be placed after being consolidated, treated, or designated for transfer to an off-site facility.

**Inspection and Testing of Incoming Wastes:** Procedures for inspection and testing of incoming wastes are described in Section II.A.5/6, Waste Analysis Plan. These procedures describe the methods used to ensure that the waste received conforms to relevant characteristics stated in the waste profile form provided by the generator. Those characteristics ensure that the waste is compatible with other wastes. Compatibility is verified by a test consisting of mixing the waste in question with wastes contained in containers into which the waste is planned to be transferred. Failure of a waste to pass a

compatibility test may be evidence that the waste in question does not conform to the specifications stated in the profile, or the failure may occur from testing errors, such as inadvertently mixing incompatible materials. The steps taken in the compatibility test will be verified before assuming that the waste in question does not conform to the specification in the profile.

Inspection and testing procedures for incoming wastes are dependent on process code to be used on the waste. Results from the inspection and testing of waste are entered an electronic data base. Inspection and testing of wastes generally takes place before the wastes are transferred to the container storage cells. The waste verification process also describes procedures for management of incoming wastes that do not conform to information provided in the waste evaluation documents.

**Waste Receipt and Distribution:** Van trailers (trailers) transporting waste containers to the facility park next to the loading dock, with their rear doors facing the dock side.

Containers arriving at Triumvirate Environmental Inc. may bring "permitted waste" or "transfer facility waste." Permitted waste arrives on a manifest showing Triumvirate Environmental Inc. as the designated facility; whereas, for transfer facility waste, Triumvirate Environmental Inc. is not shown as the designated facility. Transfer facility waste arriving at Triumvirate Environmental Inc. is in route to other TSD facilities. Most of that waste remains in the same trailer in which it arrived or it is transferred to another trailer. The outbound shipment is made within 10 days of arrival at the facility. Under certain situations (such as no additional trailer is available or no parking space is available at the loading/unloading dock), the transfer facility waste containers from a shipment may be stored temporarily in the container storage unit and then loaded into an outbound trailer. The outbound trailer in such case must leave Triumvirate Environmental Inc. within 10 days of receipt of the transfer facility waste.

Containers holding transfer facility waste can be distinguished from those holding permitted waste because all waste that is permitted or terminated at Triumvirate Environmental Inc. receives a bar-code label. Transfer waste does not receive a barcode label. The barcode label shows the drum identification number and the drum receipt date. In addition, manifests listing transfer facility waste in storage at the unit are maintained at the facility. Procedures for compliance with regulatory requirements and for management of transfer facility waste are documented in section II.A.7 - "Recordkeeping & Reporting."

The procedures used to inspect inbound waste shipments are found in Recordkeeping & Reporting. Containers holding permitted waste are unloaded from incoming trailers and placed on the loading dock or in the staging areas located inside the container storage unit with the hazardous waste label easily visible. Containers in a shipment may hold one or several waste streams, and each waste stream may contain one or several drums. The facility tracks all inbound waste through an electronic system that details each

manifest and barcodes all waste that is terminated at the facility. All containers that are accepted at the facility receive a unique barcode and label which will identify how the drum will be handled by the process code. Any container that is being transferred will be counted and tracked in the electronic system through the transfer station function. All transfer waste is inspected, counted, and placed into an electronic transfer station which monitors the waste that is onsite.

All waste accepted at the facility are assigned process codes and they have DOT hazard classes. DOT hazard classes are used for the segregation of the material and process codes determine how the waste will be handled, including, if it will be re-packaged, consolidated, or treated. Details of this process are located in the Waste Analysis Plan.

**Evaluation of Waste Before Shipment:** The last part of the Waste Analysis Plan pertaining to classification of wastes deals with evaluation of the waste before it is shipped to an off-site facility. These procedures are found under the title of "Evaluation of Wastes for Shipment," of the Waste Analysis Plan (Section II.A.5/6). The procedures require evaluation of the hazardous waste codes, the land disposal restriction notification requirements, and DOT description for consolidated waste and stabilized waste. Waste in transfer that does not receive any type of management at the facility except storage is not discussed. The same regulatory status shown in shipping documents and container markings for the inbound load may also be used for shipping the "storage only" waste out. Consolidated waste is assigned the same codes that belonged to waste put into the consolidated containers. The DOT description is a generic proper shipping name that best describes the mixture, which may be determined by inspecting the DOT descriptions that belong to individual waste streams comprising the mixture.

**Container Storage Unit:** The existing permitted unit consists of a rectangular area where several storage cells have been built. Every cell has been provided with a separate secondary containment designed to store compatible waste and isolate it from incompatible waste that may be stored in contiguous cells. The secondary containment structures consist of curbs, roll-over berms, and the walls of the warehouse building where the unit is located. A curb runs inside along the building's perimeter wall that is made of sheet steel. A synthetic coating material resistant to solvents and corrosives has been applied to the floor surface to protect it from the attack of aggressive chemicals and from the wear of equipment that rolls over the area. The dimensions of the secondary containment systems are such that they are capable of containing spills the size of at least 10% of the maximum storage capacity of the cells. A detailed description of dimensions, construction, and capacity of the secondary containment systems is provided by "Secondary Containment" (Section II.B.1).

Storage of ignitable hazardous waste at the facility is at least 50 feet from the nearest property boundary. Ignitable and Incompatibles (Section II.B.2.) discusses requirements that apply to ignitable, reactive, and incompatible waste.

Triumvirate Environmental Inc., manages a large variety of waste types at the unit, several of which may be incompatible with other waste stored in the unit. Therefore, a system to prevent the storage of incompatible wastes in the same cell has been developed and described in "Segregation & Separation" (Section II.B.3.). The system segregates and separates containers holding incompatible waste with the use of a method that the U.S. Department of Transportation requires for the transportation of hazardous materials. Since hazardous wastes are also hazardous materials, the same requirements apply during transportation. This method has been selected because it is easy to understand, implement, and communicate, and because it does not require other waste evaluation activities in addition to the ones already in place.

The method is based on the DOT Hazard Class (or division) that is a component of the DOT description. The DOT description is reviewed during the waste evaluation process conducted on every waste stream before it is approved for management at the Triumvirate Environmental facility. The determination of compatible hazard classes is made with the use of the table found in the DOT regulations. A sign showing the hazard classes applicable to the wastes stored in the cell is posted for each cell.

Once the waste has been inspected and tested, the operator locates the cell where the container is to be stored by means of the hazard class or the consolidation code shown on the hazardous waste label. When wastes of the same hazard class would be incompatible consolidation codes replace the hazard class as the communication media used to identify the storage cell. These codes are used on wastes made of ingredients having different characteristics, for which the hazard class assigned may not be indicative of all the hazards posed by the resulting mixture. In this case, the compatibility of the waste is determined by using other established compatibility methods whose results may differ from the compatibility group indicated by the hazard class. The consolidation code or the hazard class, whichever provides the safest condition, is selected to identify the storage location. Operators store the waste in accordance with the consolidation code whenever one of those types is displayed on the label; otherwise the hazard class is used.

The last two sections of the container subpart are "Management of Containers" (Section II.B.4) and "Inspection Procedures" (Section II.B.5). "Management of Containers" describes the procedures the facility uses to inspect the integrity of the containers, the manner of placement in the cells and handling during storage, and the system utilized to manage rejected waste drums while stored in the unit. The inspection procedures describe the methods used to inspect drums, structures, and equipment inside the unit.

**Consolidation of Wastes:** The hazardous waste regulations do not consider consolidation a treatment operation; therefore, there is not a section in the permit application questionnaire and instruction booklet that addresses such operations. Since compatibility of wastes during consolidation is a major concern, "Segregation & Separation" (Section II.B.3) includes discussion of this operation.

Triumvirate Environmental, Inc. is authorized to consolidate compatible hazardous wastes stored in containers, that are equal to or greater than one gallon, into larger containers. Hazardous waste which can be disposed of together at an approved hazardous waste facility will only be consolidated together. Only hazardous waste that has passed the acceptance procedures described in the Waste Compatibility Test Manual will be consolidated. Triumvirate Environmental, Inc will not consolidate acids, inhalation hazards, or oxidizers. Flammable material which is intended for fuel blending or incineration may be consolidated contingent upon NFPA upgrades. The Waste Compatibility Test Manual, attachment II.A.5/6-1, will determine compatibility in determining which waste streams will be intended for consolidation. Consolidations will take place in the lower warehouse, identified in Figure II.A.5.

Subsection 14.0, Compatibility Test Methods, of the Waste Analysis Plan (Section II.A.5/6) addresses compatibility concerns posed by operations of consolidation in transport containers, lab pack containers, and drums/totes.

**Stabilization (Solidification and Stabilization):**

Triumvirate Environmental, Inc will stabilize metal bearing wastes (D004-D008, D010-D011) with stabilizing agents, such as fly ash or cement. Examples of such waste streams are contaminated soil with RCRA metals. Stabilization will occur in cubic yard boxes or roll-off containers. The equipment required to stabilize the waste will be a small track hoe. Any waste to be stabilized will be tested to ensure that it meets LDR standards with exception the RCRA metals (D004-D008, D010-D011) prior to stabilization. Treatment will only be done to treat RCRA metals. After stabilization all batches will be tested to verify that the concentrations of RCRA metals are below regulatory guidelines for the determination of hazardous waste characteristics for metals (D004-D008, D010-D011) Wastes will be stabilized inside the lower warehouse, shown in Figure II.A.5.

By properly mixing the correct ratios of reagents, liquids, and solids, a chemical interaction will occur to bind the metal contaminant, therefore preventing the leaching of regulated constituents. The resulting treatment residue will be a solid material. Sampling and testing is then performed to determine the effectiveness of the treatment process. In the event the material does not meet the Treatment Standards, additional treatment will be required, or it will be shipped off-site as a hazardous waste.

In the solid waste permit Triumvirate Environmental Inc., is authorized to solidify waste water, antifreeze, latex paint, and resin.

**Storage of Non-hazardous Wastes:** Triumvirate Environmental Inc., may store non-regulated (i.e., non-hazardous) wastes in the permitted units. In such a case, Triumvirate Environmental Inc., will not exceed the permitted capacity of the unit after counting the non-hazardous waste quantity in such permitted units. Non-hazardous wastes include

used oil, anti-freeze, latex paint, and oil filters. Non-hazardous may also be placed inside a roll-off box. Liquid non-hazardous waste, including waste water, latex paint, and resin, may be solidified.

**TABLE I.D.3**

**WASTE TABLE FOR TRIUMVIRATE ENVIRONMENTAL INC OF ORLANDO**

| Process Code | Process Design Capacity | Waste Description | Hazardous Waste Code | Annual Quantity (gallons) |
|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | Ignitable Liquid | D001 | 500,000 |
| S01 | gallons (G) or liters (L) | Corrosive | D002 | 500,000 |
| S01 | gallons (G) or liters (L) | Reactive Liquids & Solids | D003 | 5,000 |
| S01, T21 | gallons (G) or liters (L); gallons per day (U) or liters per day (V) | Arsenic | D004 | 200,000 |
| S01, T21 | gallons (G) or liters (L); gallons per day (U) or liters per day (V) | Barium | D005 | 5,000 |
| S01, T21 | gallons (G) or liters (L); gallons per day (U) or liters per day (V) | Cadmium | D006 | 200,000 |
| S01, T21 | gallons (G) or liters (L); gallons per day (U) or liters per day (V) | Chromium | D007 | 200,000 |
| S01, T21 | gallons (G) or liters (L); gallons per day (U) or liters per day (V) | Lead | D008 | 200,000 |
| S01, T21 | gallons (G) or liters (L); gallons per day (U) or liters per day (V) | Mercury | D009 | 5,000 |
| S01, T21 | gallons (G) or liters (L); gallons per day (U) or liters per day (V) | Selenium | D010 | 5,000 |
| S01, T21 | gallons (G) or liters (L); gallons per day (U) or liters per day (V) | Silver | D011 | 50,000 |
| S01 | gallons (G) or liters (L) | Endrin | D012 | 5,000 |

| | | | | |
|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | Lindane | D013 | 5,000 |
| S01 | gallons (G) or liters (L) | Methoxychlor | D014 | 5,000 |
| S01 | gallons (G) or liters (L) | Toxaphene | D015 | 5,000 |
| S01 | gallons (G) or liters (L) | 2,4-D | D016 | 5,000 |
| S01 | gallons (G) or liters (L) | 2,4,5-TP (Silvex) | D017 | 5,000 |
| S01 | gallons (G) or liters (L) | Benzene | D018 | 20,000 |
| S01 | gallons (G) or liters (L) | Carbon Tetrachloride | D019 | 200,000 |
| S01 | gallons (G) or liters (L) | Chlordane | D020 | 5,000 |
| S01 | gallons (G) or liters (L) | Chlorobenzene | D021 | 50,000 |
| S01 | gallons (G) or liters (L) | Chloroform | D022 | 50,000 |
| S01 | gallons (G) or liters (L) | o-Cresol | D023 | 5,000 |
| S01 | gallons (G) or liters (L) | M-Cresol | D024 | 5,000 |
| S01 | gallons (G) or liters (L) | P-Cresol | D025 | 5,000 |
| S01 | gallons (G) or liters (L) | Cresol | D026 | 5,000 |
| S01 | gallons (G) or liters (L) | 1,4-Dichlorobenzene | D027 | 5,000 |
| S01 | gallons (G) or liters (L) | 1,2-Dichloroethane | D028 | 5,000 |
| S01 | gallons (G) or liters (L) | 1,1-Dichloroethylene | D029 | 5,000 |
| S01 | gallons (G) or liters (L) | 2,4-Dinitrotoluene | D030 | 5,000 |
| S01 | gallons (G) or liters (L) | Heptachlor | D031 | 5,000 |
| S01 | gallons (G) or liters (L) | Hexachlorobenzene | D032 | 5,000 |
| S01 | gallons (G) or liters (L) | Hexachlorobutadiene | D033 | 5,000 |
| S01 | gallons (G) or liters (L) | Hexachloroethane | D034 | 5,000 |
| S01 | gallons (G) or liters (L) | Methyl Ethyl Ketone | D035 | 50,000 |
| S01 | gallons (G) or liters (L) | Nitrobenzene | D036 | 5,000 |
| S01 | gallons (G) or liters (L) | Pentachlorophenol | D037 | 5,000 |
| S01 | gallons (G) or liters (L) | Pyridine | D038 | 5,000 |
| S01 | gallons (G) or liters (L) | Tetrachloroethylene | D039 | 50,000 |
| S01 | gallons (G) or liters (L) | Trichloroethylene | D040 | 50,000 |
| S01 | gallons (G) or liters (L) | 2,4,5-Trichlorophenol | D041 | 5,000 |
| S01 | gallons (G) or liters (L) | 2,4,6-Trichlorophenol | D042 | 5,000 |
| S01 | gallons (G) or liters (L) | Vinyl Chloride | D043 | 5,000 |
| S01 | gallons (G) or liters (L) | Spent Halogenated Solvents | F001 | 100,000 |
| S01 | gallons (G) or liters (L) | Spent Halogenated Solvents | F002 | 100,000 |
| S01 | gallons (G) or liters (L) | Spent Non-Halogenated Solvents | F003 | 500,000 |
| S01 | gallons (G) or liters (L) | Spent Non-Halogenated Solvents | F004 | 5,000 |
| S01 | gallons (G) or liters (L) | Spent Non-Halogenated Solvents | F005 | 500,000 |

| | | | | |
|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | Electroplating Sludges | F006 | 200,000 |
| S01 | gallons (G) or liters (L) | Spent Cyanide Plating Solutions | F007 | 50,000 |
| S01 | gallons (G) or liters (L) | Plating Bath Residues | F008 | 50,000 |
| S01 | gallons (G) or liters (L) | Spent Stripping Solutions | F009 | 50,000 |
| S01 | gallons (G) or liters (L) | Quenching Bath Residues | F010 | 50,000 |
| S01 | gallons (G) or liters (L) | Spent Cyanide Solutions | F011 | 50,000 |
| S01 | gallons (G) or liters (L) | Quench Wastewater Sludge | F012 | 50,000 |
| S01 | gallons (G) or liters (L) | Wastewater Treatment Sludge | F019 | 100,000 |
| S01 | gallons (G) or liters (L) | Discarded Unused Formulations of Chlorophenols | F027 | 5,000 |
| S01 | gallons (G) or liters (L) | Chlorophenolic Residuals | F032 | 500 |
| S01 | gallons (G) or liters (L) | Creosote Residuals | F034 | 500 |
| S01 | gallons (G) or liters (L) | Arsenic/Chromium Residuals | F035 | 500 |
| S01 | gallons (G) or liters (L) | Petroleum Refinery Primary Sludge | F037 | 500 |
| S01 | gallons (G) or liters (L) | Petroleum Refinery Secondary Sludge | F038 | 500 |
| S01 | gallons (G) or liters (L) | Leachate From Wastes | F039 | 500 |
| S01 | gallons (G) or liters (L) | Bottom Sediment Sludge | K001 | 500 |
| S01 | gallons (G) or liters (L) | Dissolved Air Float | K048 | 500 |
| S01 | gallons (G) or liters (L) | Slop Oil Emulsion Solids | K049 | 500 |
| S01 | gallons (G) or liters (L) | Heat Exchanger Sludge | K050 | 500 |
| S01 | gallons (G) or liters (L) | API Separator Sludge | K051 | 500 |
| S01 | gallons (G) or liters (L) | Petroleum Tank Bottoms | K052 | 500 |
| S01 | gallons (G) or liters (L) | Emission Control Dust/Sludge | K061 | 500 |
| S01 | gallons (G) or liters (L) | Spent Pickle Liquor | K062 | 500 |
| S01 | gallons (G) or liters (L) | Solvent Washes & Sludge | K086 | 5,000 |
| S01 | gallons (G) or liters (L) | Organic Wastes | K156 | 500 |
| S01 | gallons (G) or liters (L) | Wastewaters | K157 | 500 |
| S01 | gallons (G) or liters (L) | Baghouse Dusts & Filter Separator Solids | K158 | 500 |
| S01 | gallons (G) or liters (L) | Organics From Treatment of Thiocarbamate Wastes | K159 | 500 |
| S01 | gallons (G) or liters (L) | Purification Solids | K161 | 500 |
| S01 | gallons (G) or liters (L) | Warfarin & Salts when >0.3% | P001 | 500 |
| S01 | gallons (G) or liters (L) | Acetamide, N-(Aminothioxomethyl) | P002 | 500 |
| S01 | gallons (G) or liters (L) | Acrolein | P003 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | Aldrin | P004 | 500 |
| S01 | gallons (G) or liters (L) | Allyl Alcohol | P005 | 500 |
| S01 | gallons (G) or liters (L) | Aluminum Phosphide | P006 | 500 |
| S01 | gallons (G) or liters (L) | 5-(Aminomethyl)-3-Isoxazolol | P007 | 500 |
| S01 | gallons (G) or liters (L) | 4-aminopyridine | P008 | 500 |
| S01 | gallons (G) or liters (L) | Arsenic Acid ($H_3AsO_4$) | P010 | 500 |
| S01 | gallons (G) or liters (L) | Arsenic Oxide ($As_2O_5$) | P011 | 500 |
| S01 | gallons (G) or liters (L) | Arsenic Oxide ($As_2O_3$) | P012 | 500 |
| S01 | gallons (G) or liters (L) | Barium Cyanide | P013 | 500 |
| S01 | gallons (G) or liters (L) | Benzenethiol | P014 | 500 |
| S01 | gallons (G) or liters (L) | Beryllium | P015 | 500 |
| S01 | gallons (G) or liters (L) | Dichloromethylether | P016 | 500 |
| S01 | gallons (G) or liters (L) | Bromoacetone | P017 | 500 |
| S01 | gallons (G) or liters (L) | Brucine | P018 | 500 |
| S01 | gallons (G) or liters (L) | Dinoseb | P020 | 500 |
| S01 | gallons (G) or liters (L) | Calcium Cyanide | P021 | 500 |
| S01 | gallons (G) or liters (L) | Carbon Disulfide | P022 | 500 |
| S01 | gallons (G) or liters (L) | Acetaldehyde, Chloro- | P023 | 500 |
| S01 | gallons (G) or liters (L) | Benzenamine, 4-Chloro- | P024 | 500 |
| S01 | gallons (G) or liters (L) | 1-(o-Chlorophenyl)thiourea | P026 | 500 |
| S01 | gallons (G) or liters (L) | 3-Chloropropionitrile | P027 | 500 |
| S01 | gallons (G) or liters (L) | Benzene, Chloromethyl | P028 | 500 |
| S01 | gallons (G) or liters (L) | Copper Cyanide | P029 | 500 |
| S01 | gallons (G) or liters (L) | cyanides | P030 | 500 |
| S01 | gallons (G) or liters (L) | 2-Cyclohexyl-4,6-dinitrophenol | P034 | 500 |
| S01 | gallons (G) or liters (L) | Arsonous Dichloride, Phenyl | P036 | 500 |
| S01 | gallons (G) or liters (L) | Dieldrin | P037 | 500 |
| S01 | gallons (G) or liters (L) | Arsine, Diethyl- | P038 | 500 |
| S01 | gallons (G) or liters (L) | Disulfoton | P039 | 500 |
| S01 | gallons (G) or liters (L) | O,O-Diethyl O-pyrazinyl Phosphorothioate | P040 | 500 |
| S01 | gallons (G) or liters (L) | Diethyl-p-nitrophenyl Phosphate | P041 | 500 |
| S01 | gallons (G) or liters (L) | Epinephrine | P042 | 500 |
| S01 | gallons (G) or liters (L) | Diisopropylfluorophosphate | P043 | 500 |
| S01 | gallons (G) or liters (L) | Dimethoate | P044 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | Thiofanox | P045 | 500 |
| S01 | gallons (G) or liters (L) | Benzeneethanamine, alpha, alpha-dimethyl- | P046 | 500 |
| S01 | gallons (G) or liters (L) | 4,6-Dinitro-o-cresol & Salts | P047 | 500 |
| S01 | gallons (G) or liters (L) | 2,4-Dinitrophenol | P048 | 500 |
| S01 | gallons (G) or liters (L) | Dithiobiuret | P049 | 500 |
| S01 | gallons (G) or liters (L) | Endosulfan | P050 | 500 |
| S01 | gallons (G) or liters (L) | Endrin | P051 | 500 |
| S01 | gallons (G) or liters (L) | Aziridine | P054 | 500 |
| S01 | gallons (G) or liters (L) | Acetamide, 2-Fluoro- | P057 | 500 |
| S01 | gallons (G) or liters (L) | Acetic Acid, Fluoro-, Sodium Salt | P058 | 500 |
| S01 | gallons (G) or liters (L) | Heptachlor | P059 | 500 |
| S01 | gallons (G) or liters (L) | Isodrin | P060 | 500 |
| S01 | gallons (G) or liters (L) | Hexaethyl Tetraphosphate | P062 | 500 |
| S01 | gallons (G) or liters (L) | Hydrogen Cyanide | P063 | 500 |
| S01 | gallons (G) or liters (L) | Methyl isocyanate | P064 | 500 |
| S01 | gallons (G) or liters (L) | Methomyl | P066 | 500 |
| S01 | gallons (G) or liters (L) | Aziridine, 2-methyl | P067 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Hydrazine | P068 | 500 |
| S01 | gallons (G) or liters (L) | 2-Methyllactonitrile | P069 | 500 |
| S01 | gallons (G) or liters (L) | Aldicarb Sulfone | P070 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Parathion | P071 | 500 |
| S01 | gallons (G) or liters (L) | alpha-Naphthylthiourea | P072 | 500 |
| S01 | gallons (G) or liters (L) | Nickel Carbonyl | P073 | 500 |
| S01 | gallons (G) or liters (L) | Nickel Cyanide | P074 | 500 |
| S01 | gallons (G) or liters (L) | Nicotine & Salts | P075 | 500 |
| S01 | gallons (G) or liters (L) | Benzenamine, 4-Nitro- | P077 | 500 |
| S01 | gallons (G) or liters (L) | Nitroglycerin | P081 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitrosodimethylamine | P082 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitrosomethylvinylamine | P084 | 500 |
| S01 | gallons (G) or liters (L) | Octamethylpyrophosphoramide | P085 | 500 |
| S01 | gallons (G) or liters (L) | Osmium Tetroxide | P087 | 500 |
| S01 | gallons (G) or liters (L) | Endothall | P088 | 500 |
| S01 | gallons (G) or liters (L) | Parathion | P089 | 500 |
| S01 | gallons (G) or liters (L) | Phenylmercury Acetate | P092 | 500 |
| S01 | gallons (G) or liters (L) | Phenylthiourea | P093 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | Phorate | P094 | 500 |
| S01 | gallons (G) or liters (L) | Famphur | P097 | 500 |
| S01 | gallons (G) or liters (L) | Potassium Cyanide | P098 | 500 |
| S01 | gallons (G) or liters (L) | Argentate(1-), bis (Cyano-C)-, Potassium | P099 | 500 |
| S01 | gallons (G) or liters (L) | Ethyl Cyanide | P101 | 500 |
| S01 | gallons (G) or liters (L) | Propargyl Alcohol | P102 | 500 |
| S01 | gallons (G) or liters (L) | Selenourea | P103 | 500 |
| S01 | gallons (G) or liters (L) | Silver Cyanide | P104 | 500 |
| S01 | gallons (G) or liters (L) | Sodium Azide | P105 | 500 |
| S01 | gallons (G) or liters (L) | Sodium Cyanide | P106 | 500 |
| S01 | gallons (G) or liters (L) | Strychnine & Salts | P108 | 500 |
| S01 | gallons (G) or liters (L) | Tetraethyldithiopyrophosphate | P109 | 500 |
| S01 | gallons (G) or liters (L) | Tetraethyl Lead | P110 | 500 |
| S01 | gallons (G) or liters (L) | Tetraethyl Pyrophosphate | P111 | 500 |
| S01 | gallons (G) or liters (L) | Thallic Oxide | P113 | 500 |
| S01 | gallons (G) or liters (L) | Selenious Acid, dithallium (1+) Salt | P114 | 500 |
| S01 | gallons (G) or liters (L) | Plumbane, Tetraethyl | P115 | 500 |
| S01 | gallons (G) or liters (L) | Thiosemicarbazide | P116 | 500 |
| S01 | gallons (G) or liters (L) | Trichloromethanethiol | P118 | 500 |
| S01 | gallons (G) or liters (L) | Ammonium Vanadate | P119 | 500 |
| S01 | gallons (G) or liters (L) | Vanadium Pentoxide | P120 | 500 |
| S01 | gallons (G) or liters (L) | Zinc Cyanide | P121 | 500 |
| S01 | gallons (G) or liters (L) | Zinc Phosphide | P122 | 500 |
| S01 | gallons (G) or liters (L) | Toxaphene | P123 | 500 |
| S01 | gallons (G) or liters (L) | Carbofuran | P127 | 500 |
| S01 | gallons (G) or liters (L) | Mexacarbate | P128 | 500 |
| S01 | gallons (G) or liters (L) | Tirpate | P185 | 500 |
| S01 | gallons (G) or liters (L) | Physostigmine Salicylate | P188 | 500 |
| S01 | gallons (G) or liters (L) | Carbosulan | P189 | 500 |
| S01 | gallons (G) or liters (L) | Metolcarb | P190 | 500 |
| S01 | gallons (G) or liters (L) | Dimetilan | P191 | 500 |
| S01 | gallons (G) or liters (L) | Isolan | P192 | 500 |
| S01 | gallons (G) or liters (L) | Oxamyl | P194 | 500 |
| S01 | gallons (G) or liters (L) | Manganese Dimethyldithiocarbamate | P196 | 500 |
| S01 | gallons (G) or liters (L) | Formparanate | P197 | 500 |

| | | | | |
|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | Formetanate Hydrochloride | P198 | 500 |
| S01 | gallons (G) or liters (L) | Methiocarb | P199 | 500 |
| S01 | gallons (G) or liters (L) | Promecarb | P201 | 500 |
| S01 | gallons (G) or liters (L) | m-Cumenyl Methylcarbamate | P202 | 500 |
| S01 | gallons (G) or liters (L) | Aldicarb Sulfone | P203 | 500 |
| S01 | gallons (G) or liters (L) | Physostigmine | P204 | 500 |
| S01 | gallons (G) or liters (L) | Ziram | P205 | 500 |
| S01 | gallons (G) or liters (L) | Acetaldehyde | U001 | 500 |
| S01 | gallons (G) or liters (L) | Acetone | U002 | 500 |
| S01 | gallons (G) or liters (L) | Acetonitrile | U003 | 500 |
| S01 | gallons (G) or liters (L) | Acetophenone | U004 | 500 |
| S01 | gallons (G) or liters (L) | 2-Acetylaminofluorene | U005 | 500 |
| S01 | gallons (G) or liters (L) | Acetyl Chloride | U006 | 500 |
| S01 | gallons (G) or liters (L) | Acrylamide | U007 | 500 |
| S01 | gallons (G) or liters (L) | Acrylic Acid | U008 | 500 |
| S01 | gallons (G) or liters (L) | Acrylonitrile | U009 | 500 |
| S01 | gallons (G) or liters (L) | Mitomycin C | U010 | 500 |
| S01 | gallons (G) or liters (L) | Amitrole | U011 | 500 |
| S01 | gallons (G) or liters (L) | Aniline | U012 | 500 |
| S01 | gallons (G) or liters (L) | Auramine | U014 | 500 |
| S01 | gallons (G) or liters (L) | Azaserine | U015 | 500 |
| S01 | gallons (G) or liters (L) | Benz(c)acridine | U016 | 500 |
| S01 | gallons (G) or liters (L) | Benzal Chloride | U017 | 500 |
| S01 | gallons (G) or liters (L) | Benz(a)anthracene | U018 | 500 |
| S01 | gallons (G) or liters (L) | Benzene | U019 | 500 |
| S01 | gallons (G) or liters (L) | Benzenesulfonyl Chloride | U020 | 500 |
| S01 | gallons (G) or liters (L) | Benzidine | U021 | 500 |
| S01 | gallons (G) or liters (L) | Benzo(a)pyrene | U022 | 500 |
| S01 | gallons (G) or liters (L) | Benzotrichloride | U023 | 500 |
| S01 | gallons (G) or liters (L) | Dichloromethoxy Ethane | U024 | 500 |
| S01 | gallons (G) or liters (L) | Dichloroethyl Ether | U025 | 500 |
| S01 | gallons (G) or liters (L) | Chlornaphazine | U026 | 500 |
| S01 | gallons (G) or liters (L) | Dichloroisopropyl Ether | U027 | 500 |
| S01 | gallons (G) or liters (L) | Diethylhexyl Phthalate | U028 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Bromide | U029 | 500 |
| S01 | gallons (G) or liters (L) | 4-Bromophenyl Pheny Ether | U030 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | n-Butyl Alcohol | U031 | 500 |
| S01 | gallons (G) or liters (L) | Calcium Chromate | U032 | 500 |
| S01 | gallons (G) or liters (L) | Chloral | U034 | 500 |
| S01 | gallons (G) or liters (L) | Chlorambucil | U035 | 500 |
| S01 | gallons (G) or liters (L) | Chlordane, alpha & gamma isomers | U036 | 500 |
| S01 | gallons (G) or liters (L) | Chlorobenzene | U037 | 500 |
| S01 | gallons (G) or liters (L) | Chlorobenzilate | U038 | 500 |
| S01 | gallons (G) or liters (L) | p-Chloro-m-cresol | U039 | 500 |
| S01 | gallons (G) or liters (L) | Epichlorohydrin | U041 | 500 |
| S01 | gallons (G) or liters (L) | 2-Chloroethyl Vinyl Ether | U042 | 500 |
| S01 | gallons (G) or liters (L) | Vinyl Chloride | U043 | 500 |
| S01 | gallons (G) or liters (L) | Chloroform | U044 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Chloride (I,T) | U045 | 500 |
| S01 | gallons (G) or liters (L) | Chloromethyl Methyl Ether | U046 | 500 |
| S01 | gallons (G) or liters (L) | beta-chloronaphthalene | U047 | 500 |
| S01 | gallons (G) or liters (L) | o-Chlorophenol | U048 | 500 |
| S01 | gallons (G) or liters (L) | 4-Chloro-o-toluidine, hydrochloride | U049 | 500 |
| S01 | gallons (G) or liters (L) | Chrysene | U050 | 500 |
| S01 | gallons (G) or liters (L) | Creosote | U051 | 500 |
| S01 | gallons (G) or liters (L) | Cresol | U052 | 500 |
| S01 | gallons (G) or liters (L) | Crotonaldehyde | U053 | 500 |
| S01 | gallons (G) or liters (L) | Cumene (I) | U055 | 500 |
| S01 | gallons (G) or liters (L) | Cyclohexane | U056 | 500 |
| S01 | gallons (G) or liters (L) | Cyclohexanone (I) | U057 | 500 |
| S01 | gallons (G) or liters (L) | Cyclophosphamide | U058 | 500 |
| S01 | gallons (G) or liters (L) | Daunomycin | U059 | 500 |
| S01 | gallons (G) or liters (L) | DDD | U060 | 500 |
| S01 | gallons (G) or liters (L) | DDT | U061 | 500 |
| S01 | gallons (G) or liters (L) | Diallate | U062 | 500 |
| S01 | gallons (G) or liters (L) | Dibenz(a,h)anthracene | U063 | 500 |
| S01 | gallons (G) or liters (L) | Dibenzo(a,i)pyrene | U064 | 500 |
| S01 | gallons (G) or liters (L) | 1,2-Dibromo-3-chloropropane | U066 | 500 |
| S01 | gallons (G) or liters (L) | Ethane, 1,2-dibromo- | U067 | 500 |
| S01 | gallons (G) or liters (L) | Methylene Bromide | U068 | 500 |
| S01 | gallons (G) or liters (L) | Dibutyl phthalate | U069 | 500 |
| S01 | gallons (G) or liters (L) | o-Dichlorobenzene | U070 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | m-Dichlorobenzene | U071 | 500 |
| S01 | gallons (G) or liters (L) | p-Dichlorobenzene | U072 | 500 |
| S01 | gallons (G) or liters (L) | 3,3'-Dichlorobenzidine | U073 | 500 |
| S01 | gallons (G) or liters (L) | 1,4-Dichloro-2-butene | U074 | 500 |
| S01 | gallons (G) or liters (L) | Dichloro Difluoro Methane | U075 | 500 |
| S01 | gallons (G) or liters (L) | Ethane, 1,1-dichloro- | U076 | 500 |
| S01 | gallons (G) or liters (L) | Ethane, 1,2-dichloro- | U077 | 500 |
| S01 | gallons (G) or liters (L) | 1,1-Dichloroethylene | U078 | 500 |
| S01 | gallons (G) or liters (L) | 1,2-Dichloroethylene | U079 | 500 |
| S01 | gallons (G) or liters (L) | Methylene Chloride | U080 | 25,000 |
| S01 | gallons (G) or liters (L) | 2,4-Dichlorophenol | U081 | 500 |
| S01 | gallons (G) or liters (L) | 2,6-Dichlorophenol | U082 | 500 |
| S01 | gallons (G) or liters (L) | Propylene Dichloride | U083 | 500 |
| S01 | gallons (G) or liters (L) | 1,3-Dichloropropene | U084 | 500 |
| S01 | gallons (G) or liters (L) | 1,2:3,4-Diepoxybutane | U085 | 500 |
| S01 | gallons (G) or liters (L) | N,N'-Diethylhydrazine | U086 | 500 |
| S01 | gallons (G) or liters (L) | O,O-Diethyl S-methyl Dithiophosphate | U087 | 500 |
| S01 | gallons (G) or liters (L) | Diethyl Phthalate | U088 | 500 |
| S01 | gallons (G) or liters (L) | Diethylstilbesterol | U089 | 500 |
| S01 | gallons (G) or liters (L) | Dihydrosafrole | U090 | 500 |
| S01 | gallons (G) or liters (L) | 3,3'-Dimethoxybenzidine | U091 | 500 |
| S01 | gallons (G) or liters (L) | Dimethylamine | U092 | 500 |
| S01 | gallons (G) or liters (L) | p-Dimethylaminoazobenzene | U093 | 500 |
| S01 | gallons (G) or liters (L) | 7,12-Dimethylbenz(a)anthracene | U094 | 500 |
| S01 | gallons (G) or liters (L) | 3,3'-Dimethylbenzidine | U095 | 500 |
| S01 | gallons (G) or liters (L) | Dimethylcarbamoyl Chloride | U097 | 500 |
| S01 | gallons (G) or liters (L) | 1,1-Dimethylhydrazine | U098 | 500 |
| S01 | gallons (G) or liters (L) | 1,2-Dimethylhydrazine | U099 | 500 |
| S01 | gallons (G) or liters (L) | 2,4-Dimethylphenol | U101 | 500 |
| S01 | gallons (G) or liters (L) | Dimethyl Phthalate | U102 | 500 |
| S01 | gallons (G) or liters (L) | Dimethyl Sulfate | U103 | 500 |
| S01 | gallons (G) or liters (L) | 2,4-Dinitrotoluene | U105 | 500 |
| S01 | gallons (G) or liters (L) | 2,6-Dinitrotoluene | U106 | 500 |
| S01 | gallons (G) or liters (L) | Di-n-Octyl Phthalate | U107 | 500 |
| S01 | gallons (G) or liters (L) | 1,4-Dioxane | U108 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | 1,2-Diphenylhydrazine | U109 | 500 |
| S01 | gallons (G) or liters (L) | Dypropylamine | U110 | 500 |
| S01 | gallons (G) or liters (L) | Di-n-propylnitrosoamine | U111 | 500 |
| S01 | gallons (G) or liters (L) | Ethyl Acetate | U112 | 500 |
| S01 | gallons (G) or liters (L) | Ethyl Acrylate | U113 | 500 |
| S01 | gallons (G) or liters (L) | Ethylenebisdithiocarbamic Acid, Salts & Esters | U114 | 500 |
| S01 | gallons (G) or liters (L) | Ethylene Oxide | U115 | 500 |
| S01 | gallons (G) or liters (L) | Ethylenethiourea | U116 | 500 |
| S01 | gallons (G) or liters (L) | Ethyl Ether | U117 | 500 |
| S01 | gallons (G) or liters (L) | Ethyl Methacrylate | U118 | 500 |
| S01 | gallons (G) or liters (L) | Ethyl Methanesulfonate | U119 | 500 |
| S01 | gallons (G) or liters (L) | Fluoranthene | U120 | 500 |
| S01 | gallons (G) or liters (L) | Trichloromonofluoromethane | U121 | 25,000 |
| S01 | gallons (G) or liters (L) | Formaldehyde | U122 | 500 |
| S01 | gallons (G) or liters (L) | Formic Acid | U123 | 500 |
| S01 | gallons (G) or liters (L) | Furan | U124 | 500 |
| S01 | gallons (G) or liters (L) | Furfural | U125 | 500 |
| S01 | gallons (G) or liters (L) | Glycidylaldehyde | U126 | 500 |
| S01 | gallons (G) or liters (L) | Hexachlorobenzene | U127 | 500 |
| S01 | gallons (G) or liters (L) | Hexachlorobutadiene | U128 | 500 |
| S01 | gallons (G) or liters (L) | Lindane | U129 | 500 |
| S01 | gallons (G) or liters (L) | Hexachlorocyclopentadiene | U130 | 500 |
| S01 | gallons (G) or liters (L) | Hexachloroethane | U131 | 500 |
| S01 | gallons (G) or liters (L) | Hexachlorophene | U132 | 500 |
| S01 | gallons (G) or liters (L) | Hydrazine | U133 | 500 |
| S01 | gallons (G) or liters (L) | Hydrofluoric Acid | U134 | 500 |
| S01 | gallons (G) or liters (L) | Hydrogen Sulfide | U135 | 500 |
| S01 | gallons (G) or liters (L) | Cacodylic Acid | U136 | 500 |
| S01 | gallons (G) or liters (L) | Indeno[1,2,3-cd]pyrene | U137 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Iodide | U138 | 500 |
| S01 | gallons (G) or liters (L) | Isobutyl Alcohol | U140 | 500 |
| S01 | gallons (G) or liters (L) | Isosafrole | U141 | 500 |
| S01 | gallons (G) or liters (L) | Kepone | U142 | 500 |
| S01 | gallons (G) or liters (L) | Lasiocarpine | U143 | 500 |
| S01 | gallons (G) or liters (L) | Lead Acetate | U144 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | Lead Phosphate | U145 | 500 |
| S01 | gallons (G) or liters (L) | Lead Subacetate | U146 | 500 |
| S01 | gallons (G) or liters (L) | Maleic Anhydride | U147 | 500 |
| S01 | gallons (G) or liters (L) | Maleic Hydrazide | U148 | 500 |
| S01 | gallons (G) or liters (L) | Malononitrile | U149 | 500 |
| S01 | gallons (G) or liters (L) | Melphalan | U150 | 500 |
| S01 | gallons (G) or liters (L) | Mercury | U151 | 500 |
| S01 | gallons (G) or liters (L) | Methacrylonitrile | U152 | 500 |
| S01 | gallons (G) or liters (L) | Methanethiol | U153 | 500 |
| S01 | gallons (G) or liters (L) | Methanol | U154 | 25,000 |
| S01 | gallons (G) or liters (L) | Methapyrilene | U155 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Chlorocarbonate | U156 | 500 |
| S01 | gallons (G) or liters (L) | 3-Methylcholanthrene | U157 | 500 |
| S01 | gallons (G) or liters (L) | 4,4'-Methylenebis(2-Chloroaniline) | U158 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Ethyl Ketone | U159 | 25,000 |
| S01 | gallons (G) or liters (L) | Methyl Ethyl Ketone Peroxide | U160 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Isobutyl Ketone | U161 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Methacrylate | U162 | 500 |
| S01 | gallons (G) or liters (L) | N-Methyl-N'-Nitro-N-Nitrosoguanidine | U163 | 500 |
| S01 | gallons (G) or liters (L) | Methylthiouracil | U164 | 500 |
| S01 | gallons (G) or liters (L) | Naphthalene | U165 | 500 |
| S01 | gallons (G) or liters (L) | 1,4-Naphthalenedione | U166 | 500 |
| S01 | gallons (G) or liters (L) | alpha-Naphthylamine | U167 | 500 |
| S01 | gallons (G) or liters (L) | beta-Naphthylamine | U168 | 500 |
| S01 | gallons (G) or liters (L) | Nitrobenzene | U169 | 500 |
| S01 | gallons (G) or liters (L) | p-Nitrophenol | U170 | 500 |
| S01 | gallons (G) or liters (L) | 2-Nitropropane | U171 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitrosodi-n-butylamine | U172 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitrosodiethanolamine | U173 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitrododiethylamine | U174 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitroso-N-ethylurea | U176 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitroso-N-methylurea | U177 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitroso-N-methylurethane | U178 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitrosopiperidine | U179 | 500 |
| S01 | gallons (G) or liters (L) | N-Nitrosopyrrolidine | U180 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | 5-Nitro-o-toluidine | U181 | 500 |
| S01 | gallons (G) or liters (L) | Paraldehyde | U182 | 500 |
| S01 | gallons (G) or liters (L) | Pentachlorobenzene | U183 | 500 |
| S01 | gallons (G) or liters (L) | Pentachloroethane | U184 | 500 |
| S01 | gallons (G) or liters (L) | Pentachloronitrobenzene | U185 | 500 |
| S01 | gallons (G) or liters (L) | 1,3-Pentadiene | U186 | 500 |
| S01 | gallons (G) or liters (L) | Phenacetin | U187 | 500 |
| S01 | gallons (G) or liters (L) | Phenol | U188 | 500 |
| S01 | gallons (G) or liters (L) | Phosphorus Sulfide | U189 | 500 |
| S01 | gallons (G) or liters (L) | Phthalic Anhydride | U190 | 500 |
| S01 | gallons (G) or liters (L) | 2-Picoline | U191 | 500 |
| S01 | gallons (G) or liters (L) | Pronamide | U192 | 500 |
| S01 | gallons (G) or liters (L) | 1,3-Propane Sultone | U193 | 500 |
| S01 | gallons (G) or liters (L) | n-Propylamine | U194 | 500 |
| S01 | gallons (G) or liters (L) | Pyridine | U196 | 500 |
| S01 | gallons (G) or liters (L) | p-Benzoquinone | U197 | 500 |
| S01 | gallons (G) or liters (L) | Reserpine | U200 | 500 |
| S01 | gallons (G) or liters (L) | Resorcinol | U201 | 500 |
| S01 | gallons (G) or liters (L) | Safrole | U203 | 500 |
| S01 | gallons (G) or liters (L) | Selenium Dioxide | U204 | 500 |
| S01 | gallons (G) or liters (L) | Selenium Sulfide | U205 | 500 |
| S01 | gallons (G) or liters (L) | Streptozotocin | U206 | 500 |
| S01 | gallons (G) or liters (L) | 1 ,2,4,5-Tetrachlorob enzene | U207 | 500 |
| S01 | gallons (G) or liters (L) | 1,1,1,2-Tetrachloroethane | U208 | 500 |
| S01 | gallons (G) or liters (L) | 1,1,2,2-Tetrachloroethane | U209 | 500 |
| S01 | gallons (G) or liters (L) | Tetrachloroethylene | U210 | 500 |
| S01 | gallons (G) or liters (L) | Carbon Tetrachloride | U211 | 5,000 |
| S01 | gallons (G) or liters (L) | Tetrahydrofuran | U213 | 500 |
| S01 | gallons (G) or liters (L) | Thallium (I) Acetate | U214 | 500 |
| S01 | gallons (G) or liters (L) | Thallium (I) Carbonate | U215 | 500 |
| S01 | gallons (G) or liters (L) | Thallium (I) Chloride | U216 | 500 |
| S01 | gallons (G) or liters (L) | Thallium (I) Nitrate | U217 | 500 |
| S01 | gallons (G) or liters (L) | Thioacetamide | U218 | 500 |
| S01 | gallons (G) or liters (L) | Thiourea | U219 | 500 |
| S01 | gallons (G) or liters (L) | Toluene | U220 | 25,000 |
| S01 | gallons (G) or liters (L) | Toluenediamine | U221 | 500 |

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|---|---|---|---|---|
| S01 | gallons (G) or liters (L) | o-Toluidine Hydrochloride | U222 | 500 |
| S01 | gallons (G) or liters (L) | Toluene Diisocyanate | U223 | 25,000 |
| S01 | gallons (G) or liters (L) | Bromoform | U225 | 500 |
| S01 | gallons (G) or liters (L) | Methyl Chloroform | U226 | 25,000 |
| S01 | gallons (G) or liters (L) | 1,1,2-Trichloroethane | U227 | 25,000 |
| S01 | gallons (G) or liters (L) | Trichloroethylene | U228 | 25,000 |
| S01 | gallons (G) or liters (L) | Tris(2,3-dibromopropyl)phosphate | U235 | 500 |
| S01 | gallons (G) or liters (L) | Trypan Blue | U236 | 500 |
| S01 | gallons (G) or liters (L) | Uracil Mustard | U237 | 500 |
| S01 | gallons (G) or liters (L) | Ethyl Carbamate (urethane) | U238 | 500 |
| S01 | gallons (G) or liters (L) | Xylene | U239 | 25,000 |
| S01 | gallons (G) or liters (L) | 2,4-D Salts & Esters | U240 | 500 |
| S01 | gallons (G) or liters (L) | 1-Propene, 1,1,2,3,3,3-hexachloro- | U243 | 500 |
| S01 | gallons (G) or liters (L) | Thiram | U244 | 500 |
| S01 | gallons (G) or liters (L) | Cyanogen Bromide | U246 | 500 |
| S01 | gallons (G) or liters (L) | Methoxychlor | U247 | 500 |
| S01 | gallons (G) or liters (L) | Warfarin & Salts when >0.3% | U248 | 500 |
| S01 | gallons (G) or liters (L) | Zinc Phosphide | U249 | 500 |
| S01 | gallons (G) or liters (L) | Benomyl | U271 | 500 |
| S01 | gallons (G) or liters (L) | Bendiocarb | U278 | 500 |
| S01 | gallons (G) or liters (L) | Carbaryl | U279 | 500 |
| S01 | gallons (G) or liters (L) | Barban | U280 | 500 |
| S01 | gallons (G) or liters (L) | o-Toluidine | U328 | 500 |
| S01 | gallons (G) or liters (L) | p-Toluidine | U353 | 500 |
| S01 | gallons (G) or liters (L) | Ethylene Glycol Monoethyl Ether | U359 | 500 |
| S01 | gallons (G) or liters (L) | Bendiocarb Phenol | U364 | 500 |
| S01 | gallons (G) or liters (L) | Carbofuran Phenol | U367 | 500 |
| S01 | gallons (G) or liters (L) | Carbendazim | U372 | 500 |
| S01 | gallons (G) or liters (L) | Propham | U373 | 500 |
| S01 | gallons (G) or liters (L) | Prosulfocarb | U387 | 500 |
| S01 | gallons (G) or liters (L) | Triallate | U389 | 500 |
| S01 | gallons (G) or liters (L) | A2213 | U394 | 500 |
| S01 | gallons (G) or liters (L) | Diethylene Glycol, Dicarbamate | U395 | 500 |
| S01 | gallons (G) or liters (L) | Triethylamine | U404 | 500 |
| S01 | gallons (G) or liters (L) | Thiophanate-methyl | U409 | 500 |
| S01 | gallons (G) or liters (L) | Thiodicarb | U410 | 500 |

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| S01 | gallons (G) or liters (L) | Propoxur | U411 | 500 |

Part II.A

## PART II

The hazardous waste operations conducted at the facility include storage in containers, consolidation (pouring into shippable containers and re-packaging unopened containers), and stabilization for RCRA metals.

### A. General

1. *Facility information:*

a. *Attach a topographic map showing a distance of 1,000 feet around the hazardous waste management area at a scale of 1 inch to 200 feet. Contours must be shown on the map with intervals sufficient to clearly show the pattern of surface water in the vicinity of and from each operational unit of the facility (e.g. contour intervals of 5 feet if relief is greater than 20 feet or an interval of 2 feet if relief is less than 20 feet).*

Information and features of the map shown in Figure II A 1 are consistent with instructions in the permit application form regarding the extent of the area around the facility, the scale, and contour intervals. Since the topography of the area included in the map contains a relief not greater than 2 feet, the only two contour lines shown in the figure indicate elevations 1 foot apart. Because of the scale of the area topographic map (Figure II A 1 ), the site area appears too small in size to show in a clear manner the details of the facility requested in the map content requirements listed below. Therefore, a site map is provided in Figure II.A.5, which shows all the details that cannot be shown in a clear manner on the area topographic map. Figure II A 2 shows topographical information on two parcels of property east of the original property. References to the map or figure made below may apply to any of the three maps described above.

*The map should clearly show the following:*

(1) *Map scale and date*: Scale and date are shown. (Figure II A 1 )

(2) *100-year floodplain areas*: The map indicates floodplain areas with dots and cross-hatched lines. The dotted area shows a Zone A-1 floodplain area adjacent and to the east of the area showing cross-hatched lines, which indicates a Zone B floodplain area. (Figure II A 1)

(3) *Orientation of the map*: The north orientation of each map is shown.

(4) *Access control (fences and gates)*: The perimeter fence is indicated by a solid line that delineates the boundaries of the site. The gates have been clearly identified in the map. (Figure II.A.5)

(5) I*njection and withdrawal wells both on-site and off-site*: To the best of our knowledge, there are no injection or withdrawal wells on-site or off-site within

1,000 feet from the hazardous waste facility. The facility drains into the storm water prevention pond.

(6) *Buildings and other structures (recreational areas, access and internal roads, storm, sanitary and process sewage system, fire control facilities, etc.*): Existing buildings and other structures are shown on Figure II.A.5.

(7) *Contours sufficient to show the surface water flow*: The contour lines are shown, but the area is so flat that they do not help in identifying any surface water flow direction. All storm water flows into the storm water prevention pond and that flows into Boggy Creek. Boggy Creek is located about 1/4 mile east of the facility.

(8) *Loading and unloading areas*: The container loading and unloading areas are identified in Figure II.A.5.

(9) *Drainage and flood control barriers*: The facility site drains into a stormwater pond located northeast of the north building. The stormwater pond is one component of the flood control barrier system at Triumvirate Environmental Inc. Storages are either confined within walls having sufficient height to keep the floodwaters out, or they have been built with a floor surface level higher than the floodwater level. Water from the stormwater pond discharges through underground piping to a drainage ditch before it reaches Boggy Creek at a point directly east of the site. The map (Figure II A 1) shows the path stormwater follows on its way to the creek.

(10) *Hazardous waste units including clean-up areas*: Operational hazardous waste units for storage and treatment of waste are shown on Figure II.A.5. There are no clean-up areas at the facility. Additional Solid Waste Management Unit information is located in Parts II.P and II.Q

(11) Runoff control system: As explained in paragraph (9), there is a pond at Triumvirate Environmental Inc., site which controls and directs stormwaters to a creek that runs to the east of the facility site.

40 CFR 270.14(b)(19) paragraphs (iv) and (vii) also require surrounding land uses and property legal boundaries to be shown in the map. The Triumvirate Environmental facility is bordered on the east by an empty lot that has never been built upon. The facility site is located in an industrial park occupied by light to—medium industry companies on the north, west, and south sides. There are no residences, schools, churches, or public gathering places within 1,000 feet of the area shown by the map. The property's legal boundaries are included in Figure II.A.5.

b. *Include a wind rose indicating the local prevailing wind speed and direction, legend, and date with the maps or as a separate item*: Figure II A 3 shows a wind rose which contains this information.

c. *Traffic information — Include the information required in 270.14(b)(10)*: Figure II.A.5 shows traffic volume and control information requested in 270.14(b)(10). Due to the small area of the facility site and the fact that most of it is or will be occupied by buildings, the traffic pattern and size is very simple. There are no data on the load bearing capacity of site pavements. However, the facility was developed from the beginning as a transportation facility capable of handling vehicles with a nominal combined gross weight of 80,000 pounds. Construction drawings show that the paved internal traffic areas consist of a 6-inch thick concrete slab covered with an asphalt layer.

*2. Financial responsibility information:*

*a. Attach the most recent closure estimates for the facility [264.143 and 270.14(b)(15)]. Use DEP Forms 62-730.900(4)(a), (b), (c), (d), (e), (g), (h), (i) or (j) only. Retype documents are not acceptable. Send the originally signed documents to: Hazardous Waste Financial Responsibility Coordinator; Department of Environmental Protection, Division of Waste Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.*

The present financial assurance mechanism for closure at Triumvirate Environmental is Lexon Insurance Bond (LX-88865), a copy of which is found in Exhibit II.A.2.a.-1. The face amount of this policy is $158,150 with an effective date of April 30, 2012. Triumvirate may choose in the future to use any of the financial instruments offered in 264.143. In accordance with 264.143(e)(9), the face amount of this policy will be increased within 60 days if the current closure cost estimate exceeds the applicable face value, or another financial instrument will be obtained.

*b. If applicable, attach the most recent post-closure care cost estimate for the facility [264.144] and a copy of the financial mechanism used to establish financial assurance for post-closure care of the facility [264.145, 264.146, 270.14(b)(16)]. Use DEP Forms 62-730.900(4)(a), (b), (c), (d), (e),(g), (h), (i) or 0) only. Retyped documents are not acceptable. Send the originally signed documents to the address in 2.a. above.*

Triumvirate Environmental is not subject and will not be subject to post-closure care because the facility does not have and it is not applying for any land disposal units.

*c. If corrective action under 40 CFR 264.100 or 264.101 is requested at the facility, comply with rule 62-730.180(6), FA. C.*

No corrective action under 40 CFR 264.100 or 264.101 is requested at the facility at this time.

*d. Attach a copy of the documents used to demonstrate liability coverage [264. 147]. Use DEP Forms 62-730.900(4)(b), (d), (k), (1), (m) or (n) only. Retyped documents are not acceptable. Send the originally signed documents to the address in 2.a. above.*

A copy of the most recent document [i.e., Form 62-730.900(4))k)] used to demonstrate liability coverage for the Triumvirate Environmental facility is shown in the attached documents. Triumvirate Environmental will submit an updated DEP Form 62-730.900(4)(k), or other form that is applicable to the type of liability coverage that is being utilized at such time, within 30 days after the occurrence of any of the events described in 264.147(a)(7). ( *Located in Maps & Figures tab in back of book.)*

3. ***Floodplain Information:***

*Attach a flood map. The Federal Insurance Administration (FIA) of the Federal Emergency Management Agency* (FEMA) Map Service Center *produces flood maps that have information on flood areas. If a FIA flood map is not available for an area, use an equivalent mapping technique to determine whether the facility is within the 100-year floodplain, and if so, what the 100-year flood elevation is. The U.S. Geological Survey, the Soil Conservation Service, the Water Management Districts, and the Regional Planning Councils also have information requested in this section.*

The FIRM Flood Insurance Map of Orange County shows that Triumvirate Environmental Inc., is not located in a 100 year flood plain.

*If the site is located in the 100-year floodplain, identify the 100-year flood level and any other special flooding factors (e.g. wave action) which must be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood.*

The Facility is not located in the 100-year floodplain or in any other special flooding factor.

*a. An engineering analysis indicating the various hydrodynamic and hydrostatic forces expected to occur at the site as a consequence of a 100-year flood.*

The Facility is not located in the 100-year floodplain or in any other special flooding factor

*b. Structural and other engineering studies showing the design of operational units (i.e., tanks, incinerators) and flood protection devices (i.e., .floodwalls, dikes) at the facility and how these will prevent washout.*

The Facility is not located in the 100-year floodplain or in any other special flooding factor

*c.If applicable, and in lieu of paragraphs 3.a. and 3. b. above, a detailed description of the procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:*

*1. Timing of such movement relative to flood levels, including the estimated time to move the waste to show that such movement can be completed before floodwaters reach the facility;*

*2. A description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with the regulations under 40 CFR Parts 264 and 265;*

*3. The planned procedures, equipment and personnel to be used and the means to ensure that such resources will be available in time for use; and*

*4. The potential of accidental discharges of the waste during movement.*

*If the site is not located in the 100-year floodplain, provide the source of data for such a determination and include a copy relevant to the FIA map or the calculations and maps used where a FIA map is not available.*

Not applicable.

4.a. ***Security Procedure***

*Attach a description of the security procedures and equipment required by 264.14 [270.14(b)(4)]*

264.14 offers options that hazardous waste facilities may use to comply with its provisions.

Triumvirate Environmental Inc. has in place a fence that completely surrounds the facility. Access of unauthorized persons and livestock to the active portion of the facility is prevented by the six-foot chain link fence and by locked gates. The gate remains locked except for entering and exiting the facility. In addition, signs have been posted near the entrance gates and at regular intervals along the fence that surrounds the site in a way that makes them legible from a distance of at least 25 feet from any direction through which the facility may be approached. A sign reading "All Visitors Check in at Office" is posted at the east entrance and provides directions to visitors. Figure II A 5 shows locations of signs.

4.b. *Attach a copy of the contingency plan required by 40 CF part 264, Subpart D.*
Contingency Plan is attached on pages 2ACP-1 through 2ACP-36

5. *Attach a copy of the reports of the chemical and physical analysis of the hazardous wastes handled at the facility, including all information which must be known to treat, store or dispose of the wastes in accordance with 40 CFR 264.13 and 40 CFR 270.14(b)(2)*

6. *Attach a copy of the waste analysis plan required by 40 CFR 264.13(b) and 40 CFR 270.14(b)(3) . Include the following:*
   - *a. Parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters;*
   - *b. Test methods used;*
   - *c. Sampling methods used;*
   - *d. Frequency of analysis to ensure accuracy;*
   - *e. Waste analyses that generators supply;*
   - *f. Methods used to meet additional waste analysis requirements; and if applicable,*
   - *g. For off-site facilities, the procedures used to inspect and ensure that the wastes received match the accompanying manifest.*

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Item 5 above requires the applicant to include copies of analysis reports for wastes managed at the facility. The number of pages of analysis reports the facility keeps in files for waste managed at the site would add several voluminous books to this application, without adding significant information that could be used to review the method used by the facility to evaluate incoming waste. Instead of submitting the analysis reports required in item 5, the facility's waste analysis plan included in this application to satisfy the requirements contained in item 6 above is considered to define the information to be shown in the waste evaluation documents. This information is that needed to properly treat, store, or dispose of the wastes in accordance with 264.13. This section of the permit application has been identified with the number II.A.5/6 because it addresses the requirements contained in items 5 and 6 above.

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*7. Attach a copy of the procedures used to comply with 264.12 and 40 CFR Part 264,Subpart E (Manifest System, Recordkeeping, and Reporting).*

Pages 2A-15 through 2A-41 addresses this question.

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## EXHIBITS


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MANIFESTS, RECORDKEEPING, AND REPORTING

## 1.0 INTRODUCTION

This section of the permit application describes the procedures used to record and maintain information required by hazardous waste regulations for the waste management operations conducted at the facility. It also describes the system used to complete and review shipping documents and to address deficiencies and discrepancies discovered in the documents by the review process. The hazardous waste regulations contain requirements to report information pertaining to incidents and operations related to waste management activities at the facility.

## 2.0 OBJECTIVES

This part of the permit application describes the process used by the facility to:

Review and process inbound shipping documents and resolve deficiencies and discrepancies found in the documents and in the shipment.

Review inbound waste shipments and record management activities used to process the
waste and to track the waste from the inbound shipment to the outbound shipment.

Prepare and process outbound shipping documents and shipment and resolve deficiencies and discrepancies found in the documents and in the shipments.

Manage transfer facility waste and unauthorized waste shipments.

Complete, submit, and maintain records and reports related to incidents and operations at the facility.

## 3.0 SHIPPING DOCUMENTS

Shipping documents are the paperwork prepared by the generators and the hazardous waste permitted facility that must accompany hazardous waste shipments during transportation to off-site facilities. The generator must complete the shipping documents for shipments originating at the generator site. Similar responsibilities apply to the hazardous waste treatment, storage, and disposal facilities (TSDFs) when shipments originate at the TSDF. The shipping documents consist of the following:

The uniform hazardous waste manifest
The land disposal restriction (LDR) notification form and
The universal treatment standard (UTS) notification form

The LDR and UTS forms are combined and are required to accompany the first (i.e., initial) shipment only. They are optional for subsequent shipments.

## 4.0 INBOUND SHIPMENTS

TSDFs are required to inspect shipments and review accompanying manifests to assure the waste received coincides in type and size with the manifest and that the information provided in the LDR and UTS notifications (when required to accompany the shipment) complies with the regulations. The first step in this process consists of inspecting the shipment to identify the drums listed in the manifest(s). All waste that is received by the facility is assigned a barcode label that has the inbound and, when known, outbound process code. Operators at the facility inspect the incoming hazardous waste label and the container type and count the number of drums in the shipment for each waste stream and place the barcode label next to the original shipping label. During this process the description of the waste is verified, and the number and type of containers must match the manifest description. Inadequate and incomplete markings on the hazardous waste label are amended by the facility operators. Discrepancies regarding the shipment and the manifest are noted on the manifest and on the online tracking system.

Following inspection of the shipment and manifest by facility operators, the manifest, the LDR and UTS notification forms (when provided with the shipment), are forwarded to a competent person for review. The review is to verify that the shipping documents are in compliance with the regulations and to resolve discrepancies and deficiencies discovered in the shipment and in the documents, if any. Specific objectives of the review are:

Take notice of discrepancies discovered during the waste receiving operation.

Ensure that the manifest has been completed in accordance with standards in the Rule 62-730.160 F.A.C., and in Subpart B of the 40 CFR Part 262.

Verify that the LDR and UTS notification forms (when required by regulations to accompany the shipment) comply with the requirements of Part 268.

Notify the generator of discrepancies and deficiencies discovered in the shipment, manifest, and/or LDR and UTS notification forms and resolve significant discrepancies within 15 days of shipment receipt.

To comply with the regulations of 264.71(b)(2), shipment and manifest discrepancies, as well as regulatory deficiencies contained in the manifest, are noted in item 18a of the manifest. A copy of the manifest is signed and dated by the facility and returned to the generator within 30 days of waste delivery. The manifest discrepancy notifications are generated automatically by our custom-made computer tracking program and is used by the facility to resolve problems related to shipments and shipping documents. The generator is requested to notify the facility within 15 days of the waste delivery date on the resolution of the problem. In most cases the problem is resolved in the manner indicated in the form without the generator revisions. However, in cases of missing or incomplete documents, or when the waste is significantly different from the one described in the evaluation documents, active involvement of the generator becomes necessary. The waste analysis plan describes methods to determine when an incoming waste is significantly different from the one approved for shipment to the facility. Failure to resolve discrepancies will result in return of the shipment to the generator, or to an alternate facility designated by the generator.

## 5.0 PROCESSES AT THE FACILITY

The previous sub-section described procedures utilized by the facility to review inbound shipping documents and to resolve regulatory deficiencies and discrepancies discovered in the shipment and in shipping documents. This sub-section deals with the system the facility uses to record the processes undergone by the waste accepted by the facility.

Triumvirate uses a custom made computer application to track and account for individual waste containers as they are received stored, handled, re-packaged, consolidated or stabilized and shipped out of the facility. The application and database is called PERMIT and it is housed in servers. PERMIT can be accessed by staff members via a secured internet connection and password at any location, at any time. A general description PERMIT and how it functions is indicated below.

PERMIT is an electronic system that tracks all waste that is at the Triumvirate Environmental facility. Wasteland is an electronic program that creates manifests, shipping documents, packing slips, LDRs, and manages profiles. All waste that is accepted at the facility needs to be accepted into PERMIT. This can be done by importing a manifest from Wasteland or by manually entering the manifest into PERMIT. All waste that is accepted at the facility is given a barcode label from PERMIT. Transfer Waste is accepted in PERMIT but it is not barcoded. Barcode labels are printed by facility staff members and adhered to the appropriate containers before the containers are accepted at the facility. Facility staff members are responsible for updating the information in the barcode system to reflect the storage location of each container in the facility. Facility staff members use hand held barcode scanners to update the application database whenever any container is moved, repackaged, consolidated, stabilized or manipulated within the facility. The application database is also updated whenever containers are shipped out of the facility. All outbound manifests from the facility are created from PERMIT to keep the inventory in PERMIT accurate.
The barcode labels on the drums contain process codes which dictate how the waste can be handled. The process codes are assigned to the waste profiles before the waste is accepted at

the facility and they are assigned by competent facility employee(s). When a waste is accepted in PERMIT the barcode will track the waste, the process code will dictate how it is handled, and the DOT shipping description will determine where it can be stored.

The server which houses the Triumvirate's computer application and its database is connected to the internet. On a daily basis, the data that has been collected through the use of the application is exported to a secure electronic data storage repository located outside the facility property.

At any time software upgrades may occur and electronic tracking systems may change. Any change will not affect the general tracking as previously described.

## 6.0 OUTBOUND SHIPMENTS

The facility prepares shipping documents for waste shipments that originate at the facility. Manifests are printed by either PERMIT or Wasteland and both programs speak to each other and store shipping manifests, profiles and other related documents. This data management system maintains files for outbound waste streams that have been approved by off-site facilities. Off-site facilities approve waste streams for treatment and disposal prior to shipment from Triumvirate Environmental. The outbound system is similar to the inbound system. Information from outbound approvals is inputted into PERMIT and Wasteland, which are used to print manifests for outbound shipments. Outbound shipments should only be printed from PERMIT to keep the inventory in PERMIT accurate. Outbound waste approvals are generic in that the waste approved for shipment to the off-site facility may have a composition that ranges between maximum and minimum percent limits for various components as determined by the TSDF that we are sending the waste to. The waste that is sent to a TSDF will meet the characteristics of the profile, but it may not exactly match the profile Variations in the composition of the waste must not affect the physical and chemical characteristics of the waste relevant for the treatment method that has been prescribed for the waste, nor can the variation result in a different type of waste. Wastes shipped under a generic approval may have fewer waste codes than those shown in the approval. The Waste Analysis Plan describes the procedures that should be used to determine the DOT description and the hazardous waste codes that should be used for outbound wastes. The same procedures also address the method that is used to complete LDR and UTS notification forms. After completion, the manifest, LDR and UTS notification forms (when applicable) are submitted to a competent person for review to assure compliance with regulations.

Waste shipments that originate from the Triumvirate Environmental facility may be classified as follows:

- Waste bulked in transport containers such as tankers, roll-off boxes, or dump trailers.
- Waste bulked in transportable containers, which consists of totes, cubic yard boxes, or containers having a smaller size.
- Lab pack containers.

- Waste in transfer consisting of waste that was not removed from the transportable containers received by the Triumvirate Environmental Inc. facility.

The first step in preparing a waste shipment consists of completing a list of inbound waste containers contents included in the outbound shipment. The shipment preview report shows, among other things, the barcode number affixed to the container, the location where the drum is located onsite, the container size, type of container and profile number for the contents from every inbound waste container in the outbound load. For waste bulked in transport containers, the shipment preview report is completed from the data management system that tracks the movement of container wastes bulked in roll-off boxes and dump trailers. A shipment consisting of waste bulked in transportable containers, lab pack containers, and waste in the data management system to generate a shipment preview report containing information similar to that generated for shipments of waste bulked in transport containers.

## 7.0 TRANSFER FACILITY

Triumvirate Environmental Inc operates a transportation fleet that has been licensed by the State of Florida to transport hazardous waste that is registered out of the Triumvirate Environmental Davie FL location. The Triumvirate Environmental facility in Orlando is also a hazardous waste transporter and operates a transfer facility which allows waste to be held in transferred for up to ten days.

Waste at the facility subject to permit conditions (permitted waste) is transported to the facility on a manifest showing Triumvirate Environmental Inc. as the designated facility. Waste regulated by transfer facility requirements is a waste transported on a manifest that shows as a designated facility one which is not Triumvirate Environmental and is referred to as Transfer Waste. Currently, the transfer facility waste is managed in trailers parked at the loading dock. Containers holding transfer facility waste are only placed in the container storage unit when no space is available for transfer from trailer to trailer, which rarely happens. When waste is placed inside the facility it is clearly separated from permitted waste and is roped off to clearly identify it as 10-day transfer waste.

Provisions in Rule 62-730.171, F.A.C. specify that transfer facilities must have a written contingency and emergency plan that meets the requirements of 40 CFR Part 265, Subpart D, and a written closure plan that conforms to 265.111, 265.112(c), 265.114, and 265.115. This subsection complies with this requirement. Transfer facilities are also required to maintain written records showing arrival and departure dates for transfer waste, as well as the generator's name and EPA I.D. No. and the document number for the manifest used to ship the waste. Triumvirate Environmental logs in the information described for waste streams that arrive at The Facility and records the departure date when each transfer facility waste and

permitted waste shipment leaves the facility. The information is stored in PERMIT and can be printed at any time.

The number of drums holding transfer facility waste in the container storage unit at any time is not expected to be a large number. Drums to be transferred from one trailer to another may be grouped together in the unit and/or at the specified 10 day location as posted on the dock. These drums have the following unique markings and features when located in the container storage unit:

The approval code written on permitted waste drums contain characters that identify them as Triumvirate Environmental Inc. approval codes; transfer facility waste drums do not show Triumvirate Environmental approval codes.

Every permitted waste drum in the container storage unit is clearly separated from Transfer Waste drums. Transfer Waste drums do not show drum barcoded stickers marked on their sides or displayed on a facility sticker and are roped off to clarify that they are 10-day transfer waste.

A box located inside the office will be designated and identified to hold manifests showing transfer facility waste placed in the cell, or designated area for that waste code.

Transfer facility drums will be placed on the dock or transfer trailers. Only wastes having compatible DOT hazard classes will be placed together. Incompatible wastes will be placed on pallets having integral containment systems.

## 8.0 UNAUTHORIZED WASTE SHIPMENTS

Triumvirate Environmental Inc. does not accept waste that has not been approved in accordance with the Waste Analysis Plan or without a waste manifest. If a shipment of waste arrives without an accompanying manifest, the situation can be promptly resolved if a complete copy or a replacement of the missing manifest is obtained and the waste stream has been approved for shipment to the facility. Waste that has not been approved for shipment to the facility cannot be accepted by the facility, and it will be labeled "rejected waste".

Triumvirate Environmental Inc. policy dictates that:

Rejected waste must not remain at the facility for a time period longer than 10 days after the receipt date, unless it has been accepted as permitted waste within such time period.

Rejected waste information must be entered in Triumvirates waste tracking application which electronically produces a Rejected Waste Log Report.

Triumvirate Environmental transportation vehicles transport waste to other facilities. Sometimes, these facilities reject the waste because the waste does not meet the specification under which it was approved. In such cases, Triumvirate Environmental transportation vehicles are required to return the waste to the generator or an alternate facility. When it is necessary to return the waste to the generator who shipped the rejected waste, it may take several weeks before the Triumvirate Environmental vehicle is scheduled to service the generator's route. At the generator's request Triumvirate Environmental may accept the rejected waste under the requirements of the permit. To change the rejected waste to a permitted waste status, the generator must submit the appropriate waste evaluation documents, and the approval process needs to be completed. The codes assigned to the waste must be permitted at the facility. Since the Triumvirate Environmental facility is permitted to accept a large number of waste codes, most rejected wastes can be accepted by the facility. If the facility is not permitted to accept the rejected waste, Triumvirate Environmental returns the waste to the generator or will take the waste to an alternate facility following instructions from the generator.

The Triumvirate Environmental facility may use provisions available to transfer facilities to manage rejected waste at its facility. Managing rejected waste as transfer facility waste requires the facility to resolve an unauthorized waste shipment situation within ten days after the date the rejected waste was received. Information about rejected waste containers is not entered in the data management system because the system requires designation of a destination facility, which is not known until the approval process is complete. Therefore, self-generated reject form, or equivalent, is used to manually track information on rejected waste. Once the waste approval process is complete and the designated destination facility is known, the information contained in the form is entered in the data management system.

As explained above, rejected waste is first considered for acceptance by the Triumvirate Environmental facility. If the rejected waste cannot be approved for management at the facility, the rejected waste is shipped to an alternate facility or returned to the generator. To accept the rejected waste, the approval process described in the waste analysis plan must be completed, and the waste must be found to be acceptable under the conditions of the Triumvirate Environmental permit. If the rejected waste is approved by the Triumvirate Environmental facility, the manifest the generator used to ship the rejected waste is amended to read Triumvirate Environmental as the alternate designated facility. If the rejected waste cannot be accepted at the Triumvirate Environmental facility, a note is inserted in the manifest showing the name of another facility as the alternate designated facility, or indicating that the waste is to be returned to the generator.

If a copy of the manifest or a replacement manifest cannot be obtained, to comply with requirements in 264.76, the facility will notify the Department with the information required by 264.76. The report will include the following information:

(a) The EPA identification number, name, and address of the facility.

(b) The date the facility received the waste.

(c) The EPA identification number, name, and address of the generator and transporter, if available.

(d) A description and the quantity of each un-manifested hazardous waste and the facility from which it was received.

(e) The method of treatment, storage, and disposal for each hazardous waste.

(f) The certification signed by the owner and operator of the facility, or his authorized representative.

(g) A brief description of why the waste was un-manifested, if known.

## 9.0 OPERATING RECORDS

Movement of waste within the facility is controlled and recorded to establish the identification and disposition of the wastes. Incoming and outgoing wastes are monitored and recorded to maintain an inventory of the waste at the facility. Documents providing characterization of waste shipped and received at the facility, shipping documents, personnel training records, safety inspection records, incident records, and process, operation and safety equipment inspection records and logs are maintained in an organized manner. The records and logs referenced above are as required by 40 CFR 264.73.

## 10.0 REQUIRED REPORTS AND NOTIFICATIONS

Triumvirate Environmental will comply with the reporting requirements listed below:

Hazardous waste biennial report for generators, as required by 40 CFR 264.75;
Exception reports when the shipper of hazardous waste has not received confirmation of delivery from the designated facility;
Notification of intent to export hazardous waste, when required by 262.53;
Exception reports for exports of hazardous waste for which a copy of the manifest from the transporter or confirmation of delivery has not been received, as indicated in 262.55;
Annual report for exported hazardous waste, as required in 262.56;
Notification that the facility has arranged to receive hazardous waste from a foreign source, as required in 264.12(a);
Notification to generators shipping hazardous waste to the facility indicating that the facility has the appropriate permits, as required in 264.12(b);
Notification to new owner or operator before transferring ownership or operation of the facility of the requirements in Parts 264 and 270, as required in 264.12(c);
Reports of incidents requiring the implementation of the contingency plan, when required in 264.56(i).Letter describing manifest discrepancies that have not been resolved within 15 days, as required in 264.72(b);
Hazardous waste biennial report for permitted facilities, as required in 264.75;
Unmanifested waste reports, as required in 264.76;
Reports indicating effectiveness of a corrective action for releases, as required in 264.100(g).
Reports of exceedances of the air emission standards for containers, as required in 264.1090;
Notices of planned changes to the permitted facility, in accordance with 270.30(1)(1);
Notices of anticipated non-compliance situations at the facility, as required in 270.30(1)(2);
Twenty-four hour report of non-compliance situations which may endanger health or the environment, in accordance with 270.30(1)(6);

## 11.0 AVAILABILITY, RETENTION, AND DISPOSITION

Records, logs, notices, sheets, reports, or documents mentioned in the preceding paragraphs are maintained at the facility for the period of time required by the applicable regulation. Record maintenance is extended automatically during the course of any unresolved enforcement action. These documents are available to the appropriate regulating agency or personnel upon request.

## Exhibit II.A.7.-1: HAZARDOUS WASTE MANIFEST

*Located in the Maps and Figures Tab*

## Exhibit II.A.7.-2: LAND DISPOSAL RESTRICTION NOTIFICATION

*Located in the Maps and Figures Tab*

## Exhibit II.A.7.-3: UNIVERSAL TREATMENT STANDARDS NOTIFICATION

*Located in the Maps and Figures Tab*

Exhibit II.A.7.-4: EXAMPLE MANIFEST DISCREPANY NOTIFICATION FORM

## Load/Manifest Discrepancy Notification

| | |
|---|---|
| Generators Name: | EPA ID#: |
| Generators Address: | |
| Manifest # | Date: |

| Manifest Line # | Waste Description | # of drums | Method of treatment, or disposal | A brief explanation of why the waste was un-manifested |
|---|---|---|---|---|
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This document is being sent as notification of a Manifest/Profile Discrepancy for materials that are being delivered/received at Triumvirate Environmental (FL), Inc.... Triumvirate Environmental (FL), Inc.MUST receive acknowledgement of receipt of this document and authorization by signature (or other means) to remedy above discrepancy within 24 hours or this material is subject to rejection or additional charges.

Generator Acknowledgement_____Date_____

Triumvirate Environmental Inc Representative_____

Title_____Date_____

_____

Please fax back this signed form as described, within 24 hours of receipt. If you wish to email it, please give us a call and we would be happy to provide an email address to ensure it is received and handled promptly.

Triumvirate Environmental (Florida), Inc is located at 10100 Rocket Blvd, Orlando Florida 32824.
Our contact information is: Phone: 407-859-4441 Fax: 407-218-6703.

# Exhibit II.A7.5 : EXAMPLE DRUM I.D. LABEL

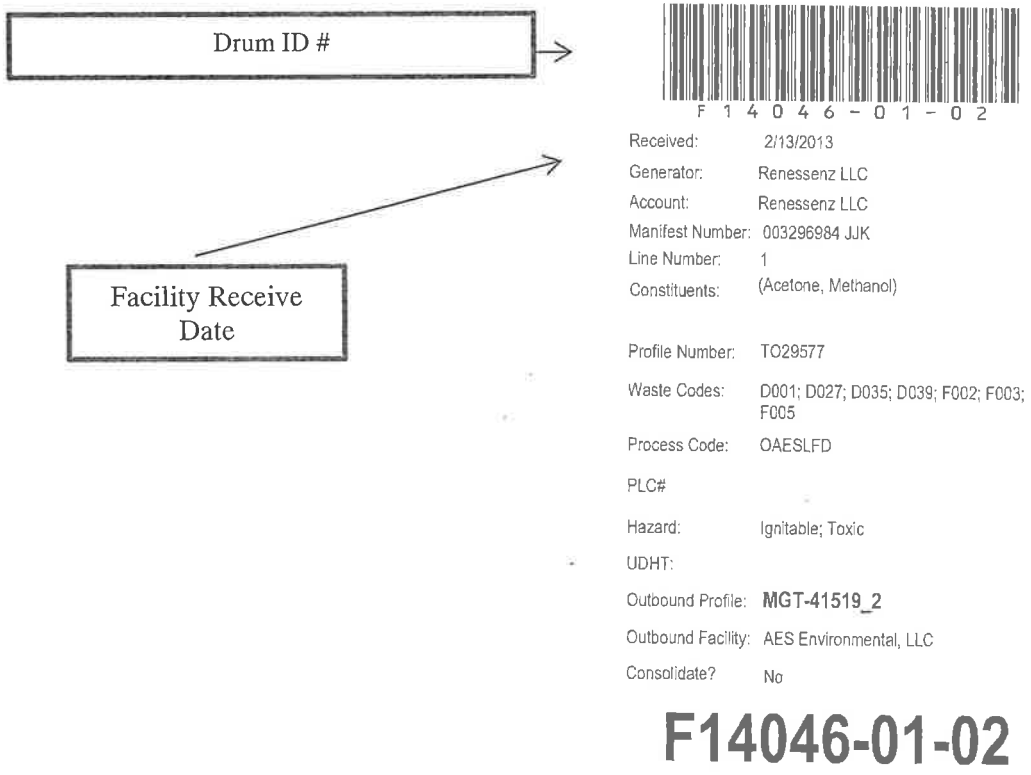

Exhibit II.A.7.-6: SHIPMENT PREVIEW REPORT

5/7/2013

# Load Summary Manifest Detail



| Manifest | Facility | Shipping Name | Line | QTY | Size | Weight | UOM | Type | Waste Codes | Profile |
|---|---|---|---|---|---|---|---|---|---|---|
| Transfer Station A | | | | | | | | | | |
| 003297580 JJK | AES Environmental, LLC | UN1090, Waste Acetone 3, II (RQ: D001) | 1 | 1 | 55 | 55 | G | DM | D001; F003 | MGT-42300 |
| 003297582 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, II (Toluene, Xylene) | 1 | 1 | 55 | 55 | G | DM | D001; D035; F003; F005 | MGT-38827 |
| 003297583 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, II (RQ: D001,D007,D008,F003,F005) (RQ: Lead, Xylene) | 1 | 4 | 55 | 832 | L | DM | D001; D007; D008; D035; F003; F005 | MGT-45880 |
| 003297584 JJK | Triumvirate Environmental (Orlando) Inc. | UN1791, Waste Hypochlorite solutions 8, II (RQ: D002) | 1 | 1 | 55 | 208 | L | DM | D002 | P 32086 |
| 003297585 JJK | AES Environmental, LLC | | 1 | 0 | | 0 | | | | PENDING |
| 003297585 JJK | AES Environmental, LLC | UN1993, Waste Flammable liquids, n.o.s. 3, II (ISOPROPYL ALCOHOL, DIMETHYL BENZYL AMMONIUM CHLORIDE) (RQ: D001) | 2 | 1 | Cubic Yard Box | 586 | K | CF | D001; D005; D035; F003; F005 | PENDING |
| 003297586 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, II (Toluene, Xylene) (RQ: D001) (RQ: Xylene) | 1 | 3 | 55 | 165 | G | DM | D001; D035; F003; F005 | MGT-42323 |
| 003297595 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, II (Toluene, Xylene) (RQ: D001) (RQ: Xylene) | 1 | 3 | 55 | 165 | G | DM | D001; D035; F003; F005 | MGT-38876 |
| 008039264 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, III (RQ: D001) | 1 | 1 | 55 | 55 | G | DM | D001; D035; F003; F005 | MGT45326 |

## Exhibit II.A.7.-7: FACILITY TRACKING REPORT

*Located in the Maps and Figures Tab*

Triumvirate Environmental (Orlando) Inc. (FLD980559728) | 10100 Rocket Boulevard | Orlando, FL 32824

Facility Tracking Report For: Associated Chemists, Inc. (FLCESQG00077)

NHWM058208 Transporter: Triumvirate Environmental (Florida), Inc. (FLD981018773) | 3670 SW 47th Avenue | Davie FL 33314

| Line | Profile | Waste Codes | Hazard Class | Qty | Size | Type | Treatment Method | Receipt/processing Information | Tracking Code | Outbound Manifest | Certified Final Disposal | Disposal Method | Empty Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 3 | TO27127 | | | 1 | 55 | DF | | Charles "Kip" Buckle | F1315-03-01 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-01 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-02 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-03 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-04 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-05 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-06 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-07 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-08 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-09 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |

## Exhibit II.A.7.-8: STAGING AREA FOR TRANSFER

*Located in the Maps and Figures Tab*

See Figure 1D1

*Located in the Maps and Figures Tab*

## Exhibit ILA.7.-9: REJECTED WASTE LOG

*Located in the Maps and Figures Tab*

TRIUMVIRATE
ENVIRONMENTAL

Discrepancy Notice/Resolution

Date:

Generator:

Manifest#:

Line Item:

Profile/Container #:

Reason for Discrepancy:

Resolution:

Please note: Resolution must be faxed or emailed within 24 hours of receipt of this notice or rejection may occur.

| | |
|---|---|
| Printed Name | Signature |
| Company Name | Date |

8. *Indicate all other federal laws that may apply to the issuance of the permit according to 270.3.*

## OTHER FEDERAL LAWS
## PERMIT APPLICATION SECTION NO. II.A.8

Regulations for permit application for hazardous waste facilities require determining the applicability of several federal laws to the facility with respect to the issuance of the hazardous waste facility permit. When any of these laws are applicable, the regulations require the adoption of permit conditions that ensure compliance with the federal law or denial of the permit if issuance would impair compliance with the law. The federal laws under consideration are listed below.

(a) *The Wild* and *Scenic Rivers Act* 16 V.S.C. 1273 *et seq.* Section 7 of the Act prohibits the
Regional Administrator from assisting by license or otherwise the construction of any water resource project that would have a direct, adverse effect on the values for which a national wild and scenic river was established. The permit resulting from this application will not have a direct or adverse effect on values protected by this law.

(b) *The National Historic Preservation Act of 1966.* 16 V.S.C. 470 *et seq.* Section 106 of the
Act and implementing regulations (36 CFR Part 800) require the Regional Administrator, before issuing a license, to adopt feasible measures to mitigate potential adverse effects of the licensed activity on properties listed or eligible for listing in the National Register of Historic Places. The Act's requirements are to be implemented in cooperation with State Historic Preservation Officers and upon notice to, and when appropriate, in consultation with the Advisory Council on Historic Preservation. The property site for the facility to which the permit will be issued is not listed, nor eligible for listing in the National Register of Historic Places.

(c) *The Endangered Species Act* 16 V.S.C. 1531 *et seq.* Section 7 of the Act and implementing regulations (50 CFR Part 402) require the Regional Administrator to ensure, in consultation with the Secretary of the Interior of Commerce, that any action authorized by EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat. The permit resulting from this application will not jeopardize the continued existence of any endangered or threatened species or adversely affect critical habitat.

(d) *The Coastal Zone Management Act* 16V.S.C. 1451 *et seq.* Section307(c) of the Act and
implementing regulations (15 CFR Part 930) prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program,

and the State or its designated agency concurs with the certification (or the Secretary of Commerce overrides the State's nonoccurrence). The facility to which the permit will be issued is not located in a coastal zone.

(e) *The Fish and Wildlife Coordination Act* 16 V.S.C. 661 *et seq.* requires that the Regional Administrator, before issuing a permit proposing or authorizing the impoundment (with certain exemptions), diversion, or other control or modification of any body of water, consult with the appropriate state agency exercising jurisdiction over wildlife resources to conserve those resources. This permit application does not propose the impoundment, diversion, or other control or modification of any body of water.

Part II.B

# TABLE OF CONTENTS
# FOR
# CONTAINERS

## SECTIONS


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## TABLES


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## FIGURES


| Figure No. | Figure Name | |
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## EXHIBITS


| Exhibit No. | Exhibit Name | |
|---|---|---|
| II.B. 1 .- 1 | FLOOR COATING SPECIFICATION | II.B. 1 .- 1 |
| II.B. 1 .-2 | HAZMAT STORAGE LOCKER SKETCH | II.B. 1 .- 2 |

*Attach the requirement of either a. or b.*

a. *Demonstrate compliance with 264.175(c) by attaching:*

(1) *Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and*

(2) *A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.*

---

The container storage unit at the Triumvirate Environmental facility stores wastes containing free liquids.
Therefore, this application does not address item a. shown above.

The application continues with paragraph b. on the next page.

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## II.B.1 SECONDARY CONTAINMENT SYSTEM

b. *Demonstrate compliance with 264.175(b) by attaching a description of the containment system which includes:*

*Basic design parameters, dimensions, and materials of construction;*

The floor surface level of the container storage unit is four feet above the natural ground level. The base that supports the floor consists of fill material compacted in accordance with appropriate engineering practices. Side walls surround the fill material to keep it in place. The floor of the unit consists of a 6-inch reinforced concrete slab, free of cracks, having adequate strength to support the static and dynamic loads to which it is subjected.

The storage unit area is of rectangular shape, 87 feet long along the west side and 60 feet long on the north and south sides. The east side of the area is 90 feet long. This side is longer than the west side because there is a concrete wall along the west half section of the north wall which was built 3 feet inside the unit and isolates the north building from the container storage unit An office is located on the southeast corner that occupies a 20.75-foot section along the east side and a 17.66-foot section of the south side of the unit area. The dimensions of the storage unit described in this paragraph are shown in Figure II A 5.

The unit floor has several roll-over berms and curbs designed to segregate wastes of different types stored in containers in the unit. Roll-over berms allow forklift access to the cells to deposit and withdraw drums on pallets. Curbs separate the secondary containment systems of contiguous cells. The roll-over berms were formed and poured over sections of the floor cut out of the slab. Two 3.5-inch high and 5-feet-wide roll-over berms are provided in the container storage unit. A 72.25-foot-long berm is located along the east side. The other berm is 42.33 feet long located along the south wall. Curbs 3.5 inches high and 8 inches wide were built of concrete poured over reinforcement rods secured to the floor by pins screwed into the concrete slab. There are five curbs separating six cells along the south wall of the unit and nine curbs along the east wall. A bonding agent was applied to the floor before the concrete was poured to increase adherence and prevent the formation of a gap between the floor and the bottom of the curb. Figure II A 5 shows the location of roll-over berms and curbs in the container storage unit area.

A protective coating resistant to solvents and corrosive liquids was applied to the floor surface of the container storage unit. The thickness and the quality of the coating material not only makes the floor sufficiently impervious to contain leaks, but also protects the floor material from attack by aggressive chemicals and from wear caused by equipment traffic over the area. Product specification for the coating material is

included in Exhibit II.B.1.-1, the MSDS for 1-Part Epoxy Concrete & Garage Floor Paint Slate Gray. The facility may use other materials that provide similar results.

(2) *How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;*

Secondary containment systems in the container storage unit are located over a floor that is not sloped. The facility stores in the unit waste in containers that are placed on pallets, which keep the containers from contacting any standing liquids.

(3) *Capacity of the containment system relative to the number and volume of containers to be stored;*

In accordance with 40 CFR 264.175(b)(3), the containment system must have sufficient capacity to contain 10% of the volume of the containers stored in the cell. A number of containers in the cell may have little or no liquid; however, for the purpose of this application, it is assumed that 100% of the containers contain 100% liquid waste material.

The container storage unit stores a maximum number of 824 —55-gallon drums, or equivalent, in three sub-units. The south sub-unit is located along the south wall of the unit and consists of six separate cells, each capable of storing up to 24 —55-gallon drums or equivalent. The east sub-unit holds 240 —55-gallon drums, or equivalent, in nine cells located along the east wall of the unit, and the northwest sub-unit stores 440 —55-gallon drums in the northwest corner of the unit in one large cell. The northwest sub-unit is provided with a secondary containment system that occupies the rest of the area of the container storage unit to the north of the south sub-unit and to the west of the east sub- unit. The fire wall, the office walls, and the wall on the south side of the unit are made entirely of concrete block. The rest of the walls of the unit are made of sheet metal, but there is a continuous concrete curb four inches high running along the inside of these walls. The concrete block walls and the concrete curb along the sheet metal walls complete the secondary containment walls for some of the cells.

**Containment Volume 1**

As shown in Figure II B 2. , the six cells located along the south wall of the unit (the south sub-unit) are provided with secondary containment systems having two widths; the width of the cell at the west end is 87 inches while the rest are 74 inches wide. All six cells have the same length and depth. Since every cell stores the same volume of waste, containment volume calculation is needed only for the cells having the shortest width (74 inches).

Width: 74" (6.166'), Minimum height of roll-over berms and curbs: 3.5" (0.292')
Length: 158" (13.166'

Wall to floor/roll-over berm intersect length: 158" (13.166'), Half roll-over berm width: 30" (2.5')

13.166' x 6.166' x 0.292' = 23.70 cu. ft.
2.5' x 6.166' x 0.292'/2 = 2.25 cu. ft.
Volume of Containment without pallets =25.95 cu. ft. x 7.48 gal/cu. ft. = 194.11 gal.
Volume Displacement of 3 Pallets: 3 x 5.40 gal/pallet (Fig. II B 3) = 16.20 gal.
Volume of Containment with Pallets: = 177.91 gal.

Cell Maximum Storage Capacity: 24 x 55 gal/drum = 1,320 gal Minimum

Required Containment Volume: 1,320 gal x 0.1 = 132 gal

The volume of the secondary containment (177.91 gallons) is greater than 10% of the maximum storage capacity (132 gallons).

**Containment Volumes 2 and 2a**

The east container storage area has nine cells along the east wall of the unit (the east sub-unit) featuring secondary containment systems with three different widths; the cell at the north end is 208 inches wide; the cell at the south end is 80 inches wide; and the remaining cells are 64 inches wide. All nine cells have the same length and depth. The eight southern-most cells each store the same volume of waste. The cell at the south end is 80 inches wide, and the seven cells to the north each have a 64-inch width. Therefore, calculations demonstrating that the 64-inch-wide cells meet the 10% secondary containment volume requirement also demonstrate that the cell 80 inches wide complies with the same requirement. The containment volume calculation is also needed for the cell at the north end that is 208 inches wide and stores twice as much as the other eight cells.

**Containment Volume 2**

Width: 64" (5.333'), Minimum height of roll-over berms and curbs: 3.5" (0.292') Length: 152" (12.666')
Wall to floor/roll-over berm intersect length: 152" (12.666'), Half roll-over berm width: 30" (2.5')

12.666' x 5.333' x 0.292' = 19.72 cu. ft.
2.5' x 5.333' x 0.292'/2 = 2.25 cu. ft.
Volume of Containment without pallets =21.97 cu. ft. x 7.48 gal/cu. ft. =164.36 gal.
Volume Displacement of 3 Pallets: 3 x 5.40 gal/pallet (Fig. II B 3) = 16.20 gal
Volume of Containment with Pallets: = 148.16 gal.

Cell Maximum Storage Capacity: 24 x 55 gal/drum = 1,320 gal

Minimum Required Containment Volume: 1,320 gal x 0.1 = 132 gal

The volume of the secondary containment (148.16 gallons) is greater than 10% of the maximum storage capacity (132 gallons).

## Containment Volume

Width: 208" (17.333'), Minimum height of roll-over berms and curbs: 3.5" (0.292';
Length: 152" (12.666')
Wall to floor/roll-over berm intersect length: 152" (12.666'), Half roll-over berm width: 30" (2.5')

12.666' x 17.333' x 0.292' = 64.10 cu. ft.
2.5' x 17.333' x 0.292'/2 = 6.33 cu. ft.
Volume of Containment without pallets = 70.43 cu. ft. x 7.48 gal/cu. ft. = 526.82 gal.
Volume Displacement of 6 Pallets: 6 x 5.40 gal/pallet (Fig. II B 3) = 32.40 gal.
Volume of Containment with Pallets: = 494.42 gal.

Cell Maximum Storage Capacity: 48 x 55 gal/drum = 2,640 gal Minimum

Required Containment Capacity: 2,640 gal x 0.1 = 264 gal

The volume of the secondary containment (494.42 gallons) is greater than 10% of the maximum storage capacity (264 gallons).

## Containment Volume 3

The area occupied by the large cell located in the northwest corner (the northwest sub-unit) of the unit is bordered by the wall of the unit at the west, a roll-over berm on the south side, a section of the wall of the office, and a roll-over berm at the east and the north wall of the unit, including the fire wall along the north side. Figure II B 2 show the dimensions that are necessary to calculate the area in question. To simplify the calculation of the containment volume, it is assumed that the cell ends where the floor meets the roll-over berms entering the south and east containment cells.

Area of the Container Storage Unit: 1,116" x 720" = +803,520 sq. in.
Area Occupied by Fire Wall: 368" x 36" = -13,248 sq. in.
Area Occupied by South Sub-Unit: (158" + 60") x 508" = -110,744 sq. in.
Area Occupied by Office: 212" x 249" = -52,788 sq. in.
Area Occupied by East Sub-Unit: (152" + 60") x 867" = -183,804 sq. in.
Area Occupied by Northeast Sub-Unit: 442,936 sq. in.
Minimum Height of Roll-Over Berms and Curbs: 3.5"
Volume of Containment Without Pallets: 1,550,276 cu. in.
(1,550,276 cu in./1,728 cu. in. per cu. ft.) x 7.48 gal per cu. ft. = 6,711 gallons

Volume Displacement of 55 Pallets: 55 x 5.4 gal/pallet = 297.00 gallons

Volume of Containment with Pallets: = 6,413 gallons

Cell Max. Storage Capacity: 440 x 55 gal/drum = 24,200 gal

Minimum Required Containment Capacity: 24,200 gal x 0.1 = 2,420 gal

The volume of the secondary containment (6,413 gallons) is greater than 10% of the maximum storage capacity (2,420 gallons).

*(4) Provisions for preventing or managing run-on; and*

The floor surface of the container storage unit is four feet above natural ground level. The floor surface elevation is above the 100-year flood plain elevation, thus preventing run-on.

*(5) How accumulated liquids can be analyzed and removed to prevent overflow.*

Liquids spilled in any cell of the unit will spread onto the cell area, and, depending on the amount of waste spilled, the level may rise above the floor surface or will only wet the area where it spreads. The selection of sampling methods that may be used to collect samples from spills occurring in a cell depends on the nature and the media of the waste spilled. Collection of samples from spills in the container storage unit does not necessarily constitute a problem.

Removal of standing liquids in a container storage cell may be accomplished with the use of absorbent materials and/or pumps driven by air or hand. Solid materials will be removed manually. There is adequate space around the cells to operate equipment necessary to remove spilled waste. Since the height of the roll-over berms and curbs providing secondary containment for the cells is smaller than the height of the walls and curbs that surround the unit, a spill overflowing a cell will be contained by the secondary containment of the adjacent cells and will not overflow the unit until the secondary containment system for every cell is overflowed.

## II.B.2 IGNITABLES AND INCOMPATIBLES

2. *Attach sketches, drawings, or data demonstrating compliance with 264.176 (Special requirements for ignitable or reactive wastes) and 264.177 (Special requirements for incompatible wastes) where applicable.*

The entire perimeter of the container storage unit is located at least 50 feet from the facility's property line. Consequently, wastes stored in the unit are also located beyond the required property line set-back distance.

The Triumvirate Environmental facility consolidates wastes from various sources to either treat the waste on-site or to ship the waste off-site for treatment or disposal. Only containers equal to or greater than one gallon may be poured together using the compatibility tests and procedures found in the Waste Analysis Plan. Smaller containers will not be opened, but they may be re-packaged together. Containers 55 gallons or greater, containing RCRA metals (D004-D008, D010-D011), may be stabilized using cement and/or fly ash. An example would be lead contaminated sandblast grit. Procedures to prevent incompatible wastes from being placed in the same container are described in the Waste Analysis Plan.

Containers used to consolidate waste are usually new or reconditioned. When a used drum is utilized to accumulate waste, waste previously held in the drum is removed. Hazardous waste will not be placed in an unwashed container that previously held an incompatible waste or materials (40CFR 264.177(b)).

The facility stores incompatible wastes in cells that are separated by berms and curbs. A separation of at least two feet is provided between rows of pallets located inside two adjacent cells. Berms and curbs provide a physical barrier that prevents leakage from the drums in a cell from reaching other cell areas. Wastes stored in one cell belong to one hazard class or group of compatible hazard classes. A more extensive description of the method used by the facility to maintain incompatible waste separation is included in the next section.

## II.B.3 SEGREGATION AND SEPARATION

3. *Where incompatible wastes are stored or otherwise managed in containers, attach a description of the procedures used to ensure compliance with 264.177(a) and (b) (Special requirements for incompatible wastes) and 264.17(b) and (c) (General requirements for ignitable, reactive, or incompatible waste)*

The facility stores incompatible wastes in containers in the container storage unit and consolidates some of these wastes in containers in two areas of the facility. When incompatible wastes are stored in the container storage unit, the facility follows a system designed to keep incompatible wastes apart. Consolidation operations include procedures designed to screen and test wastes to prevent the consolidation of incompatible wastes in the same container. This section discusses the systems used by the facility for storing containers and consolidating waste in a safe manner in accordance with the requirements of 40 CFR 264.177(a) and (b), as well as 40 CFR 264.17(b) and (c). Storage and consolidation operations and solidification/stabilization operations are addressed separately.

THE CONTAINER STORAGE UNIT

This unit stores hazardous waste in drums placed on pallets. Pallets holding up to four 55-gallon drums each are, at the most, double-stacked and arranged in rows. Every cell is designated with the compatible hazard classes of wastes stored in it. The designated classes for each cell are based on a compatibility system established by the Department of Transportation (DOT). DOT regulations require the use of this system to control hazardous materials during the course of transportation. Triumvirate Environmental has decided to utilize this system described by 49 CFR 177.848, Segregation of Hazardous Materials, because the system is easy to understand, use, and communicate.

The DOT segregation system uses a chart to identify materials that may be stored together based on the hazard class assigned to each material. Triumvirate Environmental gives careful consideration to the assignment of the hazard class to waste materials during the approval process authorizing the shipment of the waste to the facility. The chart shown in Table II.B.3.-1 is a modified copy of the DOT chart. The chart shown in this section deletes hazard classes that are not accepted at the facility (divisions 1.1 through 1.6 - explosives, and class 7 - radioactive). 'Where the chart indicates "x" at the intersection of a hazardous class row and column, these hazard classes will not be stored in the same cell. Where the chart indicates "o" at the intersection of a hazard class and column, these hazard classes may be stored in the same cell with certain restrictions (e.g., a lab pack containing hazardous class 5.2 material can be stored in the same cell with a container of hazard class 8 corrosive liquids).

**Table II.B.3.-1**

**Segregation Table for Hazardous Material**

| Class or Division | 2.1 | 2.2 | 2.3 gas | 2.3 gas | 3 | 4.1 | 4.2 | 4.3 | 5.1 | 5.2 | 6.1 liquids PG I Zone A | 8 liquids only | 9 H. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flammable gases..... 2.1 | | | X | 0 | | | | | | | 0 | 0 | |
| Non-toxic, non-flammable gases | | | | | | | | | | | | | |
| Poisonous gas Zone A..... 2.3 | X | | | | X | X | X | X | X | X | | X | |
| Poisonous gas Zone B..... 2.3 | 0 | | | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | |
| Flammable liquids ..... 3. | | | X | 0 | | | | | 0 | | X | | |
| Flammable solids..... 4.1 | | | X | 0 | | | | | | | X | 0 | |
| Spontaneously combustible | | | X | 0 | | | | | | | X | X | |
| Dangerous when wet materials | | | X | 0 | | | | | | | X | 0 | |
| Oxidizers ..... 5.1 | | | X | 0 | 0 | | | | | | X | 0 | |
| Organic peroxides ..... 5.2 | | | X | 0 | | | | | | | X | 0 | |
| Poisonous liquids PG 1 Zone A | 0 | | | | X | X | X | X | X | X | | X | |
| Corrosive liquids..... 8 | | | X | 0 | | 0 | X | 0 | 0 | 0 | X | | |
| Hazardous substances ..... 9 | | | | | | | | | | | | | |

Note: Codes X and 0 indicate prohibitions and restrictions as noted below.

- An "X" in the table indicates that these materials may not be loaded, transported, or stored together.

- An "0" indicates that these materials may not be transported or stored together unless separated in such a way that, in the event or leakage from packages under normal transportation conditions, the hazardous materials could not commingle. Regardless of the methods of separation employed, Class 8 (corrosive) liquid materials may not be loaded above Class 4 (flammable solid) materials or Class 5 (oxidizing) materials.

- Cyanides or cyanide mixtures must not be loaded or stored with acids or acidic materials. The reaction of cyanides with acids releases deadly hydrogen cyanide gas.

- When the 172.101 Table or 49 CFR 172.402 requires a package to bear a subsidiary hazard label, segregation appropriate to the subsidiary hazard must be applied when that segregation is more restrictive than that required by the primary hazard. However, hazardous materials of the same class may be stored together without regard to segregation required for any secondary hazard if the materials are not capable of reacting dangerously with each other and causing combustion or dangerous evolution of heat; evolution of flammable, poisonous, or asphyxiate gases; or formation of corrosive or unstable materials.

When containers arrive at the facility, the drums are removed from the transportation vehicle and arranged in a row for testing and/or inspection, depending on whether the waste is to be accepted at the facility. During the inspection, facility operators review and verify that the hazard class displayed on the hazardous waste label on every container is correct by comparing it to the electronic tracking system which prints bar-code labels for all waste that is terminated at the facility. The electronic tracking system is a system that tracks every inbound and outbound manifest to Triumvirate Environmental. Upon review of the hazard class and shipping label the drum is transferred to the appropriate cell in accordance with the DOT segregation system.

Flammable liquids that are classified by the National Fire Protection Association NFPA 30 as Class IA are accepted in containers that do not exceed 55 gallons. Table II.B.3.-1 indicates that wastes having divisions 2.1 (flammable gases) and 4.1 (flammable solids) and class 9 may be stored in the same cell with class 3 wastes because these wastes are compatible with each other. Spontaneously combustible wastes (division 4.2) are stored in small quantities, mainly inside lab pack containers. Waste in Division 4.3 Dangerous When Wet will be stored in a special cabinet such as a "hazmat storage locker." This cabinet is designed to protect wastes from water in the event of sprinkler activation, fire hose or other problem involving water. This cabinet is equipped with a dry chemical suppression system. It will hold four 55-gallon drums and may be placed in the northernmost cell in the east container storage area or other convenient location. It has a containment capacity of 72 gallons. A sketch of the "hazmat storage locker" is provided as Exhibit II.B.1.-2. Organic peroxides (5.2) accepted by Triumvirate Environmental Inc. for management is considered safe to handle. These peroxides are stored in the unit in small amounts usually as part of lab packs. The Waste Analysis Plan details the acceptance of organic peroxides. Oxidizing waste materials (5.1) may be accepted by the facility. The 5.1 materials are generally stored separately from wastes containing a significant proportion of organic constituents. Oxidizers (5.1) and organic peroxides (5.2) are compatible with each other.

When solid (non-hazardous) wastes are stored in the container storage unit, they will be clearly marked so they will not be confused with hazardous waste. There is no permanently designated separate storage area for solid wastes. When non-hazardous solid wastes are stored within the container storage unit, their volumes will be counted toward the total capacity of permitted hazardous waste.

Currently Triumvirate Environmental does not store flammable wastes in the container storage unit. Flammables may be stored contingent upon NFPA upgrades. To minimize the potential for fire in the container storage unit, equipment, and tools used in this area are operated, constructed, and designed in a manner to prevent the generation of sparks. There are no electric motors used in this unit except for the ones used to drive fans and blowers, which also meet the standards for explosion-proof electrical equipment. Forklifts used inside the container storage unit are propelled by

internal combustion engines that run on propane gas, which eliminates the possibility of sparks through the tail pipe. Tools used to open drums in this area are made of materials that do not produce sparks upon impact or friction with hard or metal surfaces. Other equipment, such as drills, is air-driven. Smoking is not permitted in the hazardous waste management areas at the facility. Smoking is allowed outside of the hazardous waste management areas only.

The container storage unit is operated in a manner that minimizes the generation and concentration of flammable gases due to emissions from drums stored in it. Drums stored in this unit are kept closed except when opened for sampling, inspection or transfer of contents. The bung hole plugs of the drums to be sampled are initially loosened so that the plugs can be easily removed by hand. The plugs are not removed until the drum is actually sampled or inspected. A hand-held explosion meter will be kept on-site to detect high concentrations of flammable vapors.

## CONSOLIDATION AND STABILIZATION OPERATIONS

Triumvirate Environmental consolidates and stabilizes compatible hazardous wastes at the facility inside the north building. These consolidation and stabilization areas are identified in Figure I D 1. Re-packaging of non-reactive wastes may occur in the north building or the container storage unit in the upper warehouse.

Triumvirate Environmental, Inc. is authorized to consolidate compatible hazardous wastes stored in containers, that are equal to or greater than one gallon, into larger containers. Hazardous waste which can be disposed of together at an approved hazardous waste facility will only be consolidated together. Only hazardous waste that has passed the acceptance procedures described in the Waste Compatibility Test Manual will be consolidated. Triumvirate Environmental, Inc will not consolidate acids, inhalation hazards, or oxidizers. Flammable material which is intended for fuel blending or incineration may be consolidated contingent upon NFPA upgrades. The Waste Compatibility Test Manual, attachment II.A.5/6-1, will determine compatibility in determining which waste streams will be intended for consolidation. Consolidations will take place in the lower warehouse, identified in Figure II.A.5.

The facility does not consolidate or store incompatible wastes in the consolidation areas. Procedures and systems are in use to prevent placement of incompatible wastes in the same container and are outlined in the Waste Analysis Plan. The next paragraphs describe the type of consolidation conducted at the facility and the measures taken to prevent commingling incompatible wastes and to avoid hazardous situations.

### Consolidation in Bulk Transport Containers

Consolidation in bulk transport containers presents very little chance for commingling incompatible wastes because waste streams consolidated there do not have the components necessary for ignition or reaction. Examples of such wastes expected to be

consolidated are wastewater treatment sludges from electroplating operations or from chemical conversion coating of aluminum. These waste streams do not have ignitable properties. Wastes consolidated in bulk transport containers of known compatibility do not need to be tested for compatibility. Solid or liquid wastes other than the ones described above may be consolidated in transport containers without testing for compatibility if the wastes belong to the same waste stream. The same applies to waste streams generated by a well-known and defined process similar to the ones mentioned above, which do not have ignitable properties or components that may react with other materials.

Consolidation of Lab pack Containers

Wastes inside a lab pack container consist of materials having the same hazard class or division. Waste in lab packs having division 2.1, 2.2, and 2.3 materials remain in the same inner containers as shipped in the lab pack because the inner containers are cylinders, canisters, and cartridges containing pressurized gases or unpressurized gas remnants. Such materials are usually managed at the facility as waste in transfer, which means the lab pack container is shipped off-site as received from the generator. Sometimes inner containers in the lab pack are transferred to other lab pack containers. The procedures described in the, Compatibility Test Method of the Waste Analysis Plan is followed for ignitable wastes in inner containers. Class 3 materials that are consolidated into another lab pack do not need to be tested for compatibility.

Division 4.1 materials in a lab pack may be re-packaged into a drum with other materials having the same DOT classification only if the materials are compatible by process code. Such wastes must also be checked by the procedures described in the Compatibility Test Method of the Waste Analysis Plan, before consolidation. The Reactivity Group Name (RGN) for a given material may be determined from A METHOD FOR DETERMINING THE COMPATIBILITY OF HAZARDOUS WASTE, Report No. EPA - 600/2-80-076. Appendix 1 of the EPA report lists the RGNs for many materials. Materials may have many names and synonyms. If the information on the material does not show any of the names or synonyms that appear in the Appendix 1 list of the EPA report, chemical encyclopedias, dictionaries, or publications should be checked for other names or synonyms for the material that may appear in the list. The RGN can also be determined from Appendix 2 of the EPA report if the molecular functional group or chemical family that has been determined for the waste material can be classified within one of the group names listed in Appendix 2. Division 4.1 waste in lab packs inner containers that are placed into another labpack may be consolidated without having to follow the procedures for compatibility described above (RGN determination and compatibility test) as long as the other wastes belong to DOT division 4.1.

Inner containers in a lab pack containing division 4.2 materials may be consolidated in bulk only with materials having the same name after completing the procedures

described in the Compatibility Test Method of the Waste Analysis Plan. The consolidated materials should be over packed, and each inner container should not exceed a volume of one-half gallon if the material is pyrophoric. The compatibility test is not required if the inner containers are consolidated into another labpack with materials having the same DOT hazard classification. Consolidation of labpacks containing division 5.1 and 5.2 materials follows the same procedures used for division 4.1 and 4.2 materials, respectively, except that the volume restrictions that apply to pyrophorics in division 4.2 also apply to organic peroxides of types C and D in division 5.2. Consolidation of waste materials in labpacks consisting of division 6.1, class 8 and class 9 follow the procedures that have been established above for consolidation of class 3 materials.

Containers equal to or greater than 1 gallon are consolidated in batches consisting of materials that have the same process code. Waste bottles are unpacked and the inner containers are consolidated following procedures described in the previous paragraphs. Drums are unpacked in the north building. The inner containers are placed on tables that can be moved around the area. These containers are segregated by waste material type to prevent commingling of incompatible materials. Labpack waste materials are consolidated in the manner described in previous paragraphs. Emissions generated by this operation are insignificant and do not pose a threat to human health or the environment. Personnel conducting this operation wear protective equipment to prevent injury in the event of a chemical reaction. Because of the small amount of waste materials involved, an incident from this operation will not result in significant damage or harm, even in a worst-case scenario.

**Drum Consolidation of Non-Labpack Wastes**

As explained above, consolidation of non-labpack wastes is conducted for waste streams that arrive at the facility either in small containers or in partially full drums. These waste streams are bulked into other containers or transferred from one partially full drum to another until all the drums holding the waste stream are filled to capacity. Consolidations of wastes in drums that do not belong to the same waste stream are tested for compatibility before being commingled. To prevent the generation of sparks, the area inside the north building where consolidation of non-labpack wastes occurs is provided with explosion-proof lighting and electrical systems. Electric driven equipment uses explosion-proof motors, and tools are made of materials that do not produce sparks upon impact.

**Consolidation of Corrosives**

Alkaline liquids that arrive in drums at the facility are transferred to the consolidation areas to be tested and inspected before being pumped into a drum or tote. Prior to transfer of the waste from the drum, a sample taken from the drum is mixed with corrosive liquids stored in the consolidation container, and the mixture is observed for signs of a reaction. Test results that do not indicate a reaction between the contents

in the drum and the contents in the container establish compatibility. The waste is then transferred from the drum into the container that was tested.

**Consolidation of Non-Corrosives**

Non-corrosive wastes are liquids contaminated with organic and/or inorganic constituents. These wastes are managed the same way corrosive liquids are managed in the consolidation areas. These wastes are pumped into bigger containers after the compatibility test results detect no reaction between the samples.

**Solidification and Stabilization**

Solidification refers to adding absorbents such as cement or fly ash to wastes containing free liquids. Stabilization refers to treating wastes containing metals (D004-D008, D010-D011) to render them non-hazardous. An example would be lead contaminated sand blast grit. Stabilization activities are outlined in the Waste Analysis Plan.

The stabilization operation, including solidification, will be performed in a 20 or 30 yard roll-off container located in the north building. The roll-off container will be containing an inner liner. Waste and stabilization media will be mixed thoroughly by using mechanical equipment. Stabilization materials will consist of a mixture of pozzolanic products as needed. Possible examples include: Portland cement, fly ash, and lime. Sorbents such as silicates and clays may be used to absorb liquid and enhance binding capabilities. All additives will be contained in a dry and secure portion of the warehouse. Equipment used for stabilization will be wipe-tested and decontaminated prior to be taken out of service. Consolidation of similar wastes may occur prior to stabilization, and the compatibility test would be conducted for such consolidation, as described previously. An example would be comingling smaller containers of a known waste-stream such as pails of lead contaminated sandblast grit.

## II.B.4 MANAGEMENT OF CONTAINERS

4. *Attach a description of the procedures used to comply with 264.171 (Condition of containers), 264.172 (Compatibility of waste with containers), and 264.173 (Management of containers)*

Triumvirate Environmental operates a hazardous waste transportation company that generally conducts waste collections for the facility. Drivers collecting the waste inspect containers for DOT specifications, leaks, and damages before loading the containers in the transportation vehicles. Containers that do not pass the inspection are not accepted for transport unless the container is over packed or the waste is transferred to a container in good condition. Vehicles collecting the waste carry new, empty containers and over packs to use, if the need arises.

Containers holding waste in storage at the facility comply with specifications in 49 CFR Part 173 Shippers-General Requirements for Shipments and Packaging. Dents and corroded spots are evaluated to determine whether the container can sustain handling at the facility and, for outbound shipments, whether the container will be able to withstand the effect of transportation to the point of destination. Significant damage at locations near seams, and bottom or top ends do not pass the inspection. Bunghole plugs must be tightened, and plug seals must be in good condition and in place. Head gaskets for open-head drums must be well-placed and in good condition, with the head ring closing bolt positioned downward. Drums having wet exterior walls or a wet floor around the bottom are inspected for pinholes that may be causing the drum to leak, the head rings and bung hole plugs are tightened, and the drum walls and floor are dried. If inspections conducted after the drum walls and floor were dried find repeated wetting and a clear cause for the leak is not found, the drums in question must be over packed or the contents transferred to drums in good condition.

Container types used in the container storage unit to store waste materials are made of different materials, sizes and shapes. Most generators ship their wastes in 55-gallon steel drums. Some customers ship their waste in plastic containers mainly because the waste is corrosive. Almost all waste sludge's from electroplating operations are shipped to the facility in steel, fiberboard boxes and cubic yard bags. The facility stores consolidated corrosive liquids in drums or totes. The total volume of waste stored in a cell may not exceed the maximum storage volume permitted for the cell.

After containers have been inspected upon arrival, the containers are placed on pallets with no more than four drums (55-gallon and larger) per pallet. Drums on a pallet are arranged so that the top surface of the drums provides a reasonable horizontal and uniform resting plane for a second pallet to be placed upon it. Loaded pallets are inspected for head ring bolts to be positioned downward and for other protruding objects that may damage the pallets stacked upon them. Upper pallets are kept in a stable and level position

Pallets are placed between yellow lines painted on the floor of each cell. Pallets are positioned next to the end walls in a manner to prevent damage to the drums and allow visual inspection of the drums closest to the wall. Drums on a pallet are stored with hazardous waste labels faced toward the aisle. Photographs can be found in IB.3-8 through 13.

Drums in storage at the unit are closed at all times except when being sampled or when having contents transferred to another container. Heads and bung plugs shall be replaced and tightened immediately after the sampling and transfer operations are complete.

Drums transported by Triumvirate Environmental that are rejected by other facilities are returned to Triumvirate Environmental by the transportation vehicle that carried the drums to the rejecting facility. The rejected drums are transported to the Triumvirate Environmental facility to be managed as transfer facility waste until approval in

accordance with the facility's permit or until returned to the generator or shipped to another facility. Until such time as the rejected drums are approved for management at the facility or shipped out, the rejected drums are kept together at a specified location in the unit that does not constitute an obstacle to traffic and operations conducted in the unit. Wastes in rejected drums that are not compatible with other wastes stored in the cell are separated in accordance with the segregation system described in section II.B.3. Rejected drums that are separated from other wastes in a cell because of compatibility reasons are placed on special pallets that have an integrated secondary containment system. Only wastes that are compatible with each other are placed on a pallet provided with self-containment. Self-contained pallets may not be stacked. The same procedures described above apply to transfer facility wastes placed temporarily in the container storage unit.

There is an open area next to the roll-over berm that provides secondary containment to the series of cells located along the south wall of the container storage unit, which is identified in Figure I D 1 as the staging area. This is the area where the drums are tested and inspected before being placed in the storage cells. Drums that arrive late in the day when there is not enough time to complete the testing and inspection procedures are kept overnight in the staging area until the following day on pallets. The staging area and the storage cell located in the northwest corner of the unit share the same secondary containment system, which is capable of containing 3,719 gallons in excess of the volume required to contain the maximum storage volume allowed in the northwest cell. The excess containment volume for the cell where the staging area is located is equivalent to the secondary containment volume required for 675 55-gallon drums. The staging area does not have space for more than 100 55- gallon drums. The space in the staging area does not add to the permitted storage capacity of the facility.

More than half of the drums stored in the container storage unit usually are drums generators have shipped to the facility. The remaining drums contain wastes that have been consolidated at the facility. A drum containing waste that is not compatible with the container material is likely to develop a leak during transportation or at the generator site. Operators conducting inspections on arriving containers will have the waste transferred to another container if a leaking container is found, or if a container does not appear to be made of the appropriate material to hold the waste in question. Internal liners or other device to separate the waste from the container walls may be acceptable for wastes incompatible with the transport container material. Containers used to consolidate waste at the facility are usually new or reconditioned. When a used drum is utilized to consolidate waste, the container shall be empty of the waste previously held by the drum.

Handcarts, dollies, tools, and forklifts are made of appropriate materials. Necessary attachments to prevent personnel injury and damage to the containers, equipment, or structure are used. Floor surfaces upon which the forklifts operate are smooth to facilitate a safe operation. Personnel are trained with an emphasis on safe operation.

## II.B.5 INSPECTION PROCEDURES

*Attach a copy of the inspection procedures as required in 264.174 (Inspections) and 264.15 (General inspection requirements). [270.14(b)(13)]*

The facility conducts weekly inspections in the container storage unit to prevent releases of hazardous waste and to protect human health. The inspection procedures are designed to discover, notify, and remediate physical and compliance problems with containers, markings, containment systems, firefighting and spill control equipment, and any circumstances that may create a hazard. The objective of this program is to reveal and correct conditions that may lead to releases inside or outside the unit, injury to personnel, or threat to human health or the environment.

The weekly inspection requires inspection for cracks and gaps in the secondary containment. Such conditions should be sealed to maintain the integrity of the system. The floor in the area is inspected to detect waste from leaks and spills that should be collected and cleaned up, and debris or other obstacles that should be removed to allow safe passage of personnel and forklifts. Any finding of waste from leaks or spills must be investigated as to the source, and the problem condition must be corrected. The number and size of containers are reviewed to make sure the storage capacity permitted in the container storage area has not been exceeded. Containers are inspected for pinholes or signs of leakage, damage, appropriateness of material, and construction with respect to the type of waste contained. Bung and lid closures are confirmed. Markings are reviewed for completeness of the hazardous waste codes, storage date, and DOT description on the hazardous waste label and the facility barcode label. The hazardous waste codes and hazard class shown in the label are reviewed to make sure the waste is permitted at the facility and compatible with the other wastes in the cell. The containers are inspected to ensure that they are stable and that the label is facing the aisle. Fire extinguishers, spill control, first aid, and shower and eye-wash equipment are inspected to assure immediate operability. The seal on the emergency and safety cabinet indicates whether it has been opened. The seal is checked to make sure that it is intact. Examples of the weekly inspection forms are shown in Figures II B 4 and II B 5.

The weekly inspection ensures that the emergency and personnel safety equipment kept in the cabinet is complete and in good condition. The equipment stored in the cabinet is listed in the contingency plan. The facility may use easy-to-break seals on the doors of the cabinet to reduce weekly inspections to semi-annual inspections. A broken seal is an indication that equipment in the cabinet may have been removed. The facility has the option to use the seals described above and to inspect their integrity on a weekly basis. If seals are found broken, the weekly inspection log should be completed, and missing or faulty equipment should be replaced. A complete inspection of the cabinet should be conducted at least once every six months even when seals are found intact. A copy of the weekly cabinet inspection report in shown in Figure II B 5.

## II.B.6./7. CLOSURE OF CONTAINER STORAGE UNIT

6. *Attach a copy of the closure plan and where applicable the post-closure as required by 264.112, 264.118 and 264.178. [270. 13(b)(16)]*

7. *Attach a copy of the most recent closure cost estimate 1270.14(b)(15)] and where applicable the post-closure cost estimate [270.14(b)(16)]*

A closure plan and a cost estimate for the container storage unit is contained in section II.K of this application, as required by the hazardous waste facility permit application form. Triumvirate Environmental is not required to have a post-closure plan because it is not a hazardous waste disposal facility. All information requested by items 6 and 7 above is provided in Section II.K of the application.

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# FOR
# CLOSURE

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## K. CLOSURE

*The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart G. [270.14(b)(13)]*

*I. Attach the following information to meet the closure performance standard of 40 CFR 264.111. 40 CFR 264.111 requires controlling, minimizing, or eliminating to the extent necessary to protect human health and the environment post-closure escape of hazardous waste, hazardous constituent, leachate, contaminating run-off, or hazardous waste decomposition products to the ground water, surface waters, or to the atmosphere. The closure plan 1264.1121 must include all of the information required in Part H, Sections A through 1 [270. 14(b)(13)] :*

*a. A description of how the applicant will close each hazardous waste management unit at the facility in accordance with 40 CFR 264.111;*

*b. A description of how the applicant will conduct final closure of the facility in accordance with 40 CFR 264.111. The description must identify the maximum extent of the operations during the active life of the facility;*

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Items a. and b. above refer to the same requirement: closure performance standard in the 40 CFR 264.111. This part of the application is identified as II.K.1.a/b, and it addresses the requirements contained in both items a. and b. above.

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## CLOSURE PERFORMANCE
## PERMIT APPLICATION SECTION II.K.1.a/b.

This plan is designed to complete closure of the facility to achieve clean closure. A detailed description of how the facility will conduct closure activities to achieve this goal is provided. Closure operations include removal of inventory, decontamination of equipment and structures, and verification that contamination has been removed from equipment, structures, and potentially impacted soils. The plan addresses closure operations for the container storage unit, the consolidation pad/areas, the stabilization equipment and Transfer Waste areas. Information for units and areas that need to be closed include considerations necessary to determine the type and extent of activities required to complete closure. The maximum extent of the operations conducted during the active life of the facility consists of the permitted operations to process the permitted wastes in the units and areas that are to be closed.

The plan for removal of inventory of hazardous waste will be based on the maximum quantity of the wastes permitted for storage in every unit. The inventory removal plan addresses transportation and disposal methods of the waste at off-site facilities, including identification of such facilities and distance considerations.

Methods selected in this plan to decontaminate the waste management units will be designed for maximum reduction of hazardous waste constituents in the structures, and minimum generation of clean up waste. The objective of the decontamination plan for the areas and equipment used to store and treat hazardous waste is to remove contamination, so the areas and equipment can be put to other uses, recycled, or recovered.

Before areas are put to other uses, the areas will be evaluated to determine whether the closure performance standards have been satisfied. The evaluation procedures consist of taking samples from a medium representative of the type and extent of contamination in the area that has been decontaminated. Samples will be tested using appropriate analysis methods for the parameters of concern.

Closure performance criteria are as follows:

- Final Rinsewaters: When the facility starts the closure process The State of Florida will be notified and the levels for rinse water will be discussed with The State of Florida at that time.
- Soil: Table II Soil Cleanup Target Levels for Chapter 62-777, F.A.C.,

c. *An estimate of the maximum inventory of wastes ever onsite over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure. The methods include but are not limited to, methods for removing, transporting, treating, or disposing of all the hazardous wastes. Identify the type(s) of the offsite hazardous waste management units the applicant will use, if applicable.*

## REMOVAL OF INVENTORY
## PERMIT APPLICATION SECTION II.K.1.c.

The plan for removal of waste inventory considers the following factors: identification of the units, waste types, and maximum quantity of each waste type managed in the unit; method of transportation; and treatment for each waste type. The areas involved in the inventory removal plan are the hazardous waste container storage areas.

The container storage units are permitted to store a wide variety of waste types that may be classified into six major groups. These six waste groups stored in these units are identified by the storage group codes Corrosive Liquid (CO), Waste Fuels (HI/WF), Inorganic Wastes (MH), Poison Organic/Inorganic (PH1/2), Flammable Solids/Oxidizers (RI), and Reactives (RX). The relative amounts of each waste group stored at any given time will vary. For the purpose of this closure plan and closure cost estimate, it has been estimated that the existing container storage area will contain the following quantity of 55-gallon drums of each waste group, which is the maximum inventory of total material:

- 72 drums of CO material (3,960 gallons);
- 440 drums of HI/WF material (24,200 gallons);
- 268 drums of MH material (14,740 gallons);
- 16 drums of PH1/2 material (880 gallons);
- 24 drums of RI material (1,320 gallons); and,
- 4 drums of RX material (220 gallons).
- Transfer waste is included in the above inventory

Table II.K.1.c.-1 (SUMMARY OF DATA USED TO ESTIMATE COSTS FOR DISPOSAL OF INVENTORY) contains the waste type, quantity, disposal, and transportation information for the eight waste groups stored in the container storage units. The inventory table includes information regarding the methods of transportation and treatment for waste groups or types. At the closure, containers will be loaded onto transport trucks and disposed of at off-site locations.

The decontamination wastewater waste stream is assigned the waste inventory code DW. The decontamination wastewater results from the steam-washing of structures. It is estimated that this operation will generate wastewater at a rate of 0.6 gallon per square foot of surface area of structure to be decontaminated. The estimated DW volume results from multiplying the total surface area in square feet by the generation rate mentioned above. The classification of the decontamination waste water will be discussed with The State at the time of closure. The structure surface areas for decontamination are listed below.

STRUCTURE DECONTAMINATION — SURFACE AREA IN SQUARE FEET

| | |
|---|---|
| Consolidation/Stabilization Area (inside Lower Warehouse) | 3,583 |
| Transfer Area (outside the building) | 1,000 |
| Container Storage Unit | 5,488 |
| TOTAL SURFACE AREA FOR DECONTAMINATION | 10,071 |

The inventory table shows the mode of transportation for each waste group of the expected maximum number of drums at the time of closure. The number of trips the transport vehicle needs to make to haul the total inventory amount of a waste type is obtained by dividing the number of drums of the waste by the load size of the transport vehicle (i.e., 86 drums) used to ship the waste off-site. All containers in inventory at closure will be shipped off-site using trucks.

d. *A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment systems components, equipment, structures, and soil during partial and final closure. The steps include but are not limited to, procedures for cleaning equipment and removing contaminated soils, method for sampling and testing surrounding soils, and criteria for determining extent of decontamination required to satisfy the closure performance standard;*

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This section of the permit application addresses only decontamination of structures in areas where hazardous waste was stored, treated, and consolidated. Sampling and testing of surrounding soils will be addressed in the following section.

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## CLOSURE DESCRIPTION
## PERMIT APPLICATION SECTION II.K.1.d.

This part of the permit application describes in detail the procedures to be used for decontaminating the structures used to process hazardous wastes at the facility. These procedures were developed for conducting final closure. This plan will be modified as affected by changes in equipment and structures and changes in waste inventory, decontamination procedures, methods for verification of decontamination, and closure schedule and cost estimate, if any.

These procedures were developed to close structures in three facility areas. These areas are the container storage unit, including the transfer waste area, and the consolidation/stabilization area inside the lower warehouse. The method used to decontaminate structures is pressure cleaning with steam. The factors involved in making the decision to use steam cleaning over other methods are the ability steam has to dislodge residues with pressure, to evaporate organics with temperature, and the minimal generation of condensate.

Procedures describing the steps that will be followed to remove inventory and decontaminate every area are included below.

### CONTAINER STORAGE UNIT

Transfer waste that is not stored in trucks will be stored in the container storage unit. Containers holding hazardous waste will be segregated into groups based on recommended treatment methods, following the waste classification system of Table II.K.1.c.-1. All waste inventories in drums will be loaded in trucks and shipped off-site at the time of closure. The labor required to load a van trailer to capacity with drums is expected to not exceed 4 man-hours. The maximum man-hours required to load the worst-case drum inventory at closure into van trucks = 824 drums 86 drums/truck x 4 man-hours/truck = 39 man-hours.

The container storage unit has a floor surface area of 5,488 square feet. Based on Figure II B 1, the floor surface area was calculated as follows: $[(1,116/12) \times (720/12)\ ft^2 - [(36/12) \times (368/12)]\ ft^2 = (93 \times 60)\ ft^2 - (3 \times 30.66)\ ft^2 = (5,580 - 91.98)\ ft^2 = 5,488\ ft^2$. At the time of closure The State will be notified and the levels for rinse water will be discussed at that time.

### CONSOLIDATION/STABILIZATION AREAS

The locations where consolidation operations are conducted are in the lower warehouse. The areas that will be decontaminated by steam cleaning consist of approximately 3,583 square feet in the lower warehouse and 1,000 square feet outside the North Building. Final rinsate samples will be taken as discussed earlier.

*e. A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including but not limited to, ground water monitoring, leachate collection, and run-on and run-off control; and*

## VERIFICATION OF DECONTAMINATION
## PERMIT APPLICATION SECTION II.K.1.e.

Previous sections of the application have referred to removal of inventory and decontamination of structures. Inventory removal eliminates the possibility of eventual contamination to the site from leaking containers left after the facility has been closed.

The closure operations will result in a number of waste streams that will be disposed of as hazardous waste. Decontamination waters generated from steam cleaning the container storage area, transfer waste areas and consolidation/stabilization areas will be properly characterized and managed at the time of closure

Container storage areas, as well as consolidation/stabilization areas, will be decontaminated by cleaning the surface of the floor with steam pressure until residues and removable stains disappear. Final rinsate samples will be taken as discussed earlier. The engineer certifying the closure operation will inspect the floors and parking (stabilization) areas and evaluate final rinsate analytical data.

The Triumvirate Environmental Inc. facility has been designed and planned in accordance with environmental regulations enacted with the intent of preventing environmental contamination from hazardous waste storage and treatment operations. Storage and treatment operations conducted at the facility are not expected to result in contamination of the site. Soils beneath the process and operation areas should be free of man-made or leachable hazardous waste constituents. To verify that no contamination remains at the site after closure of the facility additional testing may be conducted: If a crack in the concrete is observed a sample may be taken at that location. Soil samples should be taken from the top 6" of soil underneath the foundation initially. The contaminants of concern will depend on the waste material types handled in the area where soils are to be sampled.

Figure II K 1 shows the planned sampling locations for the contamination assessment program to be conducted under this plan. The sampling locations have been selected representing the areas where waste materials are stored or treated in the facility. A composite sample will be obtained from each area to be submitted to the laboratory. Samples will be taken for metals and SVOCs. Table II.K.1.e.-1 indicates the contaminants of concern for each area of Figure II K 1. The analytical methods that will be used for testing the corresponding samples are also shown. Clean closure levels will conform to standards in effect at the time of closure.
Sampling and analytical data will be done in accordance with Florida DEP SOP's and quality manuals which can be found online at http://www.dep.state.fl.us/labs/library/lab_sops.htm

f *A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure.*

## CLOSURE SCHEDULE
## PERMIT APPLICATION SECTION ILK.1.f.

The date of final closure of the facility is not anticipated at least until the year 2025. However, in the event circumstances require closure of any of the equipment or structures described in previous sections, closure in accordance with the provisions of this plan may occur at an earlier date. Also, if new equipment or structures are used for the storage or treatment of hazardous waste, this plan will be revised to include the new facility features in compliance with the regulations. The amendment of the closure plan will be requested through a permit modification to be submitted at least 60 days prior to a proposed change, or no later than 60 days after an unexpected change.

The Florida Department of Environmental Protection (DEP) will be notified at least 30 days prior to the last receipt of hazardous waste (40 CFR 264 subpart G). The closure schedule allows for all hazardous waste to be properly disposed of within 90 days, and all closure activities will be completed within a period of 180 days from the time after receiving the final volume of hazardous waste at the facility. A certification of closure completed by an independent, qualified, registered, professional engineer will be submitted to the DEP within 60 days of the completion of final closure. The table below outlines the schedule for closure of the facility.

| ACTIVITY | DURATION (days) | CUMULATIVE TIME (days) |
|---|---|---|
| - Final receipt of wastes | 0 | 0 |
| - Removal of waste inventory | 30 | 30 |
| - Decontamination of structures | 90 | 120 |
| - Soil sampling and testing | 30 | 150 |
| - Completion of closure | 30 | 180 |
| - P.E. certification of final closure completion | 60 | 240 |

*For facilities that use trust funds to establish financial assurance under 264.143 or 264.145 and that are expected to close prior to the expiration of the operation permit, an estimate of the expected year of final closure.*

---

The response to the question posed in the above item is that the Triumvirate Environmental facility uses closure insurance to establish financial assurance for closure and does not plan to close prior to expiration of the permit. This section is utilized to address requirements that have not been included in previous sections of the application but that must be addressed in a closure plan. Included here is a closure cost estimate, which was requested previously in the part of the application that addresses financial responsibility information. The closure cost estimate was deferred for discussion to this section.

A detailed listing of the costs estimated to close the entire facility is presented in tables II.K.1.g.1a through II.K.1.g.6a.

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## CLOSURE COST ESTIMATES
## PERMIT APPLICATION SECTION II.K.1.g.

The costs to close the facility have been estimated for five major groups of expenses: disposal, transportation, labor, sampling and testing, and engineering. The largest portions of the closure costs are the disposal and transportation of the waste inventory. The labor required to decontaminate structures and to perform other closure activities is included in the closure costs. Sampling and testing of soils and engineering services necessary to comply with the regulations represent a small fraction of the costs for closing the facility. A discussion of data and methods used to estimate cost for each expense group is as follows.

### DISPOSAL

The cost estimate for disposal presented here uses data from the waste inventory table (Table II.K.1.c.-1) in section II.K.1.c. to obtain types and quantities of wastes that are to be disposed of during facility closure. The table also shows the treatment method for each waste type. A quote letter/actual invoices have been obtained from off-site facilities for treatment and disposal of each waste type in the inventory. These documents are included at the end of this section. A summary of the waste types, codes, and quantities provided in the waste inventory table, along with information on the off-site facility name and unit disposal costs obtained from the documentation is provided below.

### SUMMARY OF DATA USED TO ESTIMATE COSTS FOR DISPOSAL OF INVENTORY

**Table II.K.1.c.-1**

| WASTE TYPES | PROCESS CODE | QUANTITY | FACILITY NAME | EXHIBIT | COST PER 55-GAL DRUM |
|---|---|---|---|---|---|
| Corrosive Liquid | CO/CL | 3,960 Gal | AES Environmental, LLC Calvert City, KY | II.K.1.g.-1 | $60.00 |
| Waste Fuels | HI/WF | 24,200 Gal | AES Environmental, LLC Calvert City, KY | II.K.1.g.-2 | $35.00 |
| Inorganic Waste | MH | 14,740 Gal | Stablex Canada Blainville, QC | II.k.1.g.-1 | $71.00 |
| Poison/Organic | PH1 | 440 Gal | Ross Incineration Services Grafton, OH | II.K.1.g.-3 | $295.00 |
| Poison/Inorganic | PH2 | 440 Gal | Ross Incineration Services Grafton, OH | II.K.1.g.-3 | $295.00 |
| Flammable | RI | 660 Gal | AES Environmental, | II.K.1.g.- | $70.00 |

| | | | | | |
|---|---|---|---|---|---|
| Solids | | | LLC<br>Calvert City, KY | 3 | |
| Oxidizers | RI | 660 Gal | Stablex Canada<br>Blainville, QC | II.K.1.g.-1 | $232.00 |
| Reactives | RX | 220 Gal | Ross Incineration Services<br>Grafton, OH | II.K.1.g.-4 | $471.00 |

The closure cost estimate for the disposal of the waste inventory from all storage units at the facility is shown in Table II.K.1.g.-1.

## TRANSPORTATION

The cost of transportation was estimated based on actual invoices for waste shipments made from Triumvirate Environmental of Florida, Inc. These invoices are included in Exhibit II.K.1.g.-6. The table shown below summarizes transportation cost data.

## SUMMARY OF DATA USED TO ESTIMATE COST OF TRANSPORTATION

| FACILITY | DESTINATION | WASTE TYPE | # OF 55-GAL DRUMS | # OF TRIPS | COST/TRIP |
|---|---|---|---|---|---|
| AES Environmental LLC. | Calvert City, KY | Corrosives | 72 | 10 | $2,189.40 |
| | | Inorganics | 268 | | |
| | | Flammable Solids | 12 | | |
| | | Waste Fuels | 440 | | |
| Stablex Canada | Blainville, CA | Inorganics | 268 | 4 | $3,090.00 |
| | | Oxidizers | 12 | | |
| Ross Incineration Services | Grafton, OH | Poison - Organics | 8 | 1 | $2,075.00 |
| | | Reactives | 4 | | |
| | | Poison - Inorganics | 8 | | |

Table II.K.1.g.-2a shows the cost estimate for the transportation of the waste inventory described previously in this section.

## LABOR

Labor cost estimates for activities related to the decontamination of structures during facility closure are presented in Table II.K.1.g.-3a. The cost estimates were calculated from labor rates based on cost per man-hour and cost per square foot. The man-hour rate is for activities identified in Section II.K.1.d of this application. The man-hours assigned to certain closure operations in Section II.K.1.d. are used in Table II.K.1.g.-3a to estimate the cost of labor required to complete such activities.

A labor rate of $45/hr and work rate of 0.0041 hr/$ft^2$ were obtained from EPA's CostPro software program for the decontamination of floors. Cost of labor per square foot = $45/hour x 0.0041 hour/f1$^2$ = $0.1845/$ft^2$. In addition to the labor costs discussed above, the cost for renting a steam cleaner for four days is included in the estimate. These cost figures are reflected in Table II.K.1.g.-3a.

## SAMPLING AND TESTING

The costs of sampling and testing soils at the facility site are confined to the operations of obtaining the samples and to the laboratory charges for performing the testing on the samples. The labor rate for boring through concrete of $60.42 was derived from EPA's CostPro software. It was conservatively assumed that boring and collecting a soil sample would take one hour per sample. The same labor rate was used for the collection of the final rinsate sample from the container storage area and the consolidation/stabilization areas. Sample collection time for final rinsate sampling was assigned 0.5 hr/sample. A price quote has been obtained from Sun Labs, which shows the analytical cost for soils and final rinsates using the analytical methods specified in section II.K.1.e. This quote from Sun Labs is included in Exhibit II.K.1.g.-6. A cost estimate of the sampling and testing operations is presented in Table II.K.1.g.-4a.

## ENGINEERING

An independent, registered professional engineer will inspect the closure operations at certain intervals during the process to ensure that it meets the performance standards specified in this plan and requirements of the permit. A number of man-hours have been estimated for the engineer to review the plan at the beginning of the process, conduct three four-hour inspections at the site, and prepare the certification of closure at the end of the operations. Table II.K.1.g.-5a discloses the time periods that have been assigned to every task the engineer has to complete, as well as the cost of professional services per hour.
Table II.K.1.g.-6a contains a summary of the estimated costs for disposal, transportation, labor, sampling and testing, and engineering. A ten percent charge has been added to the sum of all costs to cover the cost of having a third party to manage and supervise the facility closure operations described in this plan. An additional ten percent has been added to cover potential contingencies.

**Table II.K.1.e.-1**

**SOIL SAMPLING LOCATIONS AND ANALYSIS METHODS**

| SAMPLING AREA NAME | SAMPLE LOCATIONS | CONTAINMENTS OF CONCERN | ANALYSIS METHOD |
|---|---|---|---|
| South-Container Storage Unit | SC 1 & 2 | Semi-Volatile Organics<br>Leachable RCRA Metals | 8270D<br>6010C |
| East-Container Storage Unit | EC 1 & 2 | Semi-Volatile Organics<br>Leachable RCRA Metals | 8270D<br>6010C |
| Northeast Container Storage | NC 1 - 4 | Non-Halogenated Volatile Organics<br>Semi-Volatile Organics<br>Leachable RCRA Metals | 8260<br>8270D<br>6010C |
| Consolidation/Stabilization Area (inside North Building) | CA 1 3 | Semi-Volatile Organics<br>Leachable RCRA Metals | 8270D<br>6010C |
| Consolidation/Stabilization Area (outside North Building) | SB 1 _4 | Semi-Volatile Organics<br>Leachable RCRA Metals | 8270D<br>6010C |

TOTAL SOIL SAMPLE LOCATIONS 15
TOTAL COMPOSITE SAMPLES 5

| Table II.K.1.g.-Ia | | | Total Cost |
|---|---|---|---|
| | | | |
| **A. CLOSURE COST ESTIMATE FOR DISPOSAL OF INVENTORY** | | | |
| | | | |
| 1. Container Storage Unit | **Unit Cost** | **Quantity** | **Total** |
| | | | |
| a. Corrosive Liquids- 55gal CO/CL | $ 60.00 | 60 | $ 3,600.00 |
| b. Waste Fuels- 55gal HI/WF | $ 35.00 | 440 | $ 15,400.00 |
| c. Inorganic Waste- 55gal MH | $ 71.00 | 268 | $ 19,028.00 |
| d. Poison-Organic Waste- 55gal PH1 | $ 295.00 | 8 | $ 2,360.00 |
| e. Poison-Inorganic Waste- 55gal PH2 | $ 295.00 | 8 | $ 2,360.00 |
| f. Oxidizers-55gal RI | $ 180.00 | 8 | $ 1,440.00 |
| g. Flammable Solids-55gal RI | $ 95.00 | 12 | $ 1,140.00 |
| h. Reactives- 55gal RX | $ 471.00 | 4 | $ 1,884.00 |
| | | | |
| Disposal Cost for the Container Storage Unit | | | **$ 47,212.00** |

| | | | |
|---|---|---|---|
| **Table II.K.1.g.-2a** | | | |
| B. Closure Cost Estimate for Transportation of Inventory | | | |
| | | | |
| 90 Drums per Trip | | | |
| | | Quantitiy | |
| **1. AES Environmental, LLC.** | | | |
| Corrosive Liquids | | 72 | |
| Waste Fuel | | 440 | |
| Flammable Solids | | 12 | |
| | Total Drums | 524 | |
| | Trips | 6 | |
| | Trip Cost | $ 2,189.40 | |
| Total Transportation Cost | | $ 13,136.40 | |
| **2. Stablex Canada** | | | |
| Inorganics | | 268 | |
| Oxidizers | | 12 | |
| | Total Drums | 280 | |
| | Trips | 4 | |
| | Trip Cost | $ 3,090.00 | |
| Total Transportation Cost | | $ 12,360.00 | |
| **3. Ross Incineration Services** | | | |
| Poisons | | 16 | |
| Reactives | | 4 | |
| | Total Drums | 20 | |
| | Trips | 1 | |
| | Trip Cost | $ 2,075.00 | |
| Total Transportation Cost | | $ 2,075.00 | |
| Total Cost for Transportation Inventory | | | **$ 27,571.40** |

**Table II.K.1.g.-3a**

C. CLOSURE COST ESTIMATE OF LABOR FOR DECONTAMINATION AND DISPOSAL

| Container Storage Unit | Unit Cost | Quantity | Total Cost |
|---|---|---|---|
| Labor for loading wastes for transportation in man-hrs: Cost of labor per man-hr: | 45 | $40.00 | 1800 |
| Cost of loading wastes for transportation Area of structure to be decontaminated in sq. ft.: Cost of labor per sq. ft.: Cost of decontamination of structures: | $0.1845 | 5488.00 | $1,013.00 |
| Consolidation/Stabilization Area (inside North Building) Area of structure to be decontaminated in sq. ft.: Cost of labor per sq. ft.: Cost of decontamination of structure | $0.1845 | 3583.00 | $661.00 |
| Consolidation/Stabilization Area (west of North Building) a. Area of structure to be decontaminated in sq. ft.: Cost of labor per sq. ft.: Cost of decontamination of structure: | $0.1845 | 1000.00 | $885.00 |
| Steam Cleaner Rental Number of days for using the cleaner: Cost of renting the cleaner per day: Cost of steam cleaner rental: | $250.00 | 1.00 | $250.00 |

TOTAL COST FOR DECONTAMINATION OF STRUCTURES: $3909

**Table II.K.1.g.-4a**

D. CLOSURE COST ESTIMATE FOR SAMPLING AND ANALYSIS

| Container Storage Unit | Unit Cost | Quantity | Total Cost |
|---|---|---|---|
| | | Unit Cost Quantity | Total Cost |
| 1. Soil Sampling: Number of borings for sampling of soils: Cost per boring: | $60.4200 | 15.00 | $906.00 |
| 2. Soil Testing: | | | |
| a. Number of soil tests using analysis method 8270: Cost per test: Cost of soil test using analysis method 8270 | $250.00 | 5.00 | $1,250.00 |
| b. Number of soil test using analysis method 8260: Cost per test: Cost of soil test using analysis method 8260: | 95 | 1.00 | $95.00 |
| c. Number of soil test using analysis method 1311/6010: Cost per test: Cost of soil test using analysis method 1311/6010: | 125 | 5.00 | $625.00 |
| Total Cost for Sampling and Analysis of Soils: | | | $2,876.00 |

## FINAL RINSATE SAMPLES:

| | | | | | |
|---|---|---|---|---|---|
| 1. | Sample Collection: | | | | |
| | Time required to collect 3 samples: Labor rate per hour: | $ 60.42 | 1.5 hr | $ 91.00 | |
| | Labor cost for sample collection: | | | | |
| 2. | Rinsate Analysis: | | | | |
| | Number of samples | | 3 | $1,125.00 | |
| | Analytical cost per sample Total rinsate analysis cost | $375.00 | | | $ 1,216.00 |
| | Total Cost for Sampling and Analysis of Final | | | | $ 4,092.00 |

**Table II.K.1.2.-5a**

E.CLOSURE COST ESTIMATE FOR ENGINEER CERTIFICATION

| | | | | |
|---|---|---|---|---|
| Time to review closure plan in hrs: | | 4 | | |
| Time to inspect closure operations in hrs: | | 12 | | |
| Time to prepare certification of closure in | | 4 | | |
| Professional services in hrs: | | 20 | | |
| Cost of professional service per hr: | $ | 75.00 | | |
| Cost of engineer certifications: | | | 1,500.00 | |
| TOTAL COST OF ENGINEER CERTIFICATION FOR CLOSURE | | | | $ 1,500.00 |

**Table II.K.1.g.-6a**
Summary of Closure Cost Estimates

| | |
|---|---|
| A. Disposal of Inventory | $47,212.00 |
| B. Transportation of Inventory | $27,571.40 |
| C. Decontamination of Structures | $3,909.00 |
| D. Sampling and Testing of Soils and Final Rinsates | $4,092.00 |
| E. Engineer Certification: | $1,500.00 |
| 10% for Management and Supervision | $8,428.44 |
| 10% for Contingencies | $8,428.44 |
| Total Closure Cost Estimate | $101,141.28 |

II P

P. Information Regarding Potential Releases from Solid Waste Management Units:

*A Solid Waste Management Unit (SWMU) is a discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include all areas at a facility where solid wastes have been routinely and systematically released, as described in the July 27, 1990 Federal Register (55 FR 30798). The SWMU list in DEP Form 62-730.00(2)(c) does not include all types of SWMUs: these are a sampling of the more common types of units. If you have a different type of Solid Waste Management Unit, mark yes under "other."*

Solid waste, including hazardous waste, is stored onsite in permitted areas. The storage areas contain secondary containment and have equipment capable of cleaning potential releases. Information on contingencies for potential releases are located

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

Facility Name: Triumvirate Environmental (Florida) Inc.

EPA/DEP I.D. No.: FLD980559728

Facility location: Orlando (city) Florida (state)

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

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

| | | |
|---|---|---|
| landfill | ☐ Yes | ☒ No |
| surface impoundment | ☐ Yes | ☒ No |
| land farm | ☐ Yes | ☒ No |
| waste pile | ☐ Yes | ☒ No |
| incinerator | ☐ Yes | ☒ No |
| storage tank | ☒ Yes | ☐ No |
| container storage area | ☐ Yes | ☒ No |
| injection wells | ☐ Yes | ☒ No |
| wastewater treatment units | ☐ Yes | ☒ No |
| transfer station | ☐ Yes | ☒ No |
| waste recycling operations | ☒ Yes | ☐ No |
| land treatment facility | ☐ Yes | ☒ No |
| boiler/industrial furnace | ☐ Yes | ☒ No |
| other (units not listed above) | ☒ Yes | ☐ No |

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

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

   Provide the following information for each SWMU:

   a. Date of release.
   b. Specifications of all wastes managed at the unit, to the extent available.
   c. Quantity or volume of waste released.
   d. Describe the nature of the release (i.e., spill, overflow, ruptured pipe or tank, etc.)
   e. Location of the unit on the topographic map provided under 40 CFR 270.14(b)(19).
   f. Designate the type of unit.
   g. General dimensions and structural description (supply any available drawings).
   h. Dates of operation.

4. On separate sheet(s) of paper, provide for each unit all analytical data that may be available which would describe the nature and extent of the environmental contamination that exists as a result of the prior releases described in three (3.) above. Focus on the concentrations of hazardous wastes or constituents present in contaminated soil or groundwater [40 CFR 270.14(d)(3)].

Part II.Q

**Q. Information Requirements For Solid Waste Management Units**

Currently, no corrective action is required by DEP for any Solid Waste Management Units (SWMUs) or Areas of Concern (AOCs) at the facility. This section provides historical information regarding the facility SWMUs. No AOCs have been listed for the facility.

EPA performed a visual site inspection at the facility on January 13, 1987. EPA's memo dated January 26, 1987 recommended no further action at that time.

On April 30, 1992, EPA visited the site to update the SWMU list to effectively write the Hazardous and Solid Waste Amendments (HSWA) permit. The report for the site visit recommended no further action, except for SWMU 7 (catch basin) for which soil sampling was recommended.

On June 29, 1992, EPA conducted a Case Development Investigation Evaluation at the site. During this evaluation, one water sample and two soil samples were collected with respect to SWMU 7. Based on the water sample collected from SWMU 7, it was concluded that there was no significant contamination resulting from surface water runoff from the parking area. The EPA report dated July 1992 concluded that further investigation would be required to determine if the acetone contamination found in one of the soil samples can be attributed to runoff from a neighboring facility. The results of that examination are not known to Triumvirate Environmental.

EPA issued the HSWA portion of the RCRA permit, which became effective on August 10, 1995 and expired on August 10, 2005. This permit did not require a RCRA Facility Investigation (RFI) at the facility. The permit required no further action at all SWMUs, except for SWMU 7 (catch basin) and SWMU 9 (stormwater retention area — drainage swale). The permit required confirmatory sampling for SWMUs 7 and 9.

On February 5, 1996, EPA approved the revised Confirmatory Sampling Work Plan submitted on January 29, 1996 in accordance with Condition II.D.4. of the HSWA permit. The facility submitted a Confirmatory Sampling Report to EPA on April 15, 1996. This report showed that acetone and methylene chloride were detected at SWMUs 7 and 9, and at background locations. The concentrations of acetone in background samples were higher than the concentrations found at the SWMUs.

On July 8, 1996, EPA, based on its review of the Confirmatory Sampling Report, requested the facility to submit a focused RFI work plan for SWMU 7 and SWMU 9 to define the extent of soil contamination; to determine if the groundwater was contaminated; and to ascertain the source of acetone and methylene chloride detected during the confirmatory sampling.

In October 1996, the facility submitted the Focused RFI Work Plan to EPA for review and approval. On January 29, 1997, EPA approved the Focused RFI Work Plan.

On August 20, 1997, EPA, after reviewing the Focused RCRA Facility Investigation (RFI) Report dated May 1997, concluded that no further HSWA corrective action is required at the facility.

**A.1. List of SWMUs/AOCs requiring Confirmatory Sampling:**

| SWMU/AOC Number/Letter | SWMU/AOC Name | SWMU/AOC Comment and basis for Determination | Dates of Operation |
|---|---|---|---|
| | | | |

There are no units requiring Confirmatory Sampling at this time

**A.2. List of SWMUs/AOCs requiring a Site Assessment (a/k/a RCRA Facility Investigation [RFI]) or a Risk Assessment:**

| SWMU/AOC Number/Letter | SWMU/AOC Name | SWMU/AOC Comment and basis for Determination | Dates of Operation | Potentially Affected Media |
|---|---|---|---|---|
| | | | | |

There are no units identified at this time as requiring

**A.3. List of SWMUs/AOCs requiring a Remedial Action Plan or Natural attenuation with Monitoring Plan (a/k/a Corrective Measures Study [CMS]):**

| SWMU/AOC Number/Letter | SWMU/AOC Name | SWMU/AOC Comment and basis for Determination | Dates of Operation |
|---|---|---|---|
| | | | |

There are no units identified at this time as requiring a Remedial Action Plan or Natural Attenuation with Monitoring Plan.

**A.4. List of SWMUs/AOCs implementing a Remedial Action Plan or Natural Attenuation with Monitoring Plan (a/k/a Corrective Measures Study [CMS]):**

| SWMU/AOC Number/Letter | SWMU/AOC Name | SWMU/AOC Comment and basis for Determination | Dates of Operation |
|---|---|---|---|
| | | | |

There are no units identified at this time implementing a Remedial Action Plan or Natural Attenuation with Monitoring Plan

**A.5. List of SWMUs/AOCs at which Site Rehabilitation Completion Determinations without controls have been made:**

| SWMU/AOC Number/Letter | SWMU/AOC Name | Unit Comment and Basis for NFA |
|---|---|---|
| | | |

There are no units identified at this time at which Site Rehabilitation Completion Determinations without controls have been made.

**A.6. List of SWMUs/AOCs at which Site Rehabilitation Completion Determinations with controls have been made:**

| SWMU/AOC Number/Letter | SWMU/AOC Name | Unit Comment and Basis for NFA |
|---|---|---|
| | | |

| There are no units identified at this time at which Site Rehabilitation Completion Determinations with controls have been made. | | |
|---|---|---|
| **A.7. List of SWMUs/AOCs Where No Further Action Determinations have been made based on no suspected or confirmed contamination:** | | |
| SWMU/AOC Number/Letter | SWMU/AOC Name | Unit Comment and Basis for NFA |
| SWMU 1 | Container Storage Area (East subunit and Universal Waste Storage) | Regulated Unit |
| SWMU 2 | Emergency Spill Containment Tanks | Closed 2009 |
| SWMU 3 | Waste Oil Sump (closed | Closed April 20, 1992 |
| SWMU 4 | Container Storage Area (South subunit) | Regulated Unit |
| SWMU 5 | Container Storage Area (northwest subunit) | Regulated Unit |
| SWMU 6 | Portable Band Saw Area | Closed 2009 |
| SWMU 7 | Former Catch Basin | CS 1996, Closed 1997 |
| SWMU 8 | Roll-Off Box staging area | No evidence of release |
| SWMU 9 | Former stormwater retention area | CS 1996, Closed 1997 |
| SWMU 10 | Bermed unloading area (by the dock) | No known releases |
| SWMU 11 | Stormwater Retention Area | No known releases |
| SWMU 12 | Consolidation Area A (Inside North Building) | No known releases |
| SWMU 13 | Consolidation Area B (Oustide North Building) | Closed 2009 |
| SWMU 14 | Used Oil Tank | No evidence of release |

| **SWMU #14** | |
|---|---|
| **Used Oil Storage Tank** | |
| Description | 22,000 Gallon Capacity Tank. Horizontal Cylinder orientation. Double-wall steel. Dimensions: 120" diameter by 455" in length |
| Operational History | Installed in 2009 |
| Status | Active |
| Waste Characteristics | Used Oil, Antifreeze, Oily Water, and Off-Spec Fuel |
| Waste Management | Storage and Transfer Unit |
| Maintenance Procedures | Monthly Inspections |
| Release History | No Known Releases |
| Potential Pathways | Storm Water Runoff Drain |
| Exposure Potential | On-Site Retention Basin |
| Remedial Action | None |

Part II.R

## R. Process Vents

*The applicant must provide the following information in accordance with 40 CFR, Subpart AA or Part 265, Subpart AA. [270.241*

1. *Facilities that cannot install a closed-vent system and control device to comply with the provisions of 40 CFR Part 264, Subpart AA or Part 265, Subpart AA on the effective date that the facility becomes subject to the provisions of this subparts, must attach an implementation schedule as specified in 264.1033(a)(2).*

   There are no process vents that are regulated under Subpart AA at the Triumvirate Environmental facility. Subpart AA regulations apply to process vents associated with distillation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw. Triumvirate Environmental does not have any such hazardous waste operations at the facility. Hence, the requirements of Subpart AA do not apply.

Part II.S

## S. Requirements for Equipment

Subpart BB regulations apply to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10% by weight. The only process that could fall under this requirement would be the consolidation process where portable pump(s) and flexible hoses may be utilized. However, such equipment is not likely to be used for 300 hours or more per calendar year. As provided in 40 CFR 264.1050(f), equipment that contains or contacts hazardous waste with an organic concentration of at least 10% by weight for less than 300 hours is exempt from all requirements of 264.1052 through 264.1060 if such equipment is identified as required in 264.1064(g)(6). Equipment to be identified is the portable pumps and hoses (including any connections and valves) used in the consolidation process for consolidating pumpable liquids from smaller containers to larger containers for hazardous wastes with organic concentrations of at least 10% by weight.

Thus, Subpart BB requirements do not apply to Triumvirate Environmental, other than identifying equipment per 264.1064(g)(6), which is addressed in the paragraph above.

## Sa. Requirements for Tanks and Containers

Regulations in 40 CFR Part 264, Subpart CC limit emissions from tanks, containers >0.1 $m^3$ in capacity and surface impoundments handling hazardous waste with volatile organic content greater than or equal to 500 ppmw.

Triumvirate Environmental does not have tanks or surface impoundments for storage or treatment of hazardous wastes. Subpart CC regulations will apply to containers used for storage/treatment of hazardous waste with volatile organic content of greater than or equal to500 ppmw. The following containers are exempt from Subpart CC requirements:

- Containers with <0.1 $m^3$ in capacity;
- Containers holding hazardous wastes that meets the numerical concentration limits for organic hazardous constituents specified in the land disposal restrictions of 40 CFR 268.
- Containers holding hazardous waste with an organic volatile concentration of <500 ppmw.

Per the requirements of 40 CFR 264.1086, containers at Triumvirate Environmental could be subject to Level 1 or Level 2 air emission controls depending upon its capacity (i.e., >0.1 $m^3$ to 0.46 $m^3$, or >0.46 $m^3$). Container Level 3 controls potentially apply to containers >0.1 $m^3$ used for treatment of a hazardous waste by a waste stabilization process. However, Triumvirate Environmental Inc. will conduct treatment in containers by the waste stabilization process only for RCRA metal wastes that do not contain organic volatile concentrations of >500 ppmw. Hence, containers utilized for the waste stabilization process will not be subject to Subpart CC as exempted by 40 CFR 264.1082(c)(1).

Triumvirate Environmental Inc. will meet the requirements of Subpart CC under Control Level 1 (applicable containers <0.46 $m^3$ in capacity) by ensuring that containers meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials; by keeping the containers closed except for sampling, inspection, and waste removal or addition; and, by visually inspecting the container and its cover and closure devices within 24 hours of acceptance at the facility, and weekly thereafter if applicable.

Triumvirate Environmental will meet the requirements of Subpart CC under Control Level 2 (applicable containers >0.46 $m^3$) by ensuring that the containers meet the applicable DOT regulations on packaging; transferring hazardous waste content in or out of the container by submerged filling; by keeping the containers closed except for sampling, inspection, and waste removal or addition; and, by conducting visual inspections of the container, its cover, and closure devices within 24 hours after acceptance at the facility, and weekly thereafter if applicable.

**Triumvirate Environmental (Florida), Inc.'s**

# Contingency Plan For Solid & Hazardous Waste Operations

*Facility Location:*

**10100 Rocket Blvd, Orlando FL 32824**

Update Prepared by:
John Wyluda
Lab Services/Compliance Coordinator

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# CONTINGENCY PLAN

## 1.0 INTRODUCTION

This document is prepared for Triumvirate Environmental, Inc. (to comply with state regulations for facilities permitted to manage hazardous wastes. The regulations require such facilities to insert into the permit application a copy of the contingency plan to be reviewed by the Florida Department of Environmental Protection (DEP) and approved with the issuance of the corresponding permit. A prior version of this plan, prepared for Perma-Fix of Orlando, Inc. was submitted and approved with the previous permit application. Triumvirate Environmental Inc. updated the Contingency Plan with a name change upon purchase of the facility in October 2011 and maintains an updated version at the facility. Permitted facilities are required to provide a copy of the contingency plan to emergency response organizations likely to respond to incidents at the facility. This document is designed to provide helpful information about installations and potential hazards to emergency personnel responding to incidents at the facility, as well as to instruct facility personnel on what steps to take in case of emergency incidents.

The facility is designed, constructed, maintained and operated to minimize fire, explosion or unplanned release to media that could threaten human health and the environment (40 CFR Part 264.51(a)) This document contains plans and procedures established at Triumvirate Environmental , Inc. to minimize hazards to human health, property, and the environment in case of spills, fires, explosions, or other incidents that may release hazardous waste from storage and treatment units at the facility.

Plans and procedures in this document include information on emergency service organizations, assessment of potential dangers, decision criteria and implementation methods for the contingency plan, emergency procedures, an evacuation plan, and a list and location of emergency equipment. This document also contains the names of persons responsible for coordinating emergency activities and the names of local government, regulatory agencies, institutions, and contractors that will provide support, mitigation, and relief in case of emergencies. A copy of the contingency plan will be maintained at the facility and will be located in the drop-box, outside of the facility gate, that is maintained by the local fire department along with updates being provided to local emergency service organizations as needed.

## 2.0 GENERAL INFORMATION

This contingency plan and emergency procedures are prepared for Triumvirate Environmental Inc. with a mailing and site address at 10100 Rocket Boulevard, Orlando, Florida 32824. The facility telephone number is (407) 859-4441. The facility site is located in the southwest part of Orlando in the Regency Industrial Park, located approximately 3.5 miles west of the Orlando International Airport and about 1.5 miles to the southeast from the intersection of State Road 528 (Bee-Line Expressway) and the Florida Turnpike. The Triumvirate Environmental, Inc. site may be accessed from north and south Orange Blossom Trail (OBT) through Taft-Vineland Road and the Central Florida Parkway, respectively, and through Taft-Vineland Road from Orange Avenue. The closest road intersection on Rocket Boulevard from the facility is General Drive, which is located half a block away to the west.

The facility stores hazardous and non-hazardous wastes in containers. Hazardous wastes received at Triumvirate Environmental, Inc. are generated by manufacturing and service industries. The hazardous wastes are transported to the facility in DOT-approved containers. The wastes received at Triumvirate Environmental, Inc. are consolidated in larger containers or shipped out in the same container in which they were received by the facility.

## 3.0 EMERGENCY SERVICE ORGANIZATIONS

Table II.A.4.b.-1 lists the service type, name of the service organization, and telephone number for each organization that has been identified as a potential emergency service organization. This list will be posted near telephones located in areas from which emergency calls are most likely to be made to provide callers with the information necessary to summon help in case of an incident.

The type of organizations that are most needed in case of an emergency are: Emergency Response (Hazardous Materials) Team, Fire Department, Hospital, and Sheriff's Department. Figure II A 7 shows the locations of the organizations mentioned in the previous sentence that are closest to the Triumvirate Environmental (Florida), Inc. site. These organizations will be provided with a copy of the contingency plan upon its approval by the Florida DEP. These organizations will also be notified every time there is a change in –

1. emergency coordinators.
2. waste type or location of waste types that pose an additional or different safety concern to the ones described in this plan.
3. structures, equipment, or operations that affect the way this plan is to be implemented.
4. structures, equipment, or operations that alter the level of hazard at the facility
5. emergency procedures contained in this plan that may affect the level of service to be rendered by these organizations.

This document will be amended to reflect any of the changes described above, and a copy of the amended document will be provided to those organizations. This plan will also be amended when changes are necessary to improve response to emergencies. Finally, this plan will be amended if the plan fails in an emergency (40 CFR Part 264.54(b)).

Emergency organizations are expected to provide the following support during emergencies:

### Hazardous Materials Emergency Response Team

The emergency coordinators and cleanup contractor(s) will help mitigate hazards posed by hazardous materials that are out of control and help retrieve injured personnel from hazardous environments. The local emergency response team, from the local fire department, that renders this type of service is the Hazardous Materials Response Team #50, which is located near the intersection of Interstate 4 (I-4) and U.S. Highway 441 (OBT) about 7 miles north of the site at 1415 West 29 Street, Orlando (about 12 minutes from the facility). This unit is known as Squad 1. This organization will be provided with a copy of this contingency plan.

## Fire Department

The Orange County Fire Department has visited the facility to familiarize themselves with the operations and in addition to conducting yearly inspections. The Orange County Fire Department will respond to fires and other emergency incidents providing fire protection and rescue services. The department operates units located in several stations near the Triumvirate Environmental, Inc. site. These stations and their response capability are listed below.

Station #73: This unit is located in the town of Taft less than 2 miles northeast from the site at the intersection of Orange Avenue (State Road 527) and 1st Street, at 811 E. 1st Street, Orlando. The response time for this unit is about 4 minutes. This unit will be the first responder in the event of a fire.

Station #53: This unit is located just east of OBT about 2 miles northeast from the site, at 1270 La Quinta Drive, Orlando. The response time is approximately 6 minutes. The unit can provide medical support.

Station #51: This unit is located just west of OBT about 4.5 miles north from the site, at 1700 W. Oakridge, Orlando. The unit's response time is approximately 10 minutes. The unit can provide a ladder truck in case of a fire.

A copy of the contingency plan for the Orange County Fire Department will be provided to the Deputy Chief, Operations at the Orange County Fire Rescue Division, 6590 Amory Court, Winter Park, Florida 32792 upon approval of the plan by the Florida DEP.

## Hospital

Orlando Regional Healthcare (ORH) is capable of providing almost all emergency medical services that may be needed by injured personnel. ORH offers minor trauma services at the Dr. P. Phillips Hospital located just west of I-4 and about 6 miles east of the site, at 9400 S. Turkey Lake Road, Orlando. The time of travel is about 10 minutes from the facility. ORH offers major trauma services at the Orlando Regional Medical Center (ORMC) located about 8 miles north of the site at 1414 Kuhl Avenue, Orlando, Florida 32806. The time of travel to this unit is about 14 minutes from the facility. A copy of the contingency plan will be mailed to the ORMC upon approval of this plan by the Florida DEP.

## Sheriff's Department

The Orange County Sheriff's Office is available to direct traffic, handle crowds, and provide security during emergency situations. The Sheriff will be provided a copy of this document at the Orange County Sheriff Office, 2500 W. Colonial Drive, Orlando, Florida 32802, upon its approval by the Florida DEP.

Copies of the contingency plan, in accordance with statements shown above, will be provided to the emergency service organizations within 30 days after the application is deemed complete. Certified return receipt slips providing proof of mail and delivery of the documents will be kept with pertinent records at the facility.

Incidents of large magnitude may require the use of heavy equipment for containment, removal, and transportation of contaminated materials. In the event that the heavy equipment is not available, Triumvirate Environmental, Inc. will seek the help of outside emergency response contractors to assist the facility during special emergency circumstances. Triumvirate Environmental Inc. has contacts with Eagle SWS Emergency Response and with Clean Harbors of Florida, LLC.

## 4.0 EMERGENCY COORDINATORS

In case of emergency, the following people would be in charge of emergency coordination and remedial action. Each coordinator will be available 24/7:

| NAME | HOME ADDRESS | PHONE |
|---|---|---|
| Thomas Montgomery (Primary) | 524 Bamboo Harbour Court Orlando, FL 32825 | Cell: (407) 495-8483 |
| David Chambers (Secondary) | 3339 Bracken Fern Drive Harmony FL 34773 | Cell: (407) 756-2272 Alt #: (321) 514-9234 |
| Eden Tuccillo (Alternate) | 742 Battery Pointe Drive Orlando, FL 32828 | Cell: (407) 415-3950 Alt #: (407) 923-3409 |

If an emergency situation develops at the facility, the discoverer should contact an emergency coordinator listed above. The primary emergency coordinator should be contacted first. If they are not available, the secondary emergency coordinator should be called.

The primary emergency coordinator and his alternate have the authority to commit all resources of the company in the event of an emergency.

## 5.0 AREAS AND MATERIALS PRESENTING POTENTIAL HAZARDS

The facility has certain areas that present a potential hazard because of the materials that are stored or processed at those locations. The degree of hazard present in these areas is based on the material types, the quantities managed, and the level of handling such materials. These areas are the Container Storage Unit and the two Consolidation Areas. Figure IIA5 contains a layout of the Triumvirate Environmental, Inc. facility showing the areas listed above. The portion of the facility that includes the areas mentioned above is considered the "active portion of the facility". This section of the plan describes each area in detail, the operations conducted in each area, the materials handled, and where each type of material is stored or processed.

### 5.1 Container Storage Unit

This area receives hazardous and non-hazardous waste in drums that are stored on pallets. The pallets are, at the most, double-stacked, with each pallet holding up to four 55-gallon

drums. The pallets are placed in rows, as depicted in Figure I D 1. Every storage cell is identified with a sign showing the DOT hazard class(es) of compatible wastes stored in the cell. The compatibility of different wastes within a cell is determined by a compatibility system established by the Department of Transportation (DOT).

The reason for using the DOT compatibility system is to prevent two incompatible materials from coming in contact with each other and generating a reaction, which could result in fire, explosion, or generation of toxic gases. EPA hazardous waste codes are assigned based chemical lists and on the hazardous characteristics exhibited by the material. These characteristics may be ignitability, corrosivity, reactivity, or toxicity. A DOT hazard class is a number that indicates the category that has been assigned to a material based on the type of hazard it presents. Table II.A.4.b.-2 contains the Segregation Table obtained from DOT. It has been modified to delete hazard classes that Triumvirate Environmental (Florida), Inc. is not permitted to manage at the facility (1.1 through 1.6 - explosives, and 7 - radioactives).

The next table, labeled Table II.A.4.b.-3, lists the hazardous wastes stored in the container unit by waste description, EPA hazardous waste code and chemical abstracts service (CAS) registry number. This table is helpful in identifying the waste material because it shows the description and the CAS number, which can be used to find information about the material in chemical dictionaries, Safety Data Sheets (SDS's), or other chemical information sources. This table identifies unaltered waste materials based on the assigned hazardous waste codes. Waste material properties and characteristics may be changed by the generation process or other conditions. DOT hazard classes shown on containers that are stored in this unit are based on the actual properties and characteristics exhibited by the waste materials in the containers, in accordance with an evaluation of the waste completed before the waste was received by the facility. The containers in this unit are placed in cells with the hazard classes displayed on the container and each cell. The purpose of the segregation system instituted by Triumvirate Environmental Inc. is to indicate to operators where to place specific waste containers within the unit and to provide emergency responders with an easy and quick way to identify hazards present within the unit.

There is a special cabinet for Division 4.3 Dangerous When Wet (water-reactive) wastes. It will protect up to four 55-gallon drums from water in case the sprinklers inside the container storage unit are activated. It is typically kept in the northeast corner of the container storage area. A sketch of the cabinet is provided as Exhibit II.B.1.-2. The cabinet is equipped with a dry chemical fire suppression system, and will store a maximum of four 55-gallon drums.

Figure I D 1 shows the container storage unit, with locations of each row of pallets. Signs showing the corresponding hazard classes for wastes currently stored in every cell will be posted on cell walls at locations clearly visible for first responders.

## 5.2 Consolidation Areas (pending DEP acknowledgement)

Triumvirate Environmental, Inc. is authorized to consolidate compatible hazardous wastes stored in containers, that are equal to or greater than one gallon, into larger containers. Hazardous waste which can be disposed of together at an approved hazardous waste facility will only be consolidated together. Only hazardous waste that has passed the acceptance procedures described in the Waste Compatibility Test Manual will be consolidated. Triumvirate

Environmental, Inc will not consolidate acids, inhalation hazards, or oxidizers. Flammable material which is intended for fuel blending or incineration may be consolidated contingent upon NFPA upgrades. The Waste Compatibility Test Manual, attachment II.A.5/6-1, will determine compatibility in determining which waste streams will be intended for consolidation. Consolidations will take place in the lower warehouse, identified in Figure II.A.5.

## 6.0 IMPLEMENTATION OF CONTINGENCY PLAN

The decision to implement the contingency plan depends upon whether or not an imminent or actual incident could potentially threaten human health and safety or the environment. This plan provides specific guidelines for activating the emergency procedures in the contingency plan. Three factors will be evaluated: potential hazards of confined spills, spills affecting incompatible wastes, and uncontrolled spills. If a spill inside a secondary containment poses a threat in the form of fire or explosion or creates a health problem, the contingency plan will be activated.

Emergency procedures in the contingency plan will be implemented when spilled material comes in contact with incompatible wastes and there is a potential of a reaction that may result in fire, an explosion, or generation of poisonous or flammable gases. Uncontrolled spills that have the potential or have resulted in releases to the environment in magnitudes that equal or exceed reportable quantities in the 40 CFR 302.4 will also require the implementation of the contingency plan. Releases are defined in the 40 CFR 302.3. The Florida DEP will be notified of incidents at the facility requiring the implementation of the contingency plan or when the size of the release into the environment equals or exceeds the reportable quantities or when a material exceeds the volume on chapter 62-150 hazardous substance release notification. Spills will be documented in inspection records. The next sections will provide guidance to the emergency coordinators in making decisions by providing explicit instructions to be carried out in the event of an emergency.

## 7.0 EMERGENCY PROCEDURES

Upon being notified by facility personnel or government officials of a hazardous waste release that could threaten human health or the environment, as determined by the Emergency Coordinator, he/she will -

1. immediately identify the character, exact source, amount, and real extent of any released materials via observation, review of facility records, or chemical analysis, if necessary.

2. call in any extra personnel needed to complete the initial evaluation of the situation.

3. concurrently assess possible hazards to human health or the environment via the above determinations.

4. notify key support and key management personnel.

5. activate alarm systems and conduct an evacuation, as necessary.

6. seek assistance from the Orange County Sheriffs Department, Fire Department and the Florida DEP Central District, as needed.

7. notify either the government official designated as the on-scene coordinator for that geographical area or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

   (i) Name and telephone number of reporter
   (ii) Name and address of facility
   (iii) Time and type of incident (e.g., release, fire)
   (iv) Name and quantity of material(s) involved, to the extent known
   (v) The extent of injuries, if any, and
   (vi) The possible hazards to human health, or the environment, outside the facility

8. notify the Florida DEP's 24-hour warning point at 1-800-320-0519 if human health or the environment may be threatened outside the facility. The determination for the need of notification shall be made with the knowledge of the above assessment of actual conditions.

9. take all reasonable measures necessary during an emergency to ensure that fires, explosions, and releases do not occur, recur, or spread to the other hazardous waste at the facility. All operations shall stop, containers shall be removed and isolated, containment systems shall be inspected, and emergency equipment shall be utilized.

10. provide for treating, storing, or disposing of recovered waste, contaminated soil, or any other material that results from a release, fire, or explosion at the facility. No waste that may be incompatible with the released material is treated, stored or disposed of until cleanup is completed-264.56(h)(1)

11. ensure that all emergency equipment is cleaned and fit for its intended use before operations are resumed. Used fire extinguishers shall be replaced, and other equipment shall be inspected as necessary.

12. notify the FDEP, and appropriate state and local authorities that the cleanup has been completed; the released material has been treated, stored, or disposed of; and emergency equipment has been cleaned and fit for use before operations are resumed in the facility.

13. submit a written report on the incident to the FDEP, within 15 days after the incident and identify such incidents in the facility operating record. The report will include:

   (i) Name, address, and telephone number of the owner or operator
   (ii) Name, address, and telephone number of the facility
   (iii) Date, time, and type of incident (e.g., fire, explosion)
   (iv) Name and quantity of material(s) involved

(v) The extent of injuries, if any
(vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable, and
(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

14. Submit notices and information required by the hazardous waste permit (e.g., information may be required that identifies a new Solid Waste Management Unit as a result of a release).

15. If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate. 264.56(f)

## 7.1 Responses to Fires, Explosion, and Releases

The previous section was designed to provide general guidance for making decisions and to be used as a check-list during the implementation of the contingency plan. This section deals with the effect that the type and amount of waste materials managed in the operation areas may have on the occurrence and development of emergency incidents at the facility. It also indicates features and equipment found or available in the area that may help mitigate such incidents. The two types of incidents discussed here are only fire and waste material release. Explosions will result either in a fire or a release, which are the incidents addressed in this plan.

### 7.1.1 Container Storage Unit

This area is considered the area within the active portion of the facility that presents the highest level of potential hazard because of the quantity and types of waste materials that may be present in the area. The largest potential danger in this unit is fire due to the possibility that ignitable material may be stored in it. Containers that arrive at this unit are opened only for sampling, after which they are placed in a storage cell in accordance with the DOT hazard class displayed on the container. As explained in section 5.1 above, the waste materials are segregated into cells having separate secondary containments. Cell segregation and careful management of container placement shall prevent commingling of incompatible wastes. Only small fires will be fought in this area by using any of the 5-pound, 20-pound, or 150-pound fire extinguishers located inside or outside near the entrances to the unit. Personnel will not attempt to extinguish fires where there is a threat that their escape path is threatened. If the fire is not put out within a short time of the fire's initial stage, the fire alarm will be activated as the first step in the implementation of the contingency plan. This storage unit is equipped with an automatic fire sprinkler system that covers the unit's entire area.

Every cell in this unit is provided with secondary containment capable of containing more than 10% of the maximum storage volume permitted for the cell. If the secondary containment capacity of a cell is exceeded, overflow will spill into another cell, from which, when exceeded, overflow will spill into another cell, and so on. The only way a spill may be released outside the

unit is if the spill becomes of such magnitude that it exceeds all the internal cells' secondary containment volumes, and the capacity of the berm that surrounds the entire unit. The berms and walls that surround the entire unit are higher than the berms that provide containment for the internal cells. Therefore, a release to areas outside the container storage unit is unlikely.

Spills confined to the cell where the spill occurs should not present a hazard to human health or the environment as long as the spill is cleaned up within a reasonable period of time in accordance with proper safety procedures. Such spills will not activate the implementation of the emergency procedures in this contingency plan.

Spills that exceed the cells' secondary containment volume will not activate the implementation of the contingency plan as long as the spill only affects cells that store compatible waste materials. Spills will be confined to the smallest possible area using sorbent booms and oil dry. Standing liquid pools will be collected with air driven pumps and/or sorbent material. A spill from only one cell that affects another cell, which stores waste that is not compatible with the spilled material, will activate the implementation of the contingency plan, and the spill will be collected immediately if it can be determined that the clean-up can be done safely. Depending on the circumstances it might be better to allow first responders to assess. The spilled material will be transferred to containers and identified from information obtained in the waste characterization process. Spills where two or more waste streams become commingled may require testing of the release for characterization depending on whether spilled waste streams were identified and on whether the collected material may be substantially different from the spilled waste streams. Spills that result in releases outside the unit will require full implementation of the contingency plan. Waste spilled outside the unit may be contained by utilizing boom, stay-dry, or by creating earthen berms in the parking lot. If these berms are overrun, the waste will spill into the stormwater pond. Releases into the soil will require removal of contaminated soil and verification of decontamination through sampling and testing of surrounding soils. All collected wastes from spills will be properly disposed of by permitted methods.

### 7.1.2 Consolidation Area [Pending DEP Acknowledgement]

Triumvirate Environmental, Inc. is authorized to consolidate compatible hazardous wastes stored in containers, that are equal to or greater than one gallon, into larger containers. Hazardous waste which can be disposed of together at an approved hazardous waste facility will only be consolidated together. Only hazardous waste that has passed the acceptance procedures described in the Waste Compatibility Test Manual will be consolidated. Triumvirate Environmental Inc. will not consolidate acids, inhalation hazards, or oxidizers. Flammable material which is intended for fuel blending or incineration may be consolidated contingent upon NFPA upgrades. The Waste Compatibility Test Manual, attachment II.A.5/6-1, will determine compatibility in determining which waste streams will be intended for consolidation. Consolidations will take place in the lower warehouse, identified in Figure II.A.5.

The consolidation area inside the building is equipped with an automatic fire sprinkler system and there are a number of 5-pound, 20-pound, and 150-pound fire extinguishers either in the area or nearby.

**7.2 Procedures, Structures or Equipment used at the Facility to:**

*(a) Mitigate effects of equipment failure and power outages:*

During a spill and or emergency situation the contingency plan will be activated and proper equipment will be used. All powered equipment that is owned by Triumvirate Environmental, Inc. undergoes routine preventative maintenance schedules and pre and post trip inspections. As preventative maintenance and routine inspections are being done the event of an equipment failure is remote and in that event new equipment will be ordered. In the event of a power failure Triumvirate Environmental, Inc. will not conduct contingency operations until a generator, or other source of power is brought to the facility and the activities can be safely resumed.

*(b) Prevent hazards in unloading operations*

In any operation at the facility, including unloading operations, only facility staffs that are trained in the unique hazards of the facility are allowed to conduct work. All personnel working in the facility an extensive two part training that is outlined in the training program.

*(b) Prevent exposure to hazardous waste*

Facility personnel wear a level D uniform consisting of ANSI approved steel toe shoes, protective eyewear, and chemical resistant pants and long sleeve shirts. All drums and containers handled at the facility remained closed unless they are completing consolidation activities. Depending on the consolidation activities appropriate personnel protective equipment will be worn. In addition all facility employees are part of the medical surveillance program.

*(c) Prevent contamination of water and supplies:*

The facility strictly follows a storm water prevention plan (swpp) which prevents and mitigates water contamination. All supplies are kept separated from waste by either demarcation or by storing them in completely separate areas from waste materials.

*(d) Prevent run-off from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding*

Hazardous waste at the facility is stored in secondary containment in cells of like material. If the secondary containment cells over-fill the entire floor is also under secondary containment. The loading and unloading areas are equipped with emergency equipment as outlined in section 8.0 of the plan that will be used to prevent releases to the environment. In the unlikely event of hazardous waste making it to the parking lot all employees are drain to berm, dike and prevent a release from reaching the low point of the parking lot that discharges into the storm water prevention pond.

*(e) Prevent releases to atmosphere*

The facility handles liquid waste and any exhaust systems are designed to prevent worker contamination. The facility does not conduct activities that would release generate air pollutants.

## 8.0 EMERGENCY EQUIPMENT

The facility is equipped with the adequate emergency equipment to respond to several types of emergency incidents. The emergency equipment is placed in strategic locations where it can be reached quickly and safely in the event of an emergency.

All emergency equipment is dedicated to emergency situations and is not used for normal operations. Use of the emergency equipment is not limited to events that require implementation of the Contingency Plan. However, all emergency equipment will be cleaned and fit for use immediately after it has been used and will be placed in the locations indicated in this section of the plan. To control access to the cabinet and assure immediate identification of status, the cabinet will be secured with a seal that is easy to break. Only one person will be designated the keeper and replacer of the seals. Periodic inspections will ensure that the emergency equipment is complete and ready to use.

Alarm switches are located in the administration building. Since the property is small in area and all active areas and units are open to the outside, a spoken call for help can be heard in all the active areas of the facility where operators are working during working hours. An employee working alone will carry a walkie-talkie and/or a cell phone. The small area of the facility makes internal communication devices unnecessary for emergency situations.

A fire hydrant, located near the entrance to the facility, provides water in case of a fire. A fire sprinkler system services the container storage unit and the north building. A cellular phone will be available for the receptionist to use during power outages. Power outages will neither create an incident during normal operation processes nor affect response to emergency situations.

Figure II.A.5 shows the location of the emergency equipment. Table II.A.4.b.-4 lists the equipment stored in the cabinet and shown in the figure mentioned above.

## 9.0 EVACUATION PLAN

All emergencies require prompt and deliberate action. In the event of any major emergency, it will be necessary to follow an established set of procedures. Such established procedures will be followed as closely as possible; however, in specific emergency situations, the Emergency Coordinator may deviate from the procedures to provide a more effective plan for bringing the situation under control. The Emergency Coordinator is responsible for determining which emergency situations require plant evacuation.

Total plant evacuation is initiated only by the Emergency Coordinator. A fire alarm system is installed with alarm boxes located at critical areas in the facility. The fire alarms can also be used to summon aid in other emergency situations. All employees are familiar with relevant alarm box locations.

In the event plant evacuation is called for by the Emergency Coordinator, the following actions will be taken:

a. The instructions for plant evacuation will be communicated using the internal paging system.

b. No further entry of visitors, contractors, or trucks will be permitted. All vehicle traffic within the plant will cease to allow safe exit of personnel and movement of emergency equipment.

c. ALL personnel, visitors, and contractors will immediately leave through the exit gate to gather at the designated rally point.

d. No persons shall remain or reenter the location, unless specifically authorized by the person or persons calling for the evacuation. In allowing this, the person in charge assumes responsibility for those persons within the perimeter. Those within the fenced area will normally only include fire brigade personnel or emergency teams.

e. ALL persons will be accounted for by their immediate supervisors.

f. The appointed rally point is located at Rocket Boulevard by the east gate, Alternate rally point in any event the east gate is not accessible the rally point will be the west Gate. Immediately upon exit, the highest ranking supervisor will compile a list of all personnel at the rally point.

g. Upon completion of the employee list, the supervisor in charge will hand-carry the list to the Emergency Coordinator. All other personnel will remain at the gate area.

h. The names of plant personnel and/or other emergency team members involved in emergency response will be reported, in writing, to the front gate by designated response team personnel.

i. A final tally of personnel will be made by the Emergency Coordinator.

j. An attempt to find persons not accounted for will be made only if it does not involve endangering lives of others by reentry into emergency areas.

k. Reentry in the fenced area will be made only after clearance is given by the Emergency Coordinator. At his or her direction, a signal or other notification will be given for reentry into the plant.

l. In all questions of accountability, immediate supervisors will be held responsible for those persons reporting to them. Visitors will be the responsibility of those employees being visited. Contractors are the responsibility of those persons administering the individual contracts. Truck drivers are the responsibility of the warehouse supervisor or the area supervisor where the truck is loading/unloading.

m. Drills are held to practice all of these procedures and are treated with the same seriousness as an actual emergency.

Figure II A 9 shows routes employees and other persons at the facility at the time of an emergency will take when an evacuation is ordered.

## 10.0 NATURAL DISASTERS

The most probable natural disasters to affect the facility would be either a tornado or a hurricane. Warnings of approaching tornadoes and tropical storms/hurricanes may be received from the National Weather Service or local media. Also, the EPA maintains a website containing information on how to prepare for a hurricane. The webpage is entitled: *As Hurricane Season Begins: A Reminder to Minimize Process Shutdown Related Releases and to Report Releases in a Timely Manner*, and it can be located at:
http://www.epa.gov/region4/r4_hurricanereleases.html

With tornadoes, there is usually little time to make preparations. The only emergency action that can be taken during a tornado warning is to have all employees move to the center of the building they are in. All employees working outside will be notified and required to move inside to a safer location.

Early warning is possible with tropical storms/hurricanes. If it becomes apparent that a tropical storm or hurricane may impact the facility, personnel should attempt to track the path/progress of the storm. If the forecast predicts a tropical storm or hurricane force winds (>39 miles per hour) for the facility, the following steps will be taken:

- All double-stacked pallets of drums in the Container Storage Unit will be placed on the floor if space is available.
- Any empty containers outside will be moved inside to minimize damage caused by flying debris during high winds.
- All outside roll-off containers will be inspected to verify that covering tarps are secure.
- Containers subject to wet weather damage will be covered in plastic or moved inside.
- Any equipment/supplies and other loose objects outside the main buildings will be brought inside, such as empty drums, over-packs, forklifts, spill kits, etc.
- Emergency response equipment (respirators, protective clothing, gloves, etc.) that might be needed to respond to a spill/fire/release will be placed in a location easily accessible to responders.

After the event is over and it is safe to go outside, emergency coordinators will tour the facility to evaluate damage, if any, and implement the Contingency Plan as needed. Depending on the severity of the storm and the safety on the individuals an emergency coordinator may stay onsite throughout the storm.

Sinkholes are naturally occurring in The State of Florida and they are unpredictable. In the event of a sinkhole work will cease, the emergency coordinators will be notified along with the local agencies. When outside responders arrive the National Incident Management System will be followed.

## Figure II A 7: FACILITY SITE LOCATION MAP

*See Maps/Figures at the back of the Part B application*

**Figure II A 7: EMERGENCY SERVICE ORGANIZATIONS MAP**

*See Maps/Figures at the back of the Part B application*

## Figure II.A.5: FACILITY LAYOUT

*See Maps/Figures at the back of the Part B application*

**Figure I D 1: FACILITY STORAGE LAYOUT**

*See Maps/Figures at the back of the Part B application*

## Figure II A 5: EMERGENCY EQUIPMENT LOCATION MAP

*See Maps/Figures at the back of the Part B application*

**Table II.A.4.b.-1**
**EMERGENCY SERVICE ORGANIZATIONS PHONE NUMBERS**

| Emergency Contact List | | |
|---|---|---|
| **Facility Information:**<br>Triumvirate Environmental<br>10100 Rocket Boulevard, Orlando, Florida 32824<br>407-859-4441 | | |
| **Emergency Coordinators:** | | |
| Primary – | Thomas Montgomery (Primary)<br>524 Bamboo Harbour Court<br>Orlando, FL 32825 | Cell: (407) 495-8483 |
| Secondary - | David Chambers<br>3339 Bracken Fern Drive<br>Harmony, FL 34773 | Cell: (407) 756-2272<br>Alt#: (321)514-9234 |
| Alternate - | Eden Tuccillo<br>742 Battery Pointe Drive<br>Orlando, Florida 32828 | Cell: (407)415-3950<br>Alt #: (407) 923-3409 |
| **The National Incident Management System (NIMS) will be followed. Additional information can be found:** http://www.fema.gov/national-incident-management-system | | |
| **Designated Person Accountable for Discharge Prevention:** | | |
| Facility Manger – Charles (Kip) Buckley | | Cell: 321-246-5197 |
| **National Response Center (NRC):** | | 1-800-424-8802 |
| **Cleanup Contractor(s):** | | |
| Eagle SWS Emergency Response | | 1-800-852-8878 |
| Clean Harbors of Florida, LLC | | 1-800-645-8265 |
| **State Oil Pollution Control Agency** – FDEP 24-Hour State Warning Point (Depart. of Community Affairs' Division of Emergency Management) | | 1-800-320-0519 |
| **Local Emergency Response Planning Committee:** | | |
| East Central Florida Regional Planning Council<br>309 Cranes Roost Boulevard, Suite 2000<br>Altamonte Springs 32701 | | 407-262-7772 ext. 335 |
| **Other Federal/State/Local Agencies:** | | |
| EPA – Regional IV – 24-Hour Spill Reporting | | 1-800-424-8802 |
| FDEP – Central District | | 407-897-4100 |
| Orange County Emergency Management | | **911*** or 407-836-9140 (local) |
| **Local Fire Department –** Orange County Fire Department | | **911*** or 407-836-9000 (local) |
| **Local Police Department** – Orange County Police Department | | **911*** or 407-836-6500 (local) |
| **Hospital –** Orange County Regional Medical Center | | **911*** or 407-841-5111 (local) |
| **Other Contact References:** | | |
| Boggy Creek (east-northeast) – South Florida WMD | | 800-432-2045 |
| Neighboring Facility (west) – Cook Composites & Polymers | | 407-859-3030 |
| Neighboring Facility (north) – Oldcastle Precast, Inc. | | 407-855-7580 |
| Neighboring Facility (south) – L&S Logistics Services Orlando | | 407-582-0900 |

***Note: In the event of emergency, dial 911.**

**Table II.A.4.b.-2**
**Segregation Table for Hazardous Materials**

| Class or Division | 2.1 | 2.2 | 2.3 gas Zone A | 2.3 gas Zone B | 3 | 4.1 | 4.2 | 4.3 | 5.1 | 5.2 | 6.1 liquids PG I Zone A | 8 liquids only | 9 H.S. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flammable gases ..... 2.1 | | | X | O | | | | | | | O | O | |
| Non-toxic, non-flammable gases..... 2.2 | | | | | | | | | | | | | |
| Poisonous gas Zone A... 2.3 | X | | | | X | X | X | X | X | X | | X | |
| Poisonous gas Zone B... 2.3 | O | | | | O | O | O | O | O | O | | O | |
| Flammable liquids..... 3. | | | X | O | | | | | O | | X | | |
| Flammable solids..... 4.1 | | | X | O | | | | | | | X | O | |
| Spontaneously combustible materials..... 4.2 | | | X | O | | | | | | | X | X | |
| Dangerous when wet materials..... 4.3 | | | X | O | | | | | | | X | O | |
| Oxidizers..... 5.1 | | | X | O | O | | | | | | X | O | |
| Organic peroxides..... 5.2 | | | X | O | | | | | | | X | O | |
| Poisonous liquids PG I Zone A..... 6.1 | O | | | | X | X | X | X | X | X | | X | |
| Corrosive liquids ..... 8 | | | X | O | | O | X | O | O | O | X | | |
| Hazardous substances ..... 9 | | | | | | | | | | | | | |

Note: Codes X and O indicate prohibitions and restrictions as noted below.

- An "X" in the table indicates that these materials may not be loaded, transported, or stored together.

- An "O" indicates that these materials may not be transported or stored together unless separated in such a way that, in the event or leakage from packages under normal transportation conditions, the hazardous materials could not commingle. Regardless of the methods of separation employed, Class 8 (corrosive) liquid materials may not be loaded above Class 4 (flammable solid) materials or Class 5 (oxidizing) materials.

- Cyanides or cyanide mixtures must not be loaded or stored with acids or acidic materials. The reaction of cyanides with acids releases deadly hydrogen cyanide gas.

- When the 172.101 Table or 49 CFR 172.402 requires a package to bear a subsidiary hazard label, segregation appropriate to the subsidiary hazard must be applied when that segregation is more restrictive than that required by the primary hazard. However, hazardous materials of the same class may be stored together without regard to segregation required for any secondary hazard if the materials are not capable of reacting dangerously with each other and causing combustion or dangerous evolution of heat; evolution of flammable, poisonous, or asphyxiate gases; or formation of corrosive or unstable materials.

## Table II.A.4.b.-3

## Waste Permitted to be Stored at TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC., Inc.

| Waste Description | Hazardous Waste Code | CAS Registry Number | DOT Hazard Class |
|---|---|---|---|
| Ignitable Liquid | D001 | N/A | Varies |
| Corrosive (Acid, Caustic) | D002 | N/A | Varies |
| Reactive Liquids & Solids | D003 | N/A | Varies |
| Arsenic | D004 | 7440-38-2 | 6.1 |
| Barium | D005 | 7440-39-3 | 4.3 |
| Cadmium | D006 | 7440-43-9 | 6.1 |
| Chromium (Haz. Substance) | D007 | 7440-47-3 | 9 |
| Lead | D008 | 7439-92-1 | 6.1 |
| Mercury | D009 | 7439-97-6 | 8 |
| Selenium (Powder) | D010 | 7782-49-2 | 6.1 |
| Silver (Haz. Substance) | D011 | 7440-22-4 | 9 |
| Endrin (Haz. Substance) | D012 | 72-20-8 | 9 |
| Lindane (Haz. Substance) | D013 | 58-89-9 | 9 |
| Methoxychlor (Haz. Substance) | D014 | 72-43-5 | 9 |
| Toxaphene (Haz. Substance) | D015 | 8001-35-2 | 9 |
| 2,4-D (Acid – Haz. Substance) | D016 | 94-75-7 | 9 |
| 2,4,5-TP (Silvex) (Haz. Substance) | D017 | 93-72-1 | 9 |
| Benzene | D018 | 71-43-2 | 3 |
| Carbon Tetrachloride | D019 | 56-23-5 | 6.1 |
| Chlordane (Haz. Substance) | D020 | 57-74-9 | 9 |
| Chlorobenzene | D021 | 108-90-7 | 3 |
| Chloroform | D022 | 67-66-3 | 6.1 |
| o-Cresol | D023 | 95-48-7 | 6.1 |
| M-Cresol | D024 | 108-39-4 | 6.1 |
| P-Cresol | D025 | 106-44-5 | 6.1 |
| Cresol | D026 | 1319-77-3 | 6.1 |
| 1,4-Dichlorobenzene | D027 | 106-46-7 | 6.1 |
| 1,2-Dichloroethane (Ethylene Dichloride) | D028 | 107-06-2 | 3 |
| 1,1-Dichloroethylene (Vinylidene Chloride) | D029 | 75-35-4 | 3 |
| 2,4-Dinitrotoluene | D030 | 121-14-2 | 6.1 |
| Heptachlor (Haz. Substance) | D031 | 76-44-8 | 9 |
| Hexachlorobenzene | D032 | 118-74-1 | 6.1 |
| Hexachlorobutadiene | D033 | 87-68-3 | 6.1 |
| Hexachloroethane (Haz. Substance) | D034 | 67-72-1 | 9 |
| Methyl Ethyl Ketone (Ethyl Methyl Ketone) | D035 | 78-93-3 | 3 |
| Nitrobenzene | D036 | 98-95-3 | 6.1 |
| Pentachlorophenol (Haz. Substance) | D037 | 87-86-5 | 9 |
| Pyridine | D038 | 110-86-1 | 3 |
| Tetrachloroethylene | D039 | 127-18-4 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Trichloroethylene | D040 | 79-01-6 | 6.1 |
| 2,4,5-Trichlorophenol (Haz. Substance) | D041 | 95-95-4 | 9 |
| 2,4,6-Trichlorophenol (Haz. Substance) | D042 | 88-06-2 | 9 |
| Vinyl Chloride | D043 | 75-01-4 | 2.1 |
| Spent Halogenated Solvents (Haz. Substance) | F001 | N/A | 9 |
| Spent Halogenated Solvents (Haz. Substance) | F002 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F003 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F004 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F005 | N/A | 9 |
| Electroplating Sludges (Haz. Substance) | F006 | N/A | 9 |
| Spent Cyanide Plating Solutions (Haz. Substance) | F007 | N/A | 9 |
| Plating Bath Residues (Haz. Substance) | F008 | N/A | 9 |
| Spent Stripping Solutions (Haz. Substance) | F009 | N/A | 9 |
| Quenching Bath Residues (Haz. Substance) | F010 | N/A | 9 |
| Spent Cyanide Solution (Haz. Substance) | F011 | N/A | 9 |
| Quench Wastewater Sludge (Haz. Substance) | F012 | N/A | 9 |
| Wastewater Treatment Sludge (Haz. Substance) | F019 | N/A | 9 |
| Discarded Unused Formulations of Chlorophenols | F027 | N/A | 6.1 |
| Chlorophenolic Residuals (Haz. Substance) | F032 | N/A | 9 |
| Creosote Residuals (Haz. Substance) | F034 | N/A | 9 |
| Arsenic/Chromium Residuals (Haz. Substance) | F035 | N/A | 9 |
| Petroleum Refinery Primary Sludge (Haz. Substance) | F037 | N/A | 9 |
| Petroleum Refinery Secondary Sludge (Haz. Subs.) | F038 | N/A | 9 |
| Leachate from Wastes (Haz. Substance) | F039 | N/A | 9 |
| Bottom Sediment Sludge | K001 | NA | 4.1, 9 |
| Dissolved Air Float (Haz. Substance) | K048 | N/A | 9 |
| Slop Oil Emulsion Solids (Haz. Substance) | K049 | N/A | 9 |
| Heat Exchanger Sludge (Haz. Substance) | K050 | N/A | 9 |
| API Separator Sludge (Haz. Substance) | K051 | N/A | 9 |
| Petroleum Tank Bottoms (Haz. Substance) | K052 | N/A | 9 |
| Emission Control Dust/Sludge (Haz. Substance) | K061 | N/A | 9 |
| Spent Pickle Liquor (Haz. Substance) | K062 | N/A | 9 |
| Solvent Washes & Sludge (Haz. Substance) | K086 | N/A | 9 |
| Organic Wastes | K156 | N/A | 9 |
| Wastewaters | K157 | N/A | 9 |
| Baghouse Dusts & Filter Separator Solids | K158 | N/A | 9 |
| Organics from Treatment of Thiocarbamate Wastes | K159 | N/A | 9 |
| Purification Solids | K161 | N/A | 9 |
| Warfarin & Salts when >.3% (Haz. Substance) | P001 | 81-81-2 | 9 |
| Acetamide, N-(Aminothioximethyl) (Haz. Substance) | P002 | 591-08-2 | 9 |
| Acrolein | P003 | 107-02-8 | 6.1 |
| Aldrin | P004 | 309-00-2 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Allyl Alcohol | P005 | 107-18-6 | 6.1 |
| Aluminum Phosphide | P006 | 20859-73-8 | 4.3, 6.1 |
| 5-(Aminomethyl)-3-Isoxazolol (Haz. Substance) | P007 | 2763-96-4 | 9 |
| 4-Aminopyridine | P008 | 504-24-5 | 6.1 |
| Ammonium picrate | P009 | 131-74-8 | 4.1 |
| Arsenic Acid ($H_3AsO_4$) | P010 | 778-39-4 | 6.1 |
| Arsenic Oxide ($As_2O_5$) | P011 | 1303-28-2 | 6.1 |
| Arsenic Oxide ($As_2O_3$) | P012 | 1327-53-3 | 6.1 |
| Barium Cyanide | P013 | 542-62-1 | 6.1 |
| Benzenethiol (Phenyl Mercaptan) | P014 | 108-98-5 | 6.1 |
| Beryllium (Powder) | P015 | 7440-41-7 | 6.1 |
| Dichloromethylether ((Haz. Substance) | P016 | 542-88-1 | 9 |
| Bromoacetone | P017 | 598-31-2 | 6.1 |
| Brucine | P018 | 357-57-3 | 6.1 |
| Dinoseb | P020 | 88-85-7 | 9 |
| Calcium Cyanide | P021 | 592-01-8 | 6.1 |
| Carbon Disulfide | P022 | 75-15-0 | 3, 6.1 |
| Acetaldehyde, Chloro- (Haz. Substance) | P023 | 107-20-0 | 9 |
| Benzenamine, 4-Chloro- (Haz. Substance) | P024 | 106-47-8 | 9 |
| 1-(o-Chlorophenyl)thiourea (Haz. Substance) | P026 | 5344-82-1 | 9 |
| 3-Chloropropionitrile (Haz. Substance) | P027 | 542-76-7 | 9 |
| Benzene, Chloromethyl (Benzyl Chloride) | P028 | 100-44-7 | 6.1 |
| Copper Cyanide | P029 | 544-92-3 | 6.1 |
| Cyanides (Solutions & Inorganics) | P030 | 57-12-5 | 6.1 |
| Cyanogen | P031 | 460-19-5 | 6.1 |
| Cyanogen Chloride | P033 | 506-77-4 | 6.1 |
| 2-Cyclohexyl-4,6-dinitrophenol (Haz. Substance) | P034 | 131-89-5 | 9 |
| Arsonous Dichloride, Phenyl (Haz. Substance) | P036 | 696-28-6 | 9 |
| Dieldrin | P037 | 60-57-1 | 6.1 |
| Arsine, Diethyl- (Haz. Substance) | P038 | 692-42-2 | 9 |
| Disulfoton (Haz. Substance) | P039 | 298-04-4 | 9 |
| O,O-Diethyl O-pyrazinyl Phosphorothioate (Haz. Subs.) | P040 | 297-97-2 | 9 |
| Diethyl-p-nitrophenyl Phosphate (Haz. Substance) | P041 | 311-45-5 | 9 |
| Epinephrine | P042 | 51-43-4 | 6.1 |
| Diisopropylfluorophosphate (Haz. Substance) | P043 | 55-91-4 | 9 |
| Dimethoate (Haz. Substance) | P044 | 60-51-5 | 9 |
| Thiofanox (Haz. Substance) | P045 | 39196-18-4 | 9 |
| Benzeneethanamine, alpha, alpha-dimethyl (Haz. Subs.) | P046 | 122-09-8 | 9 |
| 4,6-Dinitro-o-cresol & Salts (Solid or Solutions) | P047 | 1 534-52-1 | 6.1 |
| 2,4-Dinitrophenol (Haz. Substance) | P048 | 51-28-5 | 9 |
| Dithiobiuret (Haz. Substance) | P049 | 541-53-7 | 9 |
| Endosulfan (Haz. Substance) | P050 | 115-29-7 | 9 |
| Endrin (Haz. Substance) | P051 | 1 72-20-8 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Aziridine (Ethyleneimine) | P054 | 151-56-4 | 6.1 |
| Fluorine | P056 | 7782-41-4 | 6.1 |
| Acetamide, 2-Fluoro- (Haz. Substance) | P057 | 640-19-7 | 9 |
| Acetic Acid, Fluoro-, Sodium Salt (Haz. Substance) | P058 | 62-74-8 | 9 |
| Heptachlor (Haz. Substance) | P059 | 76-44-8 | 9 |
| Isodrin (Haz. Substance) | P060 | 465-73-6 | 9 |
| Hexaethyl Tetraphosphate | P062 | 757-58-4 | 6.1 |
| Hydrogen Cyanide | P063 | 74-90-8 | 6.1, 3 |
| Methyl Isocyanate | P064 | 624-83-9 | 6.1 |
| Fulminc Acid,, mercury (2+), salt | P065 | 628-86-4 | 6.1 |
| Methomyl (Haz. Substance) | P066 | 16752-77-5 | 9 |
| Aziridine, 2-methyl | P067 | 75-55-8 | 3 |
| Methyl Hydrazine (Haz. Substance) | P068 | 60-34-4 | 9 |
| 2-Methyllactonitrile | P069 | 75-86-5 | 6.1 |
| Aldicarb (Haz. Substance) | P070 | 116-06-3 | 9 |
| Methyl Parathion | P071 | 298-00-0 | 6.1 |
| alpha-Naphthylthiourea | P072 | 86-88-4 | 6.1 |
| Nickel Carbonyl | P073 | 13463-39-3 | 6.1, 3 |
| Nickel Cyanide | P074 | 557-19-7 | 6.1 |
| Nicotine & Salts | P075 | 1 54-11-5 | 6.1 |
| Benzenamine, 4-Nitro- (p-Nitroaniline) | P077 | 100-01-6 | 6.1 |
| Nitrogen oxide NO | P078 | 10102-44-0 | 6.1 |
| Nitroglycerine | P081 | 55-63-0 | 3, 4.1 |
| N-Nitrosodimethylamine (Haz. Substance) | P082 | 62-75-9 | 9 |
| N-Nitrosomethylvinylamine (Haz. Substance) | P084 | 4549-40-0 | 9 |
| Octamethylpryophosphoramide (Haz. Substance) | P085 | 152-16-9 | 9 |
| Osmium Tetroxide | P087 | 20816-12-0 | 6.1 |
| Endothall (Haz. Substance) | P088 | 145-73-3 | 9 |
| Parathion | P089 | 56-38-2 | 6.1 |
| Phenylmercury Acetate | P092 | 62-38-4 | 6.1 |
| Phenylthiourea (Haz. Substance) | P093 | 103-85-5 | 9 |
| Phorate (Haz. Substance) | P094 | 298-02-2 | 9 |
| Carbonic dichloride | P095 | 75-44-5 | 9 |
| Hydrogen Phosphide | P096 | 7803-51-2 | 9 |
| Famphur (Haz. Substance) | P097 | 52-85-7 | 9 |
| Potassium Cyanide | P098 | 151-50-8 | 6.1 |
| Potassium Silver Cyanide (Haz. Substance) | P099 | 506-61-6 | 9 |
| Ethyl Cyanide (Haz. Substance) | P101 | 107-12-0 | 9 |
| Propargyl Alcohol | P012 | 107-19-7 | 3 |
| Selenourea (Haz. Substance) | P103 | 630-10-4 | 9 |
| Silver Cyanide | P104 | 506-64-9 | 6.1 |
| Sodium Azide | P105 | 26628-22-8 | 6.1 |
| Sodium Cyanide | P106 | 143-33-9 | 6.1 |
| Strychnine & Salts | P108 | 1 157-24-9 | 6.1 |
| Tetraethyldithiopryophosphate | P109 | 3689-24-5 | 6.1 |
| Tetraethyl Lead (Liquid) | P110 | 78-00-2 | 6.1 |
| Tetraethyl Pryophosphate (Liquid & Solid) | P111 | 107-49-3 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Thallic Oxide (Haz. Substance) | P113 | 1314-32-5 | 9 |
| Selenious Acid, dithallium (1+) Salt | P114 | 12039-52-0 | 6.1 |
| Sulfuric acid, dithallium(1+) salt | P115 | 7446-18-6 | 6.1 |
| Thiosemicarbazide (Haz. Substance) | P116 | 79-19-6 | 9 |
| Perchloromethanethiol | P118 | 75-70-7 | 6.1 |
| Ammonium Vanadate (Ammonium Metavanadate) | P119 | 7803-55-6 | 6.1 |
| Vanadium Pentoxide (Nonfused Form) | P120 | 1314-62-1 | 6.1 |
| Zinc Cyanide | P121 | 557-21-1 | 6.1 |
| Zinc Phosphide when present at concentrations above 10% | P122 | 1314-84-7 | 4.3, 6.1 |
| Toxaphene (Haz. Substance) | P123 | 8001-35-2 | 9 |
| Carbofuran | P127 | 1563-66-2 | 6.1 |
| Mexacarbate | P128 | 315-18-4 | 6.1 |
| Tirpate | P185 | 26419-73-8 | 6.1 |
| Physostigmine Salicylate | P188 | 57-64-7 | 6.1 |
| Carbosulfan | P189 | 55285-14-8 | 9 |
| Metolcarb | P190 | 1129-41-5 | 6.1 |
| Dimetilan | P191 | 644-64-4 | 6.1 |
| Isolan | P192 | 119-38-0 | 6.1 |
| Oxamyl | P194 | 23135-22-0 | 6.1 |
| Manganese Dimethyldithiocarbamate | P196 | 15339-36-3 | 6.1 |
| Formparanate | P197 | 17702-57-7 | 6.1 |
| Formetanate Hydrochloride | P198 | 23422-53-9 | 6.1 |
| Methiocarb | P199 | 2032-65-7 | 6.1 |
| Promecarb | P201 | 2631-37-0 | 6.1 |
| m-Cumenyl Methylcarbamate | P202 | 64-00-6 | 6.1 |
| Aldicarb Sulfone | P203 | 1646-88-4 | 6.1 |
| Physostigmine | P204 | 57-47-6 | 6.1 |
| Ziram | P205 | 137-30-4 | 6.1 |
| Acetaldehyde | U001 | 75-07-0 | 3 |
| Acetone | U002 | 67-64-1 | 3 |
| Acetonitrile (Methyl Cyanide) | U003 | 75-05-8 | 3 |
| Acetophenone (Haz. Substance) | U004 | 98-86-2 | 9 |
| 2-Acetylaminofluorene (Haz. Substance) | U005 | 53-96-3 | 9 |
| Acetyl Chloride | U006 | 75-36-5 | 3, 8 |
| Acrylamide | U007 | 79-06-1 | 6.1 |
| Acrylic Acid | U008 | 79-10-7 | 8 |
| Acrylonitrile | U009 | 107-13-1 | 3 |
| Mitomycin C (Haz. Substance) | U010 | 50-07-7 | 9 |
| Amitrole (Haz. Substance) | U011 | 61-82-5 | 9 |
| Aniline | U012 | 62-53-3 | 6.1 |
| Auramine (Haz. Substance) | U014 | 492-80-8 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Azaserine (Haz. Substance) | U015 | 115-02-6 | 9 |
| Benz[c]acridine (Haz. Substance) | U016 | 225-51-4 | 9 |
| Benzal Chloride (Haz. Substance) | U017 | 98-87-3 | 9 |
| Benz[a]anthracene (Haz. Substance) | U018 | 56-55-3 | 9 |
| Benzene | U019 | 71-43-2 | 3 |
| Benzenesulfonyl chloride | U020 | 98-09-9 | 8 |
| Benzidine | U021 | 92-87-5 | 6.1 |
| Benzo[a]pyrene (Haz. Substance) | U022 | 50-32-8 | 9 |
| Benzotrichloride | U023 | 98-07-7 | 8 |
| Dichloromethyoxy Ethane (Haz. Substance) | U024 | 111-91-1 | 9 |
| Dichloroethyl Ether (Haz. Substance) | U025 | 111-44-4 | 9 |
| Chlornaphazine (Haz. Substance) | U026 | 494-03-1 | 9 |
| Dichloroisopropyl Ether | U027 | 108-60-1 | 6.1 |
| Diethylhexyl Phthalate (Haz. Substance) | U028 | 117-81-7 | 9 |
| Methyl Bromide | U029 | 74-83-9 | 2.3 |
| 4-Bromophenyl Phenyl Ether (Haz. Substance) | U030 | 101-55-3 | 9 |
| n-Butyl Alcohol (Butanols) | U031 | 71-36-3 | 3 |
| Calcium Chromate (Haz. Substance) | U032 | 13765-19-0 | 9 |
| Carbonic difluoride | U033 | 353-50-4 | NA |
| Chloral (anhydrous) | U034 | 75-87-6 | 6.1 |
| Chlorambucil (Haz. Substance) | U035 | 305-03-3 | 9 |
| Chlordane, Alpha & Gamma Isomers (Haz. Substance) | U036 | 57-74-9 | 9 |
| Chlorobenzene | U037 | 108-90-7 | 3 |
| Chlorobenzilate (Haz. Substance) | U038 | 510-15-6 | 9 |
| p-Chloro-m-cresol | U039 | 59-50-7 | 6.1 |
| Epichlorohydrin | U041 | 106-89-8 | 6.1 |
| 2-Chloroethyl Vinyl Ether (Haz. Substance) | U042 | 110-75-8 | 9 |
| Vinyl Chloride | U043 | 75-01-4 | 2.1 |
| Chloroform | U044 | 67-66-3 | 6.1 |
| Methyl Chloride | U045 | 74-87-3 | 2.1 |
| Chloromethyl Methyl Ether | U046 | 107-30-2 | 3 |
| beta-Chloronaphthalene (Haz. Substance) | U047 | 91-58-7 | 9 |
| o-Chlorophenol | U048 | 95-57-8 | 6.1 |
| 4-Chloro-o-toluidine, Hydrochloride | U049 | 3165-93-3 | 6.1 |
| Chrysene (Haz. Substance) | U050 | 218-01-9 | 9 |
| Creosote (Haz. Substance) | U051 | 8001-58-9 | 9 |
| Cresol | U052 | 1319-77-3 | 6.1 |
| Crotonaldehyde (Stabilized) | U053 | 4170-30-3 | 3 |
| Cumene (Haz. Substance) | U055 | 98-82-8 | 9 |
| Cyclohexane | U056 | 110-82-7 | 3 |
| Cyclohexanone | U057 | 108-94-1 | 3 |
| Cyclophosphamide (Haz. Substance) | U058 | 50-18-0 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Daunomycin (Haz. Substance) | U059 | 20830-81-3 | 9 |
| DDD (Haz. Substance) | U060 | 72-54-8 | 9 |
| DDT (Haz. Substance) | U061 | 50-29-3 | 9 |
| Diallate (Haz. Substance) | U062 | 2303-16-4 | 9 |
| Diben(a, h)anthracene (Haz. Substance) | U063 | 53-70-3 | 9 |
| Dibenzo(a, i)pyrene (Haz. Substance) | U064 | 189-55-9 | 9 |
| 1,2-Dibromomo-3-chloropropane | U066 | 96-12-8 | 6.1 |
| Ethane, 1,2-dibromo- (Ethylene Dibromide) | U067 | 106-93-4 | 6.1 |
| Methylene Bromide (Dibromomethane) | U068 | 74-95-3 | 6.1 |
| Dibutyl Phthalate (Haz. Substance) | U069 | 84-74-2 | 9 |
| o-Dichlorobenzene | U070 | 95-50-1 | 6.1 |
| m-Dichlorobenzene (Haz. Substance) | U071 | 541-73-1 | 9 |
| p-Dichlorobenzene | U072 | 106-46-7 | 6.1 |
| 3,3-Dichlorobenzidine (Haz. Substance) | U073 | 91-94-1 | 9 |
| 1,4-Dichloro-2-butene (Haz. Substance) | U074 | 764-41-0 | 9 |
| Dichlorodifluoromethane | U075 | 75-71-8 | 2.2, 6.1 |
| Ethane, 1,1-Dichloro- (1,1-Dichloroethane) | U076 | 75-34-3 | 3 |
| Ethane, 1,2-Dichloro- (Ethylene Dichloride) | U077 | 107-06-2 | 3 |
| 1,1-Dichloroethylene (Haz. Substance) | U078 | 75-35-4 | 9 |
| 1,2-Dichloroethylene (Haz. Substance) | U079 | 156-60-5 | 9 |
| Methylene Chloride (Dichloromethane) | U080 | 75-09-2 | 6.1 |
| 2,4-Dichlorophenol (Haz. Substance) | U081 | 120-83-2 | 9 |
| 2,6-Dichlorophenol (Haz. Substance) | U082 | 87-65-0 | 9 |
| Propylene Dichloride | U083 | 78-87-5 | 3 |
| 1,3-Dichloropropene (Dichloropropene) | U084 | 542-75-6 | 3 |
| 1,2:3,4-Diepoxybutane (Haz. Substance) | U085 | 1464-53-5 | 9 |
| N,N'-Diethyhydrazine (Haz. Substance) | U086 | 1615-80-1 | 9 |
| O,O-Diethyl S-methyl Dithiophosphate (Haz. Subs.) | U087 | 3288-58-2 | 9 |
| Diethyl Phthalate (Haz. Substance) | U088 | 84-66-2 | 9 |
| Diethystilbesterol (Haz. Substance) | U089 | 56-53-1 | 9 |
| Dihydrosafrole (Haz. Substance) | U090 | 94-58-6 | 9 |
| 3,3'-Dimethoxybenzidine (Haz. Substance) | U091 | 119-90-4 | 9 |
| Dimethylamine (Anhydrous, Solution) | U092 | 124-40-3 | 2.1, 3 |
| p-Dimethylaminoazobenzene (Haz. Substance) | U093 | 60-11-7 | 9 |
| 7,12-Dimethylbenz (a) anthracene (Haz. Substance) | U094 | 57-97-6 | 9 |
| 3,3'-Dimethylbenzidine (Haz. Substance) | U095 | 119-93-7 | 9 |
| alpha,alpha-Dimethylbenzylhydroperoxide | U096 | 80-15-9 | 9 |
| Dimethylcarbamoyl Chloride | U097 | 79-44-7 | 8 |
| Hydrazine, 1,1-dimethyl- | U098 | 57-14-7 | 3, 6.1 |
| 1,2-Dimethylhydrazine | U099 | 540-73-8 | 3, 6.1 |
| 2,4-Dimethylphenol (Haz. Substance) | U101 | 105-67-9 | 9 |
| Dimethyl Phthalate (Haz. Substance) | U102 | 131-11-3 | 9 |
| Dimethyl Sulfate | U103 | 77-78-1 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| 2,4-Dinitrotoluene | U105 | 121-14-2 | 6.1 |
| 2,6-Dinitrotoluene | U106 | 606-20-2 | 6.1 |
| Di-n-Octyl Phthalate (Haz. Substance) | U107 | 117-84-0 | 9 |
| 1,4-Dioxane | U108 | 123-91-1 | 3 |
| 1,2-Diphenylhydrazine (Haz. Substance) | U109 | 122-66-7 | 9 |
| Dipropylamine | U110 | 142-84-7 | 3 |
| Di-n-propylnitrosoamine (Haz. Substance) | U111 | 621-64-7 | 9 |
| Ethyl Acetate | U112 | 141-78-6 | 3 |
| Ethyl Acrylate | U113 | 140-88-5 | 3 |
| Ethylenebisdithiocarbamic Acid, Salts & Esters (Haz. Substance) | U114 | 111-54-6 | 9 |
| Ethylene Oxide | U115 | 75-21-8 | 2.3 |
| Ethylenthiourea (Haz. Substance) | U116 | 96-45-7 | 9 |
| Ethyl Ether (Diethyl Ether) | U117 | 60-29-7 | 3 |
| Ethyl Methacrylate | U118 | 97-63-2 | 3 |
| Ethylmethanesulfonate (Haz. Substance) | U119 | 62-50-0 | 9 |
| Fluoranthene (Haz. Substance) | U120 | 206-44-0 | 9 |
| Trichloromonofluoromethane (Haz. Substance) | U121 | 75-69-4 | 9 |
| Formaldehyde (Solutions-Flammable, Non-Flammable) | U122 | 50-0-0 | 3, 9 |
| Formic Acid | U123 | 64-18-6 | 8 |
| Furan | U124 | 110-00-9 | 3 |
| Furfural | U125 | 98-01-1 | 3 |
| Glycidylaldehyde | U126 | 765-34-4 | 3 |
| Hexachlorobenzene | U127 | 118-74-1 | 6.1 |
| Hexachlorobutadiene | U128 | 87-68-3 | 6.1 |
| Lindane (Haz. Substance) | U129 | 58-89-9 | 9 |
| Hexachlorocyclopentadiene | U130 | 77-47-4 | 6.1 |
| Hexachloroethane (Haz. Substance) | U131 | 67-72-1 | 9 |
| Hexachlorophene | U132 | 70-30-4 | 6.1 |
| Hydrazine | U133 | 302-01-2 | 3, 6.1, 8 |
| Hydrofluoric Acid | U134 | 7664-39-3 | 8 |
| Hydrogen Sulfide | U135 | 7783-06-4 | 2.3, 2.1 |
| Cacodylic Acid | U136 | 75-60-5 | 6.1 |
| Ideno [1,2,3-cd] pyrene (Haz. Substance) | U137 | 193-39-9 | 9 |
| Methyl Iodide | U138 | 74-88-4 | 6.1 |
| Isobutyl Alcohol (Isobutanol) | U140 | 78-83-1 | 3 |
| Isosafrole (Haz. Substance) | U141 | 120-58-1 | 9 |
| Kepone (Haz. Substance) | U142 | 143-50-0 | 9 |
| Lasiocarpine (Haz. Substance) | U143 | 303-34-4 | 9 |
| Lead Acetate | U144 | 301-04-2 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Lead Phosphate (Haz. Substance) | U145 | 7446-27-7 | 9 |
| Lead Subacetate (Haz. Substance) | U146 | 1335-32-6 | 9 |
| Maleic Anhydride | U147 | 108-31-6 | 8 |
| Maleic Hydrazide (Haz. Substance) | U148 | 123-33-1 | 9 |
| Malononitrile | U149 | 109-77-3 | 6.1 |
| Melphalan (Haz. Substance) | U150 | 148-82-3 | 9 |
| Mercury | U151 | 7439-97-6 | 8 |
| Methacrylonitrile | U152 | 126-98-7 | 3 |
| Methanethiol | U153 | 74-93-1 | 2.3, 2.1 |
| Methanol | U154 | 67-56-1 | 3 |
| Methapyrilene (Haz. Substance) | U155 | 91-80-5 | 9 |
| Methyl Chlorocarbonate (Methyl Chloroformate) | U156 | 79-22-1 | 6.1 |
| 3-Methylcholanthrene (Haz. Substance) | U157 | 56-49-5 | 9 |
| 4,4'-Methylenebis(2-Chloraniline) (Haz. Substance) | U158 | 101-14-4 | 9 |
| Methyl Ethyl Ketone (Ethyl Methyl Ketone) | U159 | 78-93-3 | 3 |
| Methyl Ethyl Ketone Peroxide | U160 | 1338-23-4 | 5.2 |
| Methyl Isobutyl Ketone | U161 | 108-10-1 | 3 |
| Methyl Methacrylate (Monomer) | U162 | 80-62-6 | 3 |
| N-Methyl-N'-Nitro-N-Nitrosognanidine | U163 | 70-25-7 | 4.1 |
| Methylthiouracil (Haz. Substance) | U164 | 56-04-2 | 9 |
| Naphthalene (Crude or Refined) | U165 | 91-20-3 | 4.1 |
| 1,4-Naphthalenedione (Haz. Substance) | U166 | 130-15-4 | 9 |
| alpha-Naphthylamine | U167 | 134-32-7 | 6.1 |
| beta-Naphthylamine | U168 | 91-59-8 | 6.1 |
| Nitrobenzene | U169 | 98-95-3 | 6.1 |
| p-Nitrophenol | U170 | 100-02-7 | 6.1 |
| Nitropropane | U171 | 79-46-9 | 3 |
| N-Nitrosodi-n-butylamine (Haz. Substance) | U172 | 924-16-3 | 9 |
| N-Nitrosodiethanolamine (Haz. Substance) | U173 | 1116-54-7 | 9 |
| N-Nitrododiethylamine (Haz. Substance) | U174 | 55-18-5 | 9 |
| N-Nitroso-N-ethylurea (Haz. Substance) | U176 | 759-73-9 | 9 |
| N-Nitroso-N-Methylurea (Haz. Substance) | U177 | 684-93-5 | 9 |
| N-Nitroso-N-Methylurethane (Haz. Substance) | U178 | 615-53-2 | 9 |
| N-Nitrosopiperidine (Haz. Substance) | U179 | 100-75-4 | 9 |
| N-Nitrosopyrrolidine (Haz. Substance) | U180 | 930-55-2 | 9 |
| 5-Nitro-o-toluidine (mono) | U181 | 99-55-8 | 6.1 |
| Paraldehyde | U182 | 123-63-7 | 3 |
| Pentachlorobenzene (Haz. Substance) | U183 | 608-93-5 | 9 |
| Pentachloroethane | U184 | 76-01-7 | 6.1 |
| Pentachloronitrobenzene (Haz. Substance) | U185 | 82-68-8 | 9 |
| 1,3-Pentadiene (Haz. Substance) | U186 | 504-60-9 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Phenacetin (Haz. Substance) | U187 | 62-44-2 | 9 |
| Phenol (molten, solid, solutions) | U188 | 108-95-2 | 6.1 |
| Phosphorus Sulfide | U189 | 1314-80-3 | 4.3, 4.1 |
| Phthalic Anhydride | U190 | 85-44-9 | 8 |
| 2-Picoline | U191 | 109-06-8 | 3 |
| Pronamide (Haz. Substance) | U192 | 23950-58-5 | 9 |
| 1,3-Propane Sultone (Haz. Substance) | U193 | 1120-71-4 | 9 |
| n-Propylamine | U194 | 107-10-8 | 3 |
| Pyridine | U196 | 110-86-1 | 3 |
| p-Benzoquinone | U197 | 106-51-4 | 6.1 |
| Reserpine (Haz. Substance) | U200 | 50-55-5 | 9 |
| Resorcinol | U201 | 108-46-3 | 6.1 |
| Safrole (Haz. Substance) | U203 | 94-59-7 | 9 |
| Selenium Dioxide | U204 | 7783-00-8 | 6.1 |
| Selenium Sulfide | U205 | 7488-56-4 | 6.1 |
| Streptozotocin (Haz. Substance) | U206 | 18883-66-4 | 9 |
| 1,2,4,5-Tetrachlorobenzene (Haz. Substance) | U207 | 95-94-3 | 9 |
| 1,1,1,2-Tetrachloroethane (Haz. Substance) | U208 | 630-20-6 | 9 |
| 1,1,2,2-Tetrachloroehtane (Haz. Substance) | U209 | 79-34-5 | 9 |
| Tetrachloroethylene | U210 | 127-18-4 | 6.1 |
| Carbon Tetrachloride | U211 | 56-23-5 | 6.1 |
| Tetrahydrofuran | U213 | 109-99-9 | 3 |
| Thallium (I) Acetate (Thallium Compound) | U214 | 563-68-8 | 6.1 |
| Thallium (I) Carbonate (Thallium Compound) | U215 | 6533-73-9 | 6.1 |
| Thallium (I) Chloride (Thallium Compound) | U216 | 7791-12-0 | 6.1 |
| Thallium (I) Nitrate (Thallium Compound)) | U217 | 10102-45-1 | 6.1, 5.1 |
| Thioacetamide (Haz. Substance) | U218 | 62-55-5 | 9 |
| Thiourea (Haz. Substance) | U219 | 62-56-6 | 9 |
| Toluene | U220 | 108-88-3 | 3 |
| Toluenediamine (Haz. Substance) | U221 | 25376-45-8 | 9 |
| o-Toluidine Hydrochloride (Haz. Substance) | U222 | 636-21-5 | 9 |
| Toluene Diisocyanate | U223 | 26471-62-5 | 6.1 |
| Bromoform | U225 | 75-25-2 | 6.1 |
| Methyl Chloroform (1,1,1-Trichloroethane) | U226 | 71-55-6 | 6.1 |
| 1,1,2-Trichloroethane (Haz. Substance) | U227 | 79-00-5 | 9 |
| Trichloroethylene | U228 | 79-01-6 | 6.1 |
| Benzene, 1,3,5-trinitro- | U234 | 99-35-4 | 4.1 |
| Tris(2,3-dibromopropyl)phosphate (Haz. Substance) | U235 | 126-72-7 | 9 |
| Trypan Blue (Haz. Substance) | U236 | 72-57-1 | 9 |
| Uracil Mustard (Haz. Substance) | U237 | 66-75-1 | 9 |
| Ethyl Carbamate (Urethane) (Haz. Substance) | U238 | 51-79-6 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Xylene | U239 | 1330-20-7 | 3 |
| 2,4-D, Salts & Esters (Haz. Substance) | U240 | 1 94-75-7 | 9 |
| 1-Propene 1,1,2,3,3,3-hexachloro (Haz. Substance) | U243 | 1888-71-7 | 9 |
| Thiram (Haz. Substance) | U244 | 137-26-8 | 9 |
| Cyanogen Bromide | U246 | 506-68-3 | 6.1 |
| Methoxychlor (Haz. Substance) | U247 | 72-43-5 | 9 |
| Warfarin & Salts (<0.3%) (Haz. Substance) | U248 | 1 81-81-2 | 9 |
| Zinc Phosphide | U249 | 1314-84-7 | 4.3, 6.1 |
| Benoyml | U271 | 17804-35-2 | 9 |
| Sulfallate | U277 | 95-06-7 | 9 |
| Bendiocarb | U278 | 22781-23-3 | 6.1 |
| Carbaryl | U279 | 63-25-2 | 9 |
| Barban | U280 | 101-27-9 | 9 |
| o-Toluidine | U328 | 95-53-4 | 6.1 |
| p-Toluidine | U353 | 106-49-0 | 6.1 |
| Ethylene Glycol Monoethyl Ether | U359 | 110-80-5 | 3 |
| Bendiocarb Phenol | U364 | 22961-82-6 | 6.1 |
| Carbofuran Phenol | U367 | 1563-38-8 | 6.1 |
| Carbendazin | U372 | 10605-21-7 | 9 |
| Propham | U373 | 122-42-9 | 9 |
| Prosulfocarb | U387 | 52888-80-9 | 9 |
| Triallate | U389 | 2303-17-5 | 9 |
| A2213 | U394 | 30558-43-1 | 9 |
| Diethylene Glycol, Dicarbamate | U395 | 5952-26-1 | 6.1 |
| Triethylamine | U404 | 121-44-8 | 3 |
| Ethyl Ziram | U407 | 14324-55-1 | 9 |
| Thiophanate-Methyl | U409 | 23564-05-8 | 9 |
| Thiodicarb | U410 | 59669-26-0 | 9 |
| Propoxur | U411 | 114-26-1 | 6.1 |

N/A: Not Applicable, None Found

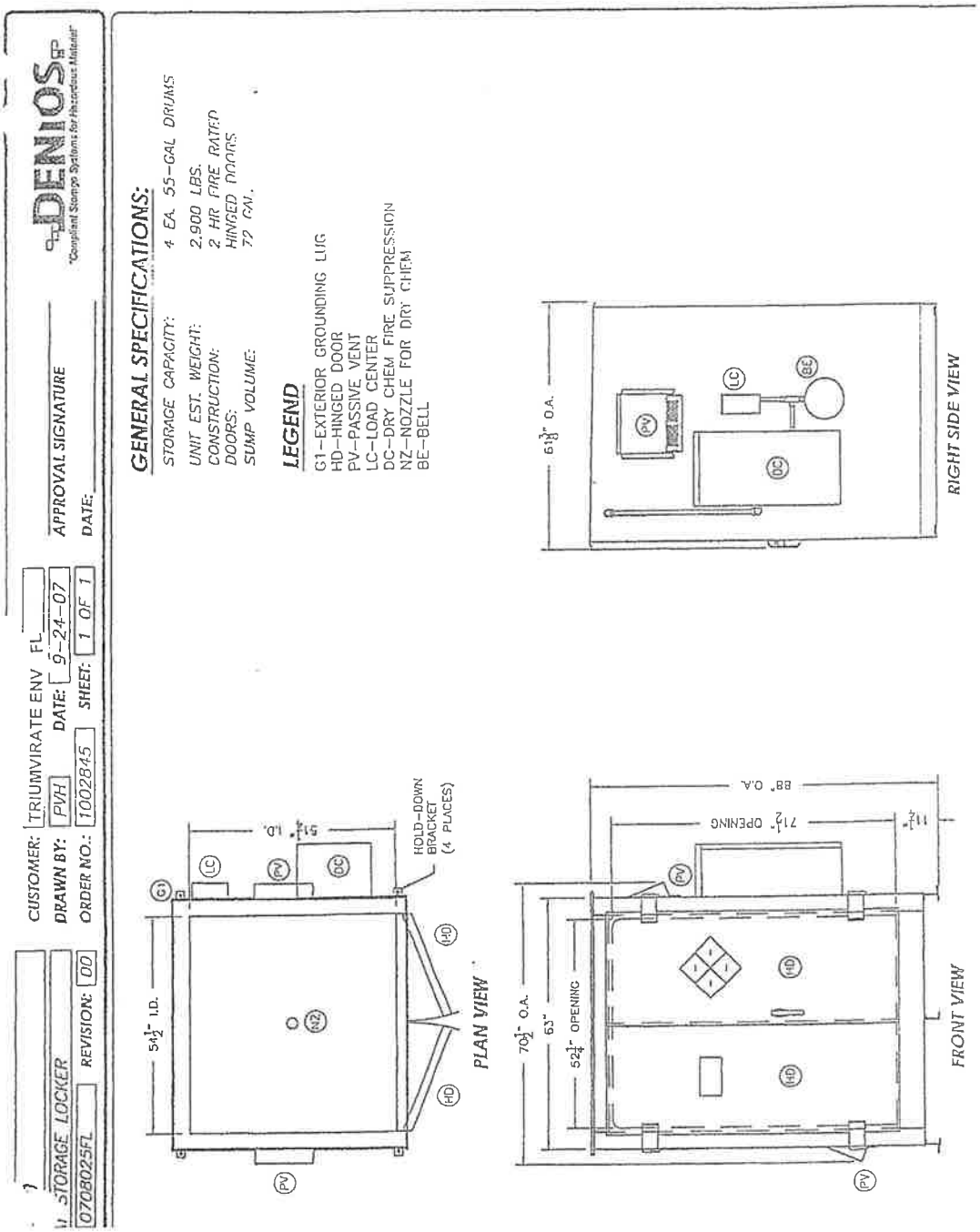
## Table II.A.4.b.-4

## Emergency Equipment and Personnel Safety Equipment Cabinet

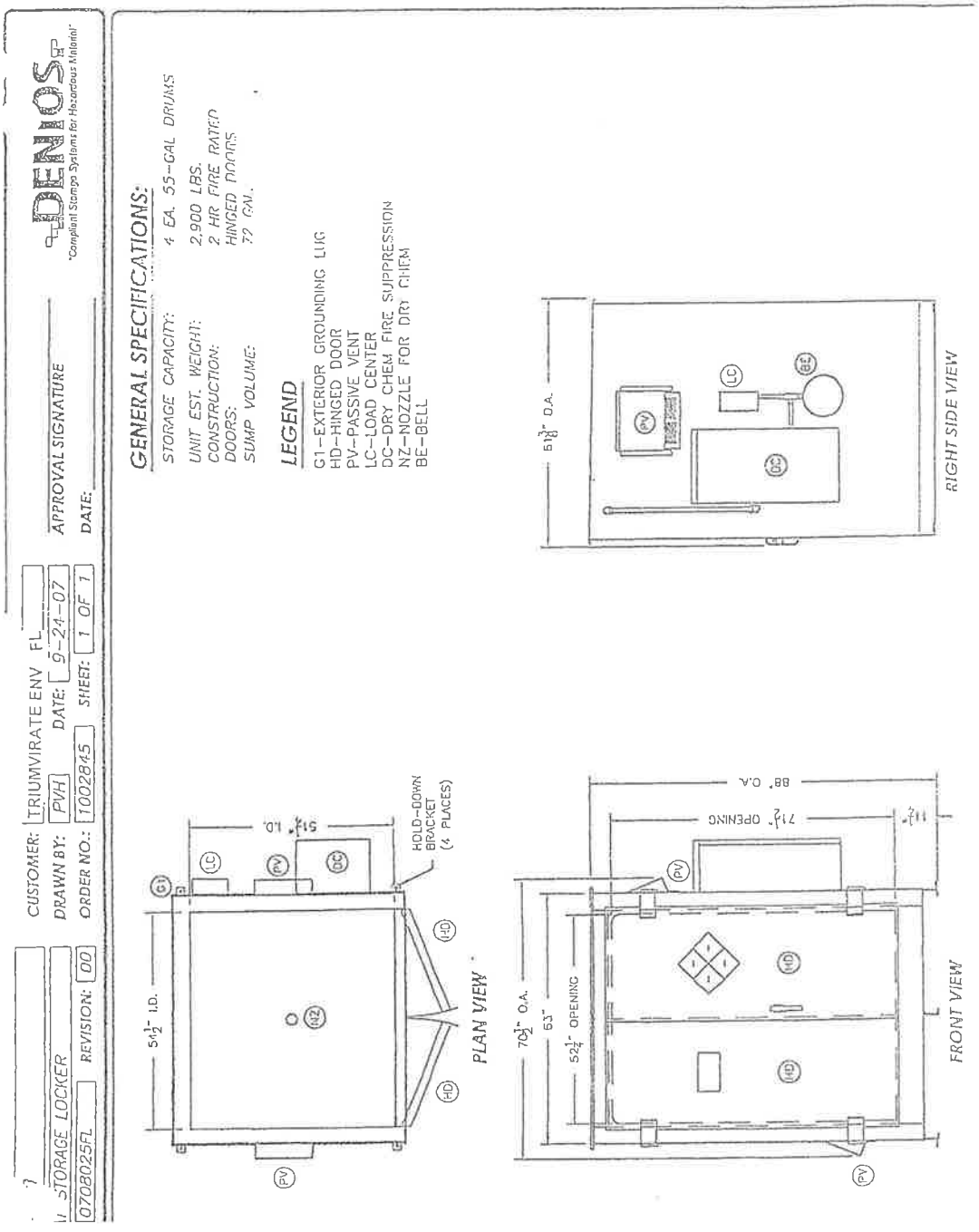
2 Empty 55-gallon, 17-H, lined drums – To store waste
2 Salvage drums (lined or poly) – To Store Waste
4 8-inch diameter, 10-foot long sorbent booms – To contain Spills
2 Spark-resistant safety shovels – To clean-up spills
2 Crowbars (nonsparking) – To remove and clean objects
2 18-inch pipe wrenches (nonsparking) – To open objects
2 Drum plug wrenches (nonsparking) – To plug drums
4 Explosion-proof flashlights – To provide lighting
1 Megaphone or Airhorn – For communication
2 Nylon ropes (each 50 feet long, ½ inch thick) – To complete confined space entries and/or tie off areas
1 Oxygen kit – For oxygen deficient atmospheres
5 Safety glasses – for eye protection
10 Safety goggles – for eye protection
5 Face shield/hard hat combination – head and eye protection
2 Emergency eye/face/body wash – for eye/face/body protection
20 Tyveks total body coverage - To keep personnel free of contaminants
4 Duct tape rolls – to hold things together
10 Rubber boots – to prevent footwear from contamination
10 Rubber gloves – to protect hands
5 Corrosive-resistant aprons – to protect the trunk
2 Corrosive-resistant suits – to prevent contamination of the body
5 Leather gloves – for hand protection
10 Half-mask respirators – for respiratory protection
5 Full-face respirators – for respiratory protection
1 Box of respirator cartridges (OV and AG) – for respiratory protection

1 Hand-Held Explosion meter (contingent upon NFPA upgrades)
1 5-lb hand held fire extinguisher – located on figure II.A.5
1 10-lb hand held fire extinguisher – located on figure II.A.5
1 150-lb wheel-mounted fire extinguisher – located on figure II.A.5
* Automatic sprinkler system – located in the warehouse
* Spill Control Equipment located on figure II.A.5
* Air-Driven pumps of various sizes
* Alarms
* Stretcher located in figure II.A.5
* Cell Phones – for facility personnel

## Exhibit II.B.1.2: HAZMAT STORAGE LOCKER SKETCH



## Exhibit II.B.1.2: HAZMAT STORAGE LOCKER SKETCH



2APP
Preparedness and
Prevention Plan

## Preparedness and Prevention Plan

## DESIGN AND OPERATION OF THE FACILITY

The hazardous waste facility owned by Triumvirate Environmental Inc. is located on a site with a contiguous area of approximately 6 acres. The facility consists of two adjacent buildings rectangular in shape each having a north-south orientation. The southwest area of the site contains the loading dock and trailer parking. The east side of the site contains a storm water retention pond on the northeast side, and a vacant area. The structures, buildings, and other features described above are shown in Figure II A 5.

The southernmost building (the south building) houses administrative offices in the south end of the building and a hazardous waste container storage unit in the north end. Drums stored in the container storage unit are received in trailers and are unloaded on a dock located at the west side of the unit. The northernmost building (the north building) is a little shorter and narrower than the south building and is used to consolidate waste, lab packing, and for solidification/ stabilization operations.

The continuation of this section describes how the facility is designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. Each area, process, and operation described in the previous paragraph will be discussed below to address the issue referenced in the sentence above.

### Container Storage Unit

This unit stores a maximum number of 824 — 55-gallon drums, or equivalent, on pallets, as shown in Figure I D 1. Each pallet holds up to four drums, and the pallets are stacked, at the most, two high. The pallets are arranged in single rows; some rows are eleven pallets long, and others are three pallets long. The storage area is divided into three subunits. One of the sub-units is made of six cells, each containing one row three pallets long. This sub-unit is located along the south wall of the unit, arranged as shown by Figure I D 1. For the purpose of this discussion, this sub-unit is labeled the south subunit. The south subunit will store acids, toxic, and non-hazardous solid waste. Each cell is separated from the next cell by a 3 ½-inch-high berm, which provides individual secondary containment to each row of pallets and provides separation for incompatible wastes that may be stored in an adjacent cell. Drums are transferred to and from the cells with forklifts that have access to the cell through a roll-over berm 3½ inches high, which runs along north side of all the cells in the south sub-unit. The secondary containment system for each cell is provided by the wall of the unit on the south, the roll-over berm on the north, and the berms that separate the cells on the east and west, except for the cells located at both ends of the sub-unit, which are contained by the east and west walls of the storage unit. The secondary containment volume of each cell is capable of holding more than 10% of the maximum volume that may be stored in the cell. The floor surface

in each cell has been coated with a chemical-resistant coating designed to protect the floor material against the chemical attack from solvents and corrosives.

There are two other sub-units, one located along the existing east wall (the east sub-unit) and the other in the northwest corner (the northwest sub-unit) of the unit. The east subunit will be used to store alkaline, toxic, non-hazardous, and universal waste types. The east sub-unit is identical to the south sub-unit as described in the previous paragraph, except that it has nine cells rather than six as the south sub-unit, and that the cell at the north end of the east sub-unit has the capacity to hold two rows of pallets rather than one as the other cells. The northwest sub-unit is one cell that has five rows eleven pallets long, all placed in a single and common secondary containment provided by the roll-over berms that run along the other sub-units at the south and east and the walls of the storage unit at the north and west. The northwest subunit will store only non-hazardous wastes. There are no berms or other type of structures protruding from the floor surface inside this sub-unit, except for a ramp for forklifts on the west side that provides access to the loading dock. The entire floor area of this sub-unit is covered with the same protective coating described in the previous paragraph. The south, east, and northwest sub-units are permitted to store 144, 240, and 440 — 55-gallon drums, respectively. Calculations for secondary containment are found in section II.B.1.

To minimize the potential for fire in the container storage unit, all electrical systems, equipment, and tools used in this area are operated, constructed, and designed to prevent the generation of sparks. Electrical systems in this unit consist of lighting, electrical outlets, and equipment necessary to the fire alarm system. There are no electric motors in operation in this unit except for the ones used to drive fans or blowers. Forklifts used inside the container storage unit for transferring drums are propelled by internal combustion engines that run on propane gas, which eliminates the possibility of sparks through the tail pipe. The container storage unit is operated in a manner that minimizes the generation and concentration of flammable gases due to emissions from drums stored in it. Drums stored in this unit are closed except when opened for sampling or inspection. This usually occurs only once during the stay of the drum in the unit. The bunghole lids of the drums to be sampled or inspected are loosened so the closures can be easily opened by hand. The closures are not removed until the drum is actually sampled. When the drums are opened for sampling or inspection, they remain opened only for the time it takes to sample or inspect the drum, after which the bunghole lids are screwed in and tightened.

Fire, explosion, and generation of toxic gases may also be caused by the chemical reaction of two wastes that are not compatible with each other. This situation may happen when incompatible wastes are stored in the same cell and the incompatible wastes leak from their containers at the same time, coming into contact with each other. Also, one waste could leak first and cause the other incompatible one to leak out of its container, resulting in incompatible contact. To prevent storage of incompatible wastes in the same cell, Triumvirate Environmental utilizes a segregation system established by the DOT. Using this segregation system, combinations of compatible DOT hazard classes or divisions can be made. Triumvirate Environmental reviews and determines with the generator the appropriate DOT hazard class or division for every waste stream, in accordance with information and

properties of the waste, before receipt by the facility. The DOT hazard class or division is displayed on the hazardous waste label affixed to the drum and is shown on processing documents accessible to the operators handling the waste. Upon arrival at the Triumvirate Environmental Inc. facility, every drum is inspected for consistency of the information shown on the hazardous waste label and the DOT hazard class or division determined previously for the waste stream in question. Upon finding the DOT hazard class or division on the label is correct, operators will store the drum in a cell that contains other drums with a compatible DOT hazard class or division. The segregation of DOT hazard classes or divisions and the use of pallets to prevent leaks from contacting the bottom of the drums minimize the possibility of fire, explosion, and generation of toxic gases that may be caused by the chemical reaction of incompatible wastes.

As explained in previous paragraphs, every cell in the container storage unit has its individual secondary containment system, which is provided by berms built inside the unit. Besides providing a separation between incompatible wastes, these containment systems also prevent leaks from escaping the cell where the leak may occur. Every cell's containment system is capable of holding at least 10% of the maximum volume that may be stored in the cell. The height of the berms that separate the cells is smaller than the height of the walls and berms that surround the sub-unit and the entire unit. If a leak exceeds the secondary containment volume of the cell where it occurred, the excess will spill over the berms into the secondary containment system of the adjacent cells. A leak of large magnitude will spill into adjacent cells in a cascade pattern, but will not escape the sub-unit unless the secondary containment system of every cell in the sub-unit has been exceeded. If a leak is released from the unit, the leak will be contained by a series of berms that may be built on the adjacent parking lot during such emergency, and finally, by the storm water retention pond.

**Consolidation/Stabilization Areas**

Triumvirate Environmental will conduct both consolidation and stabilization activities per the Waste Analysis Plan (WAP). Triumvirate Environmental Inc. will only pour off containers equal to or greater than one gallon in size in accordance with the WAP. Flammables are contingent upon NFPA upgrades. Certain toxic waste streams may also be consolidated into roll off containers. Triumvirate Environmental Inc. will not consolidate inorganic acids, inhalation hazards, or reactive chemicals (D003). As part of consolidation activities Triumvirate Environmental Inc. will also re-package lab packs into larger containers. The second activity that Triumvirate Environmental will conduct is stabilization of RCRA metals (D004-D008 and D010-D011). Stabilization activities will be done in accordance with the Waste Analysis Plan.

The consolidation/stabilization operations of hazardous waste take place in the Consolidation and Stabilization Area. This area is shown in Figure I D 1. The consolidation area manages wastes that are placed in roll-off boxes or dump trailers. This area is also used to manage waste, greater than or equal to 1 gallon, which are consolidated in drums or totes, and also manages drummed waste that will be stabilized. The wastes consolidated in roll-off boxes or dump trailers do not present a fire or an explosion hazard because they are generally wastes contaminated with heavy metals, and sometimes cyanides, which are not combustible. Inner

containers are consolidated in batches with each batch consisting of wastes of similar type. Containers less than 1 gallon will not be opened. Consolidation activities and procedures are identified in the Waste Analysis Plan.

Inner containers that are to be consolidated are usually received packaged inside drums ranging from five gallons to 55 gallons. Those drums are transferred from the container storage unit to the Consolidation and Stabilization Area, see figure I D 1. The containers are unpacked at that location, and the inner containers are placed on tables that can be moved around the area. These containers are segregated by waste material type to prevent commingling incompatible materials. Waste materials are first checked for compatibility and then consolidated per the Waste Analysis Plan. Emissions generated by this operation are insignificant and do not pose a threat to human health or the environment. Personnel conducting this operation wear protective equipment to protect them from injury in the event of a chemical reaction. Because of the small amount of waste materials involved, an incident from this operation will not result in significant damage or harm even in a worst-case scenario. A fire from this operation would be easily controlled with fire extinguishers available in the area.

The inside of the Consolidation and Stabilization Area is surrounded by a berm three inches high that has been built along the internal perimeter of the building. The part of the building that has a berm is capable of containing a spill of about 6,700 gallons, which is a volume larger than the volume of the largest container into which liquid waste may be consolidated. Calculations can be found in section II.B.1.

The consolidation operations, including lab packing, can occur anywhere in the consolidation/stabilization area.

## REQUIRED COMMUNICATION EQUIPMENT

This portion of Preparedness and Prevention Procedures required by section II.A.4.d of the permit application describes the communication system available to advise and instruct personnel at the site when an emergency incident occurs and to summon assistance from emergency response institutions. An account of the emergency equipment available at the site to control fire and spills is also provided.

### Internal Communication

The facility shown in Figure I D 1 is small in size, and personnel working at various locations of the facility in most cases could communicate by word of mouth during an emergency situation. Facility personnel also carry a mobile communication device, such as a cell phone or two-way radio. By using radios and cell phones personnel at the facility will be capable of providing information to personnel at other locations and inside the facility and to summon help from outside the facility. In addition a paging system may be used to transmit to facility personnel information or instructions inside and/or outside of the facility. Also, the fire alarm devices located at various parts of the facility will emit a loud sound when activated in case of a fire.

## External Communications

The regulations require a communication system capable of summoning assistance from emergency response services. The facility has in place a system that is capable of providing communication between the facility and any other telephone outside the facility. The fire alarm devices installed at several locations throughout the facility will summon the assistance of the fire department when activated. Cell phones can also be used for external communication.

## Spill, Fire Control, and Decontamination Equipment

The spill and fire control equipment meets the decontamination equipment required by 264.32(c). There are a number of fire extinguishers distributed throughout the facility as well as spill control equipment. Two types of mobile fire extinguishers are used at the facility: 5- and 20-pound portable fire extinguishers for locations where space is reduced or access is limited and 150-pound, wheel-mounted fire extinguishers for locations where areas are wide and unobstructed and where the floor is even. In addition to the fire extinguisher equipment described above, the container storage unit and the entire area of the north building, which houses the Consolidation and Stabilization Area, are covered with an automatic fire sprinkler system. An 8-inch diameter fire hydrant having a 4-inch and 2 inch hose connectors located just outside the southwest corner of the site is capable of supplying water in adequate volume and pressure to fight large fires.

Spill control equipment consists of absorbent material in granular form and shovels, brooms and dust pans. This material when used will absorb liquid spills, preventing the liquid from spreading and making the spills easier to collect. The absorbent material is kept in pails or drums at strategic locations where spills may occur. This material is available at the facility in sufficient quantities because it is also used to reduce free liquids in certain consolidation operations conducted at the site. A number of air-driven pumps of various sizes are used in processes and operations at the facility and are available to collect liquid spills.

## Testing and Maintenance of Equipment

The facility provides regular maintenance to fire extinguishers, fire sprinters, and fire alarms. Fire extinguishers are inspected at least annually by a private maintenance company. The fire sprinklers and fire alarms are integrated into one system that monitors and controls both pieces of equipment. An outside sprinkler and alarm service company conducts quarterly inspections.

Maintenance of the spill control equipment consists of replenishing containers with the absorbent material used to collect and control liquid spills. The need for replenishing the spill control equipment will be noted on the inspection log for the unit, process, or area where the spill control equipment is located. These inspections are addressed in sections II.B.5 of this application. Communication and decontamination equipment will be maintained and repaired to maintain good working order continuously.

### Access to Communications or Alarm System

The regulations require that an internal alarm or emergency communication device must be immediately available to personnel handling waste, and that a telephone or a handheld, two-way radio must be accessible at the scene of operation whenever only one employee is on the premises while the facility is operating. Operators at the facility will be able to communicate by means of stationary communication devices at the facility. Some operators working in the facility are provided with hand-held, two-way radios for communication with other operators carrying the same communication device. The stationary devices are in permanent operation and can be used by anyone at any time. In the unlikely event that only one employee is on the premises while the facility is operating, this employee will carry a cell phone to make possible immediate outside communication.

### Required Aisle Space

Equipment and operations at the facility will provide aisle space adequate for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility operation during an emergency. The layout of equipment, buildings, and structures in the facility has been designed so that forklifts, carts, dollies, and other mobile equipment of reasonable size, including fire and spill control, and decontamination equipment have access to all areas of the facility. The container storage unit may be accessed by forklifts through the ramp that leads to the loading dock, and drums in pallets are arranged in rows at locations delineated by yellow lines. The rows are spaced at least two feet apart from each other. Inspections conducted in the unit ensures that aisle spaces are maintained unobstructed for movement of personnel and equipment. The north building has roll-over berms at three locations on the west side of the building to make it accessible to forklifts. The layout of process equipment inside the building has been designed to allow unobstructed movement to mobile and portable equipment and to provide rapid exit for personnel in case of an incident requiring evacuation of the building. Clear and unobstructed areas for the movement of emergency equipment will be monitored and maintained by means of inspections.

### Arrangements with Local Authorities

To familiarize emergency response organizations with the facility layout, the type of hazards presented by the wastes managed at the facility, and other features associated with emergency assistance, the facility will provide the organizations with a copy of the contingency plan, which includes emergency procedures. Triumvirate Environmental Inc. has an electronic record of wastes onsite and that can be accessed at any time, from any location, and provided to emergency response personnel. Emergency response personnel will be requested to visit the facility once a year including the Orange County Emergency Management Department. The location of the facility is serviced by emergency organizations under one local government. This eliminates the problem of having to deal with more than one organization that renders the same type of service and having to designate a primary emergency authority.

The emergency response organizations, except hospital and police, are coordinated by the Orange County Emergency Management Department, which is committed to assist the facility during emergencies without the need of an agreement. Similarly, emergency response contractors will provide their services on an as-needed basis without a prior agreement or a contract. One of the hospitals designated in the contingency plan to receive injured personnel, The Hospital on Orange Avenue, is capable of treating any type of injury or illness that could result from fires, explosions, or releases at the facility. When state or local authorities decline to enter into arrangements for emergency assistance, you must document the refusal in the operating record (40 CFR Part 264.39(b)).

## Emergency Service Organizations

Table II.A.4.b.-1 lists the service type, name of the service organization, and telephone number for each organization that has been identified as a potential emergency service organization. This list will be posted near telephones located in areas from which emergency calls are most likely to be made to provide callers with the information necessary to summon help in case of an incident.

The type of organizations that are most needed in case of an emergency are: Emergency Response (Hazardous Materials) Team, Fire Department, Hospital, and Sheriff's Department. The locations of the organizations mentioned in the previous sentence that are closest to the Triumvirate Environmental Inc. site. These organizations will be provided with a copy of the contingency plan and Preparedness and Prevention Plan upon its approval by the Florida DEP. These organizations will also be notified every time there is a change in –

1. emergency coordinators.
2. waste type or location of waste types that pose an additional or different safety concern to the ones described in this plan.
3. structures, equipment, or operations that affect the way this plan is to be implemented.
4. structures, equipment, or operations that alter the level of hazard at the facility
5. emergency procedures contained in this plan that may affect the level of service to be rendered by these organizations.

This document will be amended to reflect any of the changes described above, and a copy of the amended document will be provided to those organizations. This plan will also be amended when changes are necessary to improve response to emergencies. Finally, this plan will be amended if the plan fails in an emergency (40 CFR Part 264.54(b)).

Emergency organizations are expected to provide the following support during emergencies:

Hazardous Materials Emergency Response Team

The emergency coordinators and cleanup contractor(s):will help mitigate hazards posed by hazardous materials that are out of control and help retrieve injured personnel from hazardous environments. The local emergency response team, from the local fire department, that renders

this type of service is based at Orange County Fire Rescue Station #50, which is located near the intersection of Interstate 4 (I-4) and U.S. Highway 441 (OBT) about 7 miles north of the site at 1415 West 29 Street, Orlando (about 12 minutes from the facility). This unit is known as Squad 1. This organization will be provided with a copy of this Preparedness and Prevention Plan.

Fire Department

The Orange County Fire Department has visited our facility to familiarize themselves with our operations and in addition to conducting yearly inspections. The Orange County Fire Department will respond to fires and other emergency incidents providing fire protection and rescue services. The department operates units located in several stations near the Triumvirate Environmental Inc. site. These stations and their response capability are listed below.

Station #73: This unit is located in the town of Taft less than 2 miles northeast from the site at the intersection of Orange Avenue (State Road 527) and 1st Street, at 811 E. 1st Street, Orlando. The response time for this unit is about 4 minutes. This unit will be the first responder in the event of a fire.

Station #53: This unit is located just east of OBT about 2 miles northeast from the site, at 1270 La Quinta Drive, Orlando. The response time is approximately 6 minutes. The unit can provide medical support.

Station #51: This unit is located just west of OBT about 4.5 miles north from the site, at 1700 W. Oakridge, Orlando. The unit's response time is approximately 10 minutes. The unit can provide a ladder truck in case of a fire.

A copy of the contingency plan for the Orange County Fire Department will be provided to the Deputy Chief, Operations at the Orange County Fire Rescue Division, 6590 Amory Court, Winter Park, Florida 32792 upon approval of the plan by the Florida DEP.

Hospital

Orlando Regional Healthcare (ORH) is capable of providing almost all emergency medical services that may be needed by injured personnel. ORH offers minor trauma services at the Dr. P. Phillips Hospital located just west of I-4 and about 6 miles east of the site, at 9400 S. Turkey Lake Road, Orlando. The time of travel is about 10 minutes from the facility. ORH offers major trauma services at the Orlando Regional Medical Center (ORMC) located about 8 miles north of the site at 1414 Kuhl Avenue, Orlando, Florida 32806. The time of travel to this unit is about 14 minutes from the facility. A copy of the contingency plan will be mailed to the ORMC upon approval of this plan by the Florida DEP.

Sheriff's Department

The Orange County Sheriff's Office is available to direct traffic, handle crowds, and provide security during emergency situations. The Sheriff will be provided a copy of this document at the Orange County Sheriff Office, 2500 W. Colonial Drive, Orlando, Florida 32802, upon its approval by the Florida DEP.

Copies of the Preparedness and Prevention Plan, in accordance with statements shown above, will be provided to the emergency service organizations within 30 days after the application is deemed complete. Certified return receipt slips providing proof of mail and delivery of the documents will be kept with pertinent records at the facility.

Incidents of large magnitude may require the use of heavy equipment for containment, removal, and transportation of contaminated materials. In the event that the heavy equipment is not available, Triumvirate Environmental Inc. will seek the help of outside emergency response contractors to assist the facility during special emergency circumstances.

**Table II.A.4.b.-1**
**EMERGENCY SERVICE ORGANIZATIONS PHONE NUMBERS**

| Emergency Contact List | | |
|---|---|---|
| **Facility Information:**<br>Triumvirate Environmental<br>10100 Rocket Boulevard, Orlando, Florida 32824<br>407-859-4441 | | |
| **Emergency Coordinators:** | | |
| Primary – | Thomas Montgomery (Primary)<br>524 Bamboo Harbour Court<br>Orlando, FL 32825 | Cell: (407) 495-8483 |
| Secondary - | David Chambers<br>3339 Bracken Fern Drive<br>Harmony, FL 34773 | Cell: (407) 756-2272<br>Alt#: (321)514-9234 |
| Alternate - | Eden Tuccillo<br>742 Battery Pointe Drive<br>Orlando, Florida 32828 | Cell: (407)415-3950<br>Alt #: (407) 923-3409 |
| **The National Incident Management System (NIMS) will be followed. Additional information can be found:** http://www.fema.gov/national-incident-management-system | | |
| **Designated Person Accountable for Discharge Prevention:** | | |
| Facility Manger – Charles (Kip) Buckley | | Cell: 321-246-5197 |
| **National Response Center (NRC):** | | 1-800-424-8802 |
| **Cleanup Contractor(s):** | | |
| Eagle SWS Emergency Response | | 1-800-852-8878 |
| Clean Harbors of Florida, LLC | | 1-800-645-8265 |
| **State Oil Pollution Control Agency** – FDEP 24-Hour State Warning Point (Depart. of Community Affairs' Division of Emergency Management) | | 1-800-320-0519 |
| **Local Emergency Response Planning Committee:** | | |
| East Central Florida Regional Planning Council<br>309 Cranes Roost Boulevard, Suite 2000<br>Altamonte Springs 32701 | | 407-262-7772 ext. 335 |
| **Other Federal/State/Local Agencies:** | | |
| EPA – Regional IV – 24-Hour Spill Reporting | | 1-800-424-8802 |
| FDEP – Central District | | 407-897-4100 |
| Orange County Emergency Management | | **911*** or 407-836-9140 (local) |
| **Local Fire Department –** Orange County Fire Department | | **911*** or 407-836-9000 (local) |
| **Local Police Department** – Orange County Police Department | | **911*** or 407-836-6500 (local) |
| **Hospital –** Orange County Regional Medical Center | | **911*** or 407-841-5111 (local) |
| **Other Contact References:** | | |
| Boggy Creek (east-northeast) – South Florida WMD | | 800-432-2045 |
| Neighboring Facility (west) – Cook Composites & Polymers | | 407-859-3030 |
| Neighboring Facility (north) – Oldcastle Precast, Inc. | | 407-855-7580 |
| Neighboring Facility (south) – L&S Logistics Services Orlando | | 407-582-0900 |

***Note: In the event of emergency, dial 911.**

**Figure I D 1: FACILITY LAYOUT**
See Maps & Figures Section

**Figure II.A.5 : Evacuation Routes**
See Maps & Figures Section

## Preparedness and Prevention Plan

## DESIGN AND OPERATION OF THE FACILITY

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The continuation of this section describes how the facility is designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. Each area, process, and operation described in the previous paragraph will be discussed below to address the issue referenced in the sentence above.

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in each cell has been coated with a chemical-resistant coating designed to protect the floor material against the chemical attack from solvents and corrosives.

There are two other sub-units, one located along the existing east wall (the east sub-unit) and the other in the northwest corner (the northwest sub-unit) of the unit. The east subunit will be used to store alkaline, toxic, non-hazardous, and universal waste types. The east sub-unit is identical to the south sub-unit as described in the previous paragraph, except that it has nine cells rather than six as the south sub-unit, and that the cell at the north end of the east sub-unit has the capacity to hold two rows of pallets rather than one as the other cells. The northwest sub-unit is one cell that has five rows eleven pallets long, all placed in a single and common secondary containment provided by the roll-over berms that run along the other sub-units at the south and east and the walls of the storage unit at the north and west. The northwest subunit will store only non-hazardous wastes. There are no berms or other type of structures protruding from the floor surface inside this sub-unit, except for a ramp for forklifts on the west side that provides access to the loading dock. The entire floor area of this sub-unit is covered with the same protective coating described in the previous paragraph. The south, east, and northwest sub-units are permitted to store 144, 240, and 440 — 55-gallon drums, respectively. Calculations for secondary containment are found in section II.B.1.

To minimize the potential for fire in the container storage unit, all electrical systems, equipment, and tools used in this area are operated, constructed, and designed to prevent the generation of sparks. Electrical systems in this unit consist of lighting, electrical outlets, and equipment necessary to the fire alarm system. There are no electric motors in operation in this unit except for the ones used to drive fans or blowers. Forklifts used inside the container storage unit for transferring drums are propelled by internal combustion engines that run on propane gas, which eliminates the possibility of sparks through the tail pipe. The container storage unit is operated in a manner that minimizes the generation and concentration of flammable gases due to emissions from drums stored in it. Drums stored in this unit are closed except when opened for sampling or inspection. This usually occurs only once during the stay of the drum in the unit. The bunghole lids of the drums to be sampled or inspected are loosened so the closures can be easily opened by hand. The closures are not removed until the drum is actually sampled. When the drums are opened for sampling or inspection, they remain opened only for the time it takes to sample or inspect the drum, after which the bunghole lids are screwed in and tightened.

Fire, explosion, and generation of toxic gases may also be caused by the chemical reaction of two wastes that are not compatible with each other. This situation may happen when incompatible wastes are stored in the same cell and the incompatible wastes leak from their containers at the same time, coming into contact with each other. Also, one waste could leak first and cause the other incompatible one to leak out of its container, resulting in incompatible contact. To prevent storage of incompatible wastes in the same cell, Triumvirate Environmental utilizes a segregation system established by the DOT. Using this segregation system, combinations of compatible DOT hazard classes or divisions can be made. Triumvirate Environmental reviews and determines with the generator the appropriate DOT hazard class or division for every waste stream, in accordance with information and

properties of the waste, before receipt by the facility. The DOT hazard class or division is displayed on the hazardous waste label affixed to the drum and is shown on processing documents accessible to the operators handling the waste. Upon arrival at the Triumvirate Environmental Inc. facility, every drum is inspected for consistency of the information shown on the hazardous waste label and the DOT hazard class or division determined previously for the waste stream in question. Upon finding the DOT hazard class or division on the label is correct, operators will store the drum in a cell that contains other drums with a compatible DOT hazard class or division. The segregation of DOT hazard classes or divisions and the use of pallets to prevent leaks from contacting the bottom of the drums minimize the possibility of fire, explosion, and generation of toxic gases that may be caused by the chemical reaction of incompatible wastes.

As explained in previous paragraphs, every cell in the container storage unit has its individual secondary containment system, which is provided by berms built inside the unit. Besides providing a separation between incompatible wastes, these containment systems also prevent leaks from escaping the cell where the leak may occur. Every cell's containment system is capable of holding at least 10% of the maximum volume that may be stored in the cell. The height of the berms that separate the cells is smaller than the height of the walls and berms that surround the sub-unit and the entire unit. If a leak exceeds the secondary containment volume of the cell where it occurred, the excess will spill over the berms into the secondary containment system of the adjacent cells. A leak of large magnitude will spill into adjacent cells in a cascade pattern, but will not escape the sub-unit unless the secondary containment system of every cell in the sub-unit has been exceeded. If a leak is released from the unit, the leak will be contained by a series of berms that may be built on the adjacent parking lot during such emergency, and finally, by the storm water retention pond.

**Consolidation/Stabilization Areas**

Triumvirate Environmental will conduct both consolidation and stabilization activities per the Waste Analysis Plan (WAP). Triumvirate Environmental Inc. will only pour off containers equal to or greater than one gallon in size in accordance with the WAP. Flammables are contingent upon NFPA upgrades. Certain toxic waste streams may also be consolidated into roll off containers. Triumvirate Environmental Inc. will not consolidate inorganic acids, inhalation hazards, or reactive chemicals (D003). As part of consolidation activities Triumvirate Environmental Inc. will also re-package lab packs into larger containers. The second activity that Triumvirate Environmental will conduct is stabilization of RCRA metals (D004-D008 and D010-D011). Stabilization activities will be done in accordance with the Waste Analysis Plan.

The consolidation/stabilization operations of hazardous waste take place in the Consolidation and Stabilization Area. This area is shown in Figure I D 1. The consolidation area manages wastes that are placed in roll-off boxes or dump trailers. This area is also used to manage waste, greater than or equal to 1 gallon, which are consolidated in drums or totes, and also manages drummed waste that will be stabilized. The wastes consolidated in roll-off boxes or dump trailers do not present a fire or an explosion hazard because they are generally wastes contaminated with heavy metals, and sometimes cyanides, which are not combustible. Inner

containers are consolidated in batches with each batch consisting of wastes of similar type. Containers less than 1 gallon will not be opened. Consolidation activities and procedures are identified in the Waste Analysis Plan.

Inner containers that are to be consolidated are usually received packaged inside drums ranging from five gallons to 55 gallons. Those drums are transferred from the container storage unit to the Consolidation and Stabilization Area, see figure I D 1. The containers are unpacked at that location, and the inner containers are placed on tables that can be moved around the area. These containers are segregated by waste material type to prevent commingling incompatible materials. Waste materials are first checked for compatibility and then consolidated per the Waste Analysis Plan. Emissions generated by this operation are insignificant and do not pose a threat to human health or the environment. Personnel conducting this operation wear protective equipment to protect them from injury in the event of a chemical reaction. Because of the small amount of waste materials involved, an incident from this operation will not result in significant damage or harm even in a worst-case scenario. A fire from this operation would be easily controlled with fire extinguishers available in the area.

The inside of the Consolidation and Stabilization Area is surrounded by a berm three inches high that has been built along the internal perimeter of the building. The part of the building that has a berm is capable of containing a spill of about 6,700 gallons, which is a volume larger than the volume of the largest container into which liquid waste may be consolidated. Calculations can be found in section II.B.1.

The consolidation operations, including lab packing, can occur anywhere in the consolidation/stabilization area.

## REQUIRED COMMUNICATION EQUIPMENT

This portion of Preparedness and Prevention Procedures required by section II.A.4.d of the permit application describes the communication system available to advise and instruct personnel at the site when an emergency incident occurs and to summon assistance from emergency response institutions. An account of the emergency equipment available at the site to control fire and spills is also provided.

### Internal Communication

The facility shown in Figure I D 1 is small in size, and personnel working at various locations of the facility in most cases could communicate by word of mouth during an emergency situation. Facility personnel also carry a mobile communication device, such as a cell phone or two-way radio. By using radios and cell phones personnel at the facility will be capable of providing information to personnel at other locations and inside the facility and to summon help from outside the facility. In addition a paging system may be used to transmit to facility personnel information or instructions inside and/or outside of the facility. Also, the fire alarm devices located at various parts of the facility will emit a loud sound when activated in case of a fire.

## External Communications

The regulations require a communication system capable of summoning assistance from emergency response services. The facility has in place a system that is capable of providing communication between the facility and any other telephone outside the facility. The fire alarm devices installed at several locations throughout the facility will summon the assistance of the fire department when activated. Cell phones can also be used for external communication.

## Spill, Fire Control, and Decontamination Equipment

The spill and fire control equipment meets the decontamination equipment required by 264.32(c). There are a number of fire extinguishers distributed throughout the facility as well as spill control equipment. Two types of mobile fire extinguishers are used at the facility: 5- and 20-pound portable fire extinguishers for locations where space is reduced or access is limited and 150-pound, wheel-mounted fire extinguishers for locations where areas are wide and unobstructed and where the floor is even. In addition to the fire extinguisher equipment described above, the container storage unit and the entire area of the north building, which houses the Consolidation and Stabilization Area, are covered with an automatic fire sprinkler system. An 8-inch diameter fire hydrant having a 4-inch and 2 inch hose connectors located just outside the southwest corner of the site is capable of supplying water in adequate volume and pressure to fight large fires.

Spill control equipment consists of absorbent material in granular form and shovels, brooms and dust pans. This material when used will absorb liquid spills, preventing the liquid from spreading and making the spills easier to collect. The absorbent material is kept in pails or drums at strategic locations where spills may occur. This material is available at the facility in sufficient quantities because it is also used to reduce free liquids in certain consolidation operations conducted at the site. A number of air-driven pumps of various sizes are used in processes and operations at the facility and are available to collect liquid spills.

## Testing and Maintenance of Equipment

The facility provides regular maintenance to fire extinguishers, fire sprinters, and fire alarms. Fire extinguishers are inspected at least annually by a private maintenance company. The fire sprinklers and fire alarms are integrated into one system that monitors and controls both pieces of equipment. An outside sprinkler and alarm service company conducts quarterly inspections.

Maintenance of the spill control equipment consists of replenishing containers with the absorbent material used to collect and control liquid spills. The need for replenishing the spill control equipment will be noted on the inspection log for the unit, process, or area where the spill control equipment is located. These inspections are addressed in sections II.B.5 of this application. Communication and decontamination equipment will be maintained and repaired to maintain good working order continuously.

### Access to Communications or Alarm System

The regulations require that an internal alarm or emergency communication device must be immediately available to personnel handling waste, and that a telephone or a handheld, two-way radio must be accessible at the scene of operation whenever only one employee is on the premises while the facility is operating. Operators at the facility will be able to communicate by means of stationary communication devices at the facility. Some operators working in the facility are provided with hand-held, two-way radios for communication with other operators carrying the same communication device. The stationary devices are in permanent operation and can be used by anyone at any time. In the unlikely event that only one employee is on the premises while the facility is operating, this employee will carry a cell phone to make possible immediate outside communication.

### Required Aisle Space

Equipment and operations at the facility will provide aisle space adequate for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility operation during an emergency. The layout of equipment, buildings, and structures in the facility has been designed so that forklifts, carts, dollies, and other mobile equipment of reasonable size, including fire and spill control, and decontamination equipment have access to all areas of the facility. The container storage unit may be accessed by forklifts through the ramp that leads to the loading dock, and drums in pallets are arranged in rows at locations delineated by yellow lines. The rows are spaced at least two feet apart from each other. Inspections conducted in the unit ensures that aisle spaces are maintained unobstructed for movement of personnel and equipment. The north building has roll-over berms at three locations on the west side of the building to make it accessible to forklifts. The layout of process equipment inside the building has been designed to allow unobstructed movement to mobile and portable equipment and to provide rapid exit for personnel in case of an incident requiring evacuation of the building. Clear and unobstructed areas for the movement of emergency equipment will be monitored and maintained by means of inspections.

### Arrangements with Local Authorities

To familiarize emergency response organizations with the facility layout, the type of hazards presented by the wastes managed at the facility, and other features associated with emergency assistance, the facility will provide the organizations with a copy of the contingency plan, which includes emergency procedures. Triumvirate Environmental Inc. has an electronic record of wastes onsite and that can be accessed at any time, from any location, and provided to emergency response personnel. Emergency response personnel will be requested to visit the facility once a year including the Orange County Emergency Management Department. The location of the facility is serviced by emergency organizations under one local government. This eliminates the problem of having to deal with more than one organization that renders the same type of service and having to designate a primary emergency authority.

The emergency response organizations, except hospital and police, are coordinated by the Orange County Emergency Management Department, which is committed to assist the facility during emergencies without the need of an agreement. Similarly, emergency response contractors will provide their services on an as-needed basis without a prior agreement or a contract. One of the hospitals designated in the contingency plan to receive injured personnel, The Hospital on Orange Avenue, is capable of treating any type of injury or illness that could result from fires, explosions, or releases at the facility. When state or local authorities decline to enter into arrangements for emergency assistance, you must document the refusal in the operating record (40 CFR Part 264.39(b)).

**Emergency Service Organizations**

Table II.A.4.b.-1 lists the service type, name of the service organization, and telephone number for each organization that has been identified as a potential emergency service organization. This list will be posted near telephones located in areas from which emergency calls are most likely to be made to provide callers with the information necessary to summon help in case of an incident.

The type of organizations that are most needed in case of an emergency are: Emergency Response (Hazardous Materials) Team, Fire Department, Hospital, and Sheriff's Department. The locations of the organizations mentioned in the previous sentence that are closest to the Triumvirate Environmental Inc. site. These organizations will be provided with a copy of the contingency plan and Preparedness and Prevention Plan upon its approval by the Florida DEP. These organizations will also be notified every time there is a change in –

1. emergency coordinators.
2. waste type or location of waste types that pose an additional or different safety concern to the ones described in this plan.
3. structures, equipment, or operations that affect the way this plan is to be implemented.
4. structures, equipment, or operations that alter the level of hazard at the facility
5. emergency procedures contained in this plan that may affect the level of service to be rendered by these organizations.

This document will be amended to reflect any of the changes described above, and a copy of the amended document will be provided to those organizations. This plan will also be amended when changes are necessary to improve response to emergencies. Finally, this plan will be amended if the plan fails in an emergency (40 CFR Part 264.54(b)).

Emergency organizations are expected to provide the following support during emergencies:

Hazardous Materials Emergency Response Team

The emergency coordinators and cleanup contractor(s):will help mitigate hazards posed by hazardous materials that are out of control and help retrieve injured personnel from hazardous environments. The local emergency response team, from the local fire department, that renders

this type of service is based at Orange County Fire Rescue Station #50, which is located near the intersection of Interstate 4 (I-4) and U.S. Highway 441 (OBT) about 7 miles north of the site at 1415 West 29 Street, Orlando (about 12 minutes from the facility). This unit is known as Squad 1. This organization will be provided with a copy of this Preparedness and Prevention Plan.

Fire Department

The Orange County Fire Department has visited our facility to familiarize themselves with our operations and in addition to conducting yearly inspections. The Orange County Fire Department will respond to fires and other emergency incidents providing fire protection and rescue services. The department operates units located in several stations near the Triumvirate Environmental Inc. site. These stations and their response capability are listed below.

Station #73: This unit is located in the town of Taft less than 2 miles northeast from the site at the intersection of Orange Avenue (State Road 527) and 1st Street, at 811 E. 1st Street, Orlando. The response time for this unit is about 4 minutes. This unit will be the first responder in the event of a fire.

Station #53: This unit is located just east of OBT about 2 miles northeast from the site, at 1270 La Quinta Drive, Orlando. The response time is approximately 6 minutes. The unit can provide medical support.

Station #51: This unit is located just west of OBT about 4.5 miles north from the site, at 1700 W. Oakridge, Orlando. The unit's response time is approximately 10 minutes. The unit can provide a ladder truck in case of a fire.

A copy of the contingency plan for the Orange County Fire Department will be provided to the Deputy Chief, Operations at the Orange County Fire Rescue Division, 6590 Amory Court, Winter Park, Florida 32792 upon approval of the plan by the Florida DEP.

Hospital

Orlando Regional Healthcare (ORH) is capable of providing almost all emergency medical services that may be needed by injured personnel. ORH offers minor trauma services at the Dr. P. Phillips Hospital located just west of I-4 and about 6 miles east of the site, at 9400 S. Turkey Lake Road, Orlando. The time of travel is about 10 minutes from the facility. ORH offers major trauma services at the Orlando Regional Medical Center (ORMC) located about 8 miles north of the site at 1414 Kuhl Avenue, Orlando, Florida 32806. The time of travel to this unit is about 14 minutes from the facility. A copy of the contingency plan will be mailed to the ORMC upon approval of this plan by the Florida DEP.

Sheriff's Department

The Orange County Sheriff's Office is available to direct traffic, handle crowds, and provide security during emergency situations. The Sheriff will be provided a copy of this document at the Orange County Sheriff Office, 2500 W. Colonial Drive, Orlando, Florida 32802, upon its approval by the Florida DEP.

Copies of the Preparedness and Prevention Plan, in accordance with statements shown above, will be provided to the emergency service organizations within 30 days after the application is deemed complete. Certified return receipt slips providing proof of mail and delivery of the documents will be kept with pertinent records at the facility.

Incidents of large magnitude may require the use of heavy equipment for containment, removal, and transportation of contaminated materials. In the event that the heavy equipment is not available, Triumvirate Environmental Inc. will seek the help of outside emergency response contractors to assist the facility during special emergency circumstances.

**Table II.A.4.b.-1**
**EMERGENCY SERVICE ORGANIZATIONS PHONE NUMBERS**

| Emergency Contact List | | |
|---|---|---|
| **Facility Information:**<br>Triumvirate Environmental<br>10100 Rocket Boulevard, Orlando, Florida 32824<br>407-859-4441 | | |
| **Emergency Coordinators:** | | |
| Primary – | Thomas Montgomery (Primary)<br>524 Bamboo Harbour Court<br>Orlando, FL 32825 | Cell: (407) 495-8483 |
| Secondary - | David Chambers<br>3339 Bracken Fern Drive<br>Harmony, FL 34773 | Cell: (407) 756-2272<br>Alt#: (321)514-9234 |
| Alternate - | Eden Tuccillo<br>742 Battery Pointe Drive<br>Orlando, Florida 32828 | Cell: (407)415-3950<br>Alt #: (407) 923-3409 |
| **The National Incident Management System (NIMS) will be followed. Additional information can be found:** http://www.fema.gov/national-incident-management-system | | |
| **Designated Person Accountable for Discharge Prevention:** | | |
| Facility Manger – Charles (Kip) Buckley | | Cell: 321-246-5197 |
| **National Response Center (NRC):** | | 1-800-424-8802 |
| **Cleanup Contractor(s):** | | |
| Eagle SWS Emergency Response | | 1-800-852-8878 |
| Clean Harbors of Florida, LLC | | 1-800-645-8265 |
| **State Oil Pollution Control Agency** – FDEP 24-Hour State Warning Point (Depart. of Community Affairs' Division of Emergency Management) | | 1-800-320-0519 |
| **Local Emergency Response Planning Committee:** | | |
| East Central Florida Regional Planning Council<br>309 Cranes Roost Boulevard, Suite 2000<br>Altamonte Springs 32701 | | 407-262-7772 ext. 335 |
| **Other Federal/State/Local Agencies:** | | |
| EPA – Regional IV – 24-Hour Spill Reporting | | 1-800-424-8802 |
| FDEP – Central District | | 407-897-4100 |
| Orange County Emergency Management | | **911*** or 407-836-9140 (local) |
| **Local Fire Department –** Orange County Fire Department | | **911*** or 407-836-9000 (local) |
| **Local Police Department** – Orange County Police Department | | **911*** or 407-836-6500 (local) |
| **Hospital –** Orange County Regional Medical Center | | **911*** or 407-841-5111 (local) |
| **Other Contact References:** | | |
| Boggy Creek (east-northeast) – South Florida WMD | | 800-432-2045 |
| Neighboring Facility (west) – Cook Composites & Polymers | | 407-859-3030 |
| Neighboring Facility (north) – Oldcastle Precast, Inc. | | 407-855-7580 |
| Neighboring Facility (south) – L&S Logistics Services Orlando | | 407-582-0900 |

***Note: In the event of emergency, dial 911.**

**Figure I D 1: FACILITY LAYOUT**
See Maps & Figures Section

**Figure II.A.5 : Evacuation Routes**
See Maps & Figures Section

2ATP
Personel Training

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# FOR
# PERSONNEL TRAINING


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## EXHIBITS


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|---|---|
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# PERSONNEL TRAINING

## 1.0 INTRODUCTION

Triumvirate Environmental Inc. has developed a training program for its employees involved in hazardous waste management operations to ensure the facility will be operated and maintained in a safe manner. The program has been designed to train personnel with the necessary level of awareness and knowledge to provide assurance of proper performance on job assignments with respect to safety, hazardous waste management, and response to incidents at the facility. Triumvirate Environmental personnel conduct operations that have varying levels of involvement in the management of hazardous waste. Some employees have direct contact with hazardous wastes, while others are only involved in preparing documents related to management of hazardous wastes. The training program for employees emphasizes those aspects of the job the employee has been assigned to perform. At the same time, the program trains employees about areas of operation that are not required by their job assignment where those areas may affect performance with respect to safety and response to emergencies.

## 2.0 PROGRAM OBJECTIVES

The training program is designed to address five major areas of concern which are listed below:

- safety and emergency measures and personal protective equipment;
- hazardous waste management procedures, including potential hazards posed by materials and operations;
- compliance with environmental, transportation, and occupational safety and health regulations;
- emergency response and contingency plan implementation; and
- proper performance on job assignments.

The program consists of initial and refresher training to teach employees how to perform assigned duties while observing the five areas of concern listed above. The training includes classroom instruction and/or on-the-job orientation.

## 3.0 PERSONNEL ORGANIZATION

This section of the training program describes the organization of personnel and their level of involvement in managing hazardous waste at the facility. **Figure I** includes a simplified organization chart for Triumvirate Environmental Inc. that shows four major management areas within the facility. The management areas are sales, administration, environmental, and plant. Most employees are somehow related to the management of hazardous waste, either in direct contact with it or in preparing and processing documentation and data. Personnel in the area of sales are not subject to the provisions of this permit application with respect to training because they do not work in any of the operations and processes located at the facility site. Therefore, training for sales is not discussed in this program. Sales personnel operate at locations within the geographical area from which they provide services to customers of Triumvirate Environmental Inc. Sales personnel do not work in the parts of the facility detailed in the Part B permit and are not included in the facility training program. Such personnel may participate in general orientation offerings.

Administration operations perform office-related functions for the facility. This management area includes general services (i.e., receptionist and administrative assistant), accounting (i.e., payables and receivables), and waste management, which consists of personnel responsible for the preparation and processing of documents and data related to the management of hazardous waste by the facility.

Environmental operations provide guidance to facility personnel regarding compliance with regulations and permit conditions, review documents, and supervise compliance recordkeeping. This management area is not part of the line organization that performs the services offered by the facility. Environmental operations functions as a staff position having an advisory role.

Finally, the plant management is in charge of the hazardous waste operations and processes at the facility and transportation to and from client sites and disposal facilities. Plant personnel are constantly and directly involved in hazardous waste management.

## 4.0 TRAINING INFORMATION RESOURCES

Hazardous waste facilities are subject to environmental requirements. When waste is shipped to other facilities, the facility becomes subject to transportation regulations. When employees are required to perform hazardous duties, the facility is subject to occupational health and safety regulations. Therefore, besides receiving training on environmental requirements, there are other regulations outside the environmental domain for which personnel should be trained. Some transportation requirements have been included in the environmental regulations, such as manifesting and marking. However, some transportation and occupational requirements are referenced only by citation or are not detailed at all.

This part of the training program describes some of the regulations, permit application, and operations documents used to accomplish the objective of this program. Regulations that affect operations at the facility with respect to this program are those promulgated by EPA, DOT, and OSHA in the Code of Federal Regulations (CFR) in Titles 40, 49, and 29, respectively. The regulations indicate specific requirements for procedures and operations conducted at the facility. This application describes the methods used to manage the facility in accordance with environmental regulations. Several sections of the permit are utilized to train personnel on areas related to safety, operations, and emergency response. Operation documents consist of manuals and procedures that provide valuable assistance for training of personnel. These documents may be manuals provided by the manufacturers of equipment used in the processes or operations at the facility or guidance documents published by public or private institutions on hazardous waste management, safety, emergency, or other technical issues. Documents used may also be procedures prepared by the facility, either to focus on specific parts of the operations and processes or to provide more comprehensive information on operations and processes than those contained in the permit application. This application contains general information on every hazardous waste process or operation conducted at the facility.

## 5.0 PROGRAM DEVELOPMENT METHOD

The training program has been developed to achieve the objectives defined in sub-section 2.0 of Training Program for Hazardous Waste Part B Permit for the 10100 Rocket Boulevard, Orlando, Florida facility. The topics and degree of training that employees need to receive in

order to achieve the objectives of the program require that the content of the training plan be varied, depending on the level of involvement employees have in hazardous waste management. Section 3.0 describes personnel organization at the facility and the level of involvement employees have in hazardous waste management for the areas shown in the organization chart. The training outline presented in this plan identifies the parts in the training information sources that should be used to train personnel to accomplish the objectives of the program.

## 6.0 TRAINING OUTLINE

A sample training outline is provided as **Exhibit I.** The following section lists every personnel group separately and identifies the regulations, permit sections, and operation documents that are of special interest to that personnel group. The level of proficiency required of each employee depends on the degree of responsibility and the job the employee is required to perform. The extent of instruction on a training topic an employee should receive is determined by these two factors.

**ADMINISTRATION PERSONNEL**

**Compliance with Environmental, Transportation, and Occupational Regulations –**

**Regulations:**

-- 40 CFR 261; for personnel involved in the waste evaluation
-- 40 CFR 262; for personnel involved in processing outbound shipments
-- 40 CFR 263; for personnel involved in processing waste in transfer
-- 40 CFR 264: for personnel involved in processing inbound shipments
-- 40 CFR 268; for personnel involved in processing waste shipments
-- 49 CFR 172; for personnel involved in waste shipments and evaluation

**Permit:**

-- Waste Analysis Plan; for personnel involved in waste evaluation
-- Manifest and Recordkeeping ; for personnel in shipping and evaluation

## ENVIRONMENTAL PERSONNEL

### Safety Measures and Protective Equipment –

**Regulations:**

-- 40 CFR Part 264 – Prevention; ignitables, reactives, and incompatibles
-- 49 CFR Part 177 – Hazardous materials segregation and separation
-- 29 CFR 1910.120 - Occupational Safety and Health Standards: Hazardous Materials
-- 29 CFR 1910.146 – Confined space entry
-- 29 CFR 1910.147 – Lockout/tagout of electrical power supply

**Permit:**

-- Procedures, Structures, and Equipment Used to Prevent Hazardous Waste [II.A.4.c]
-- Preparedness and Prevention

### Potential Hazards Posed by Materials and Operations –

**Regulations:**

-- 49 CFR Part 177 – Hazardous materials segregation and separation
-- 29 CFR 1910.120 – Occupational Safety and Health Standards: Hazardous Materials
-- 29 CFR 1910.146 – Confined space entry
-- 29 CFR 1910.147 – Lockout/tagout of electrical power supply

**Permit:**

-- Contingency Plan and Emergency Procedures [II.A.4.b]; sub-section 5.0
-- Description of operations for storage and treatment [II.B and C]

### Compliance with Environmental, Transportation and Occupational Regulations –

**Regulations:**

-- 40 CFR Part 261 – Identification and listing of hazardous waste
-- 40 CFR Part 262 – Requirements for generators of hazardous waste
-- 40 CFR Part 263 – Requirements for transfer facilities
-- 40 CFR Part 264 – Requirements for hazardous waste permitted facilities
-- 40 CFR Part 268 – Requirements for land disposal
-- 49 CFR Part 172 – Hazardous materials description and labeling
-- 49 CFR Part 173 – Hazardous materials classification and packaging
-- 49 CFR Part 177 – Hazardous materials segregation and separation
-- 29 CFR 1910.146 – Confined space entry
-- 29 CFR 1910.147 – Lockout/tagout of electrical power supply

**Permit:** Permit conditions and permit application

### Emergency Response –

**Regulations:**

-- 29 CFR 1910.120 – Occupational Safety and Health Standards: Hazardous Materials

**Permit:**

-- Contingency Plan and Emergency Procedures [II.A.4.b]

## PLANT PERSONNEL

### Safety Measures and Protective Equipment –

**Regulations:**

-- 29 CFR 1910.120 – Occupational Safety and Health Standards: Hazardous Materials
-- 29 CFR 1910.146 – Confined space entry
-- 29 CFR 1910.147 – Lockout/tagout of electrical power supply

**Permit:**

-- Procedures, Structures, and Equipment Used to Prevent Hazards [II.A.4.c]
-- Preparedness and Prevention [II.A.4.d]

**Operation Documents:** Procedures developed for operations and processes

### Potential Hazards Posed by Materials and Operations –

**Regulations:**

-- 49 CFR Part 177 – Hazardous materials segregation and separation
-- 29 CFR 1910.120 – Section III of Exhibit II.A.4.e.-1
-- 29 CFR 1910.146 – Confined space entry
-- 29 CFR 1910.147 – Lockout/tagout of electrical power supply

**Permit:**

-- Contingency Plan and Emergency Procedures [II.A.4.b]; sub-section 5.0
-- Description of operations for storage and treatment [II.B and C]

### Compliance with Environmental, Transportation, and Occupational Regulations –

**Regulations:**

-- 40 CFR Part 261 – Identification and listing of hazardous waste
-- 40 CFR Part 263 – Requirements for transfer facilities
-- 40 CFR Part 24 – Requirements for hazardous waste permitted facilities
-- 49 CFR Part 172 – Hazardous materials description and labeling
-- 49 CFR Part 177 – Hazardous materials segregation and separation
-- 29 CFR1910.146 – Confined space entry
-- 29 CFR 1910.147 – Lockout/tagout of electrical power supply

**Permit:**

-- Description of operations for storage and treatment [II.B and C]

### Emergency Response –

**Regulations:**

-- 29 CFR 1910.120 – Occupational Safety and Health Standards: Hazardous Materials

**Permit Application:**

-- Contingency Plan and Emergency Procedures [II.A.4.b]

### Proper Performance on Job Assignments –

**Permit:**

-- Description of operations for storage and treatment [II.A and B]

**Operation Documents:** Procedures developed for operation and processes

## 7.0 DESCRIPTION OF TRAINING MATERIAL

This part of the training program describes some of the written materials or publications used to train personnel on topics listed in the training outline. The CFR, other publications, written material prepared by the facility, and audio/visual materials are used in the training program to instruct personnel

**Environmental Regulations:** Training on environmental regulations may be carried out with the actual regulations as published in the Code of Federal Regulations, with manuals or guides published by public or private agencies or institutions, or with written materials prepared by the facility. Environmental personnel are trained in the regulations published in the CFR, and they must have a good understanding of the requirements in the areas of emergency response; preparedness and prevention; waste evaluation; shipping; recordkeeping; and reporting, monitoring, and control of emissions from vents and leaks for treatment and storage facilities. The intent of the program is to train administration and plant personnel on the environmental regulations with respect to:

- identification and coding of hazardous waste, which is needed for reviewing and completing waste profiles, markings, manifests, and land disposal restriction documents;
- information needed on a manifest during preparation of outbound shipments and when receiving inbound shipments, as well as for land disposal restriction documents that should accompany the manifest;
- prevention of hazards, response to emergencies, recordkeeping, reporting, inspection, storage, and treatment requirements for hazardous waste permitted facilities; and
- storage time period limitations, structures, and recordkeeping requirements for transfer facilities.

**Transportation Regulations:** DOT regulations require shippers of hazardous materials (including hazardous wastes) to be trained in the preparation of hazardous waste for transportation. Preparation for transportation includes shipping papers, marking, labeling, containers, segregation, and proper separation of hazardous materials. Requirements for shipping papers and marking for hazardous wastes is addressed in the environmental regulations and in the transportation regulations. Environmental personnel are trained in the transportation regulations, and they must have a good understanding of the requirements in the areas of DOT description, marking, labeling, containers, classification, packaging, segregation, and separation of hazardous materials. The intent of the program is to train administration and plant personnel in transportation regulations with respect to:

- classification and DOT description of hazardous materials for use in waste evaluation, manifests, and hazardous waste labels;
- selection, labeling, and marking of hazardous waste containers;
- preparation of shipping papers for hazardous waste shipments; and
- segregation and separation of hazardous wastes for transportation and storage.

**Occupational Regulations:** Plant personnel are subject to OSHA regulations when conducting hazardous waste operations and maintenance of certain equipment. Facility personnel are not expected to perform remediation or other types of operations at contaminated sites, nor to be first responders for incidents occurring at or outside the facility site. They are trained to meet the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) requirements in 29 CFR 1910.120. The HAZWOPER training course will be provided for plant

personnel who are directly involved in handling hazardous waste. An outline of the HAZWOPER course is shown in **Exhibit I**. When necessary and appropriate, this outline will be modified to replace parts of the agenda with other topics that are more relevant to the type of operations conducted at the facility. Parts of the permit application with respect to preparedness and prevention; manifesting; recordkeeping; and reporting, monitoring, and control of emissions from vents and leaks for hazardous waste facilities may be utilized. This course will include examples of relevant regulatory issues specific to the facility. Confined space entry and lockout/tagout procedures may be included in the training. The intent of this program is to train plant personnel about proper occupational procedures with respect to:

-- evaluation of hazards posed by materials or operating conditions;
-- personal protection equipment, monitoring, and engineering controls when operating in conditions that may be hazardous to human health;
-- contingency planning and emergency response; and
-- confined space entry and lockout/tagout procedures.

**The Permit Application:** This application describes procedures and operations conducted at the facility. The permit is expected to approve those procedures and plans prepared in response to and required by the regulations. This permit application contains information regarding:

-- the contingency plan and emergency procedures that must be followed in the event of emergency incidents at the facility;
-- procedures, structures, and equipment used to prevent and mitigate hazards to human health and the environment at the facility;
-- preparedness and prevention procedures used to minimize the occurrence of incidents and to ready the facility in the event they occur;
-- methods specified in the waste analysis plan to evaluate wastes received and shipped by the facility;
-- procedures for processing inbound and outbound waste shipments, recordkeeping, and reporting;
-- hazardous waste operations and treatment processes conducted at the facility with respect to requirements for containers and tanks involved in such operations and processes; and
-- methods for monitoring and controlling emissions from process vents and equipment leaks.

**Operation Documents:** Triumvirate Environmental Inc. may prepare procedures and other documents to complement the available information for use in training personnel. Operation documents may also consist of manuals provided by the manufacturers of equipment used in operations and processes at the facility. Operation documents prepared by the facility may help train:

-- administration personnel on procedures dealing with waste evaluation, shipments, recordkeeping, and waste in transfer; and

-- plant personnel on procedures and operations conducted at the facility with respect to storage and treatment of hazardous waste and safety requirements when performing maintenance operations on equipment.

## 8.0 TRAINING IMPLEMENTATION METHOD

Training of personnel takes place either in a classroom environment or in the field while employees are performing the tasks their job assignments require. Training may also take place at a location where it is convenient to teach the issue being addressed, such as the file room where filing cabinets hold documents related to the topic of the training. Similarly, instead of a group of trainees receiving instructions from a trainer, training may occur on a one-to-one basis.

Field or on-the-job training takes place during the operation and at the location where the operation occurs. This type of training is more applicable when it involves topics that are better explained when the operation is taking place or near the equipment that is the subject of the training.

## 9.0 TRAINING PROGRAM ADMINISTRATION

The organization structure established to implement the training program consists of a training director, training instructor, and recordkeeper. An organizational chart showing the structure of the program administration is included as **Figure I**. The training director is responsible for the program with respect to directing training event development ensuring the training event conforms to the requirements of the outline, evaluating the effectiveness of the training instructor, and verifying training documentation and recordkeeping. Minimum qualifications for the training director are a Bachelor's degree in Science, engineering, or environmental field, or 3 years experience in the environmental field. The training instructor is the trainer who teaches the topic selected for the training event and completes the necessary documentation associated with the training event. The recordkeeper gathers, organizes, and files the necessary documentation associated with the training event and ensures that training documentation for initial and refresher training for facility personnel is complete, in order, and in compliance with the regulations and the permit.

## 10.0 TRAINING INSTRUCTORS

The facility may contract the service of outside organizations to conduct training for plant personnel. Some of the topics in the training course specific to the facility may be conducted by facility personnel. Therefore, training may be conducted by a combination of outside organizations and facility personnel.

Instructors for outside organizations conducting training at the facility will be deemed competent on the basis of previous documented experience in the specified area of instruction, successful completion of a "train-the-trainer" program specific to the topics to be taught, or an evaluation of instructional competence by the training director. Instructors will be required to maintain professional competency by participating in continuing education or professional development programs or successfully completing an annual refresher course.
Facility (on-site) instructors conduct training of administration personnel on an as-needed basis, mostly for newly hired personnel requiring introductory training or existing personnel requiring refresher training. They also conduct training of plant personnel on subjects not covered in the HAZWOPER course or on HAZWOPER topics with the intent to meet some of the training requirements before outside organizations come in to complete the training. On-site instructors may be environmental personnel for topics related to the regulations and the permit or trained facility personnel from other management areas for topics related to operational issues. Facility

personnel conducting training are either employees at the supervisory level or trained employees who have experience and skills on the training subject. Environmental personnel should be trained on the regulations and the permit in accordance with requirements in the outline and have at least one year of experience in compliance functions in order to qualify for training instructor in subjects that involve the regulations and the permit.

## 11.0 FREQUENCY OF TRAINING

Facility personnel will receive initial training within six months of employment or within six months of assignment to a new position at the facility, if the training requirements of the new position are different from that of the old position.

Refresher training is conducted annually. Refresher training may be conducted to update personnel on regulatory changes and train personnel on improved operational procedures or on new process equipment.

## 12.0 TRAINING DOCUMENTATION AND RECORDKEEPING

Training events completed in accordance with this program will be documented. Training documents will record the following information:

- name of trainee;
- date training is completed;
- name of trainer; and
- training topic

Training documents will be completed by the training instructor upon completion of the training event. Training documents will be kept at the facility either with other personnel records or separate until the facility closes or for three years from the date the employee last worked at the facility. Copies of the training certificates are kept in an electronic system and available upon request.

## 13.0 JOB DESCRIPTIONS

Triumvirate Environmental (Florida), Inc. maintains records at the facility that show the position title, the name of the employee filling the position, and a description of the duties assigned for every employee that holds a position involved in hazardous waste management at the facility. Copies of job descriptions are provided in Exhibit II

**Figure I**

**GENERALIZED FACILITY ORGANIZATION CHART**

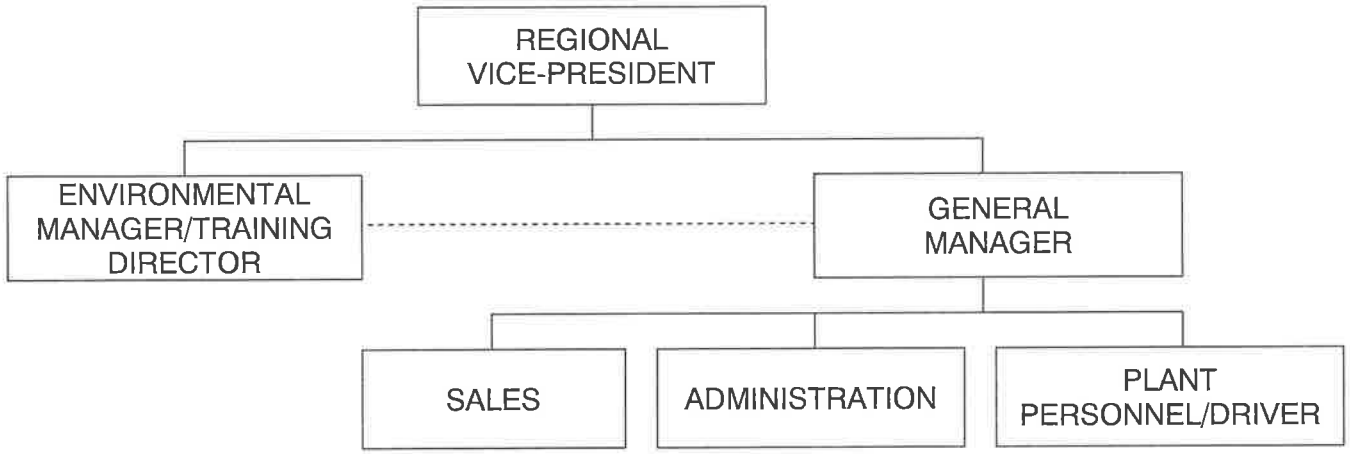

**Figure II**

**TRAINING PROGRAM ADMINISTRATION**

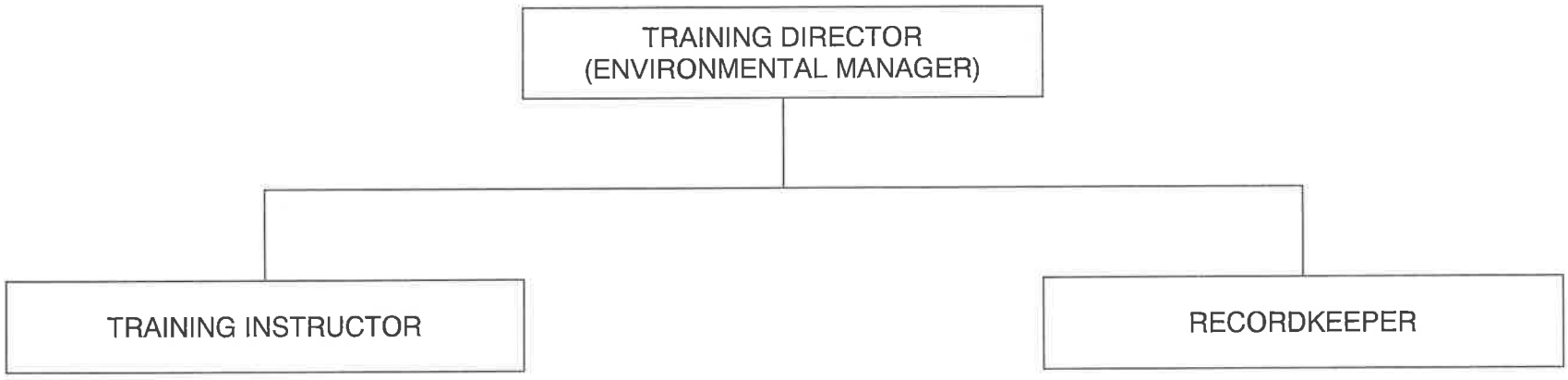

**Exhibit I**
**Sample Outline/Training Form**
**ORLANDO FACILITY REFRESHER I**

Date(s): _____

If employee completes all portions of the Facility Orientation in one day, please date at top and sign at the bottom. If not, please instruct employee to sign each individual section, as completed**

| Category | I HAVE BEEN TRAINED IN AND UNDERSTAND THE FOLLOWING: | Instructor Name | Start Time | End Time | Date | Instructor Notes |
|---|---|---|---|---|---|---|
| *Occupational Regulations* | | | | | | |
| | ***HAZWOPER Review and Applicability** | | | | | |
| | ***Facility Introduction*** | | | | | |
| | ***Emergency Response Planning** (includes: Facility Contingency Plan, Emergency Equipment, Inspection Plan, Types of Incidents and Response, and Plant Tour and Review of all Equipment and Rendezvous Point)* | | | | | |
| | ***Accident and Injury Reporting*** | | | | | |
| | ***Hazard Assessment: Hierarchy of Controls*** | | | | | |
| | ***Job Safety Analysis*** | | | | | |
| | ***Health and Safety Plan*** | | | | | |
| | ***General Safety Plans*** | | | | | |
| | ***Chemical Hazards and Toxicology*** | | | | | |
| | ***Hazardous Communications*** | | | | | |
| | ***Personal Protective Equipment*** | | | | | |
| | ***Respiratory Protection*** | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | ***Confined Space Awareness*** | | | | | |
| | ****Lock Out/Tag Out*** | | | | | |

**For Training Department Use:**
*to be tracked separately: for data entry purposes
**upon completion of final section, update "Orlando Facility Refresher: Day 1" in Intelex with last date.

| EMPLOYEE NAME | JOB TITLE | SIGNATURE |
|---|---|---|
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## ORLANDO FACILITY REFRESHER II

Date(s): _____

If employee completes all portions of the Facility Orientation in one day, please date at the top and sign at the bottom. If not, please instruct employee to sign each individual section, as completed**

| Category | I HAVE BEEN TRAINED IN AND UNDERSTAND THE FOLLOWING: | Instructor Name | Start Time | End Time | Date: | Instructor Notes |
|---|---|---|---|---|---|---|
| *Environmental Regulations* | | | | | | |
| | ***History and Applicability of RCRA Regulations*** | | | | | |
| | ***Hazardous Waste Identification and RCRA Waste Codes*** | | | | | |
| | ***Hazardous Waste Profiles*** | | | | | |
| | ***Labeling Requirements*** | | | | | |
| | ***Site Specific Segregation and Storage Requirements*** | | | | | |
| | ***The Regulated Community*** *(includes: Requirements for Hazardous Waste Generators, Waste Transporters, and Waste Permitted Facilities)* | | | | | |
| | ***Manifesting and Record Keeping*** | | | | | |
| | ***Land Disposal Restrictions and Notifications*** | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | ***Site Specific Waste Acceptance and Waste Analysis Plan*** | | | | | |
| ***Transportation Regulations*** | ***General and Function Specific Training*** | | | | | |
| | ***Shipping Papers*** | | | | | |
| | ***Hazard Classifications*** | | | | | |
| | ***Proper Shipping Names*** | | | | | |
| | ***Marking*** | | | | | |
| | ***Labeling*** | | | | | |
| | ***Packaging*** | | | | | |
| | ***Segregation and Separation of Hazardous Materials for Transportation*** | | | | | |
| | ***Placarding*** | | | | | |

**For Training Department Use:**
*to be tracked separately: for data entry purposes

**upon completion of final section, update "Orlando Facility Refresher: Day 2" in Intelex with last date.

| EMPLOYEE NAME | JOB TITLE | SIGNATURE |
|---|---|---|
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**Exhibit II**
**Job Descriptions**

**RCRA Hazardous Waste Management Job Descriptions**

Position Title: **Driver/Facility, Orlando Facility**

RCRA Classification: **Plant Personnel**

Duties:

- Drive truck to/from assigned locations – locations and scope of work may vary on a daily basis
- Accurately prepares manifests, labels, daily logs, and trip reports.
- Inspect cargo (containers/drums) for loose fittings, deformity and/or signs of leaking prior to loading onto truck.
- Ensure all containers are properly labeled and manifested.
- Load multiple containers (usually 55-gallon drums) of hazardous and non-hazardous waste onto truck for transportation and delivery to other locations.
- Use of drum cart, dolly, or Forklift to handle drums, totes, and/or boxes.
- Maintain equipment in clean and orderly manner at all times.
- Operate all equipment and safe and efficient manner.
- Load, unload, and process containers from trucks to final destination, as needed.
- Ensure all assigned tasks are in compliance with Department of Transportation, facility permits, state and federal regulations, and company policies.
- Adhere to all OSHA, Department of Transportation, state and federal, and company safety requirements.
- Maintains clean driving record.
- Maintains current Class A/B CDL with HAZMAT endorsement.
- Perform other duties as assigned.

Requisite Skills, Experience, and Education:

H.S. Diploma, GED or equivalent, Class A/B CDL with HAZMAT Endorsement, clean driving record and 3 years hazardous waste handling experience, or equivalent. Ability to maintain clean driving record. Must be able to operate trucks and other equipment in compliance with all applicable safety requirements. Participate in safety and/or compliance trainings as required. Be able to maintain positive customer relationships and WOW both internal and external clients. Be able to communicate with supervisor and staff in a safe and positive manner. Must be willing to submit to drug/alcohol testing, as required. Must be able to follow emergency procedures, if required.

Work Environment

May include occasional exposure to vibration, excessive noise, outdoor elements including seasonal extreme temperatures. Use of Air Purifying Respirator or Self Contained Breathing Apparatus, particulate mask, tyveks coveralls, gloves, hard hat, safety glasses, hearing protection, high visibility clothing, and/or other PPE, as needed.

Plant Personnel Training:

| Type | Frequency |
|---|---|
| • OSHA 40 Hour HAZWOPER (29 CFR 1910.120) | Once |
| • OSHA 8 Hour HAZWOPER Refresher (29 CFR 1910.120)* | Annually |
| • RCRA Refresher** | Annually |
| • Safety Orientation for New Hires | Once |
| • 8 Hour Spotter Training for Transfer Station Workers | Initial |
| • 4 Hour Spotter Training Refresher | Every 3 Years |
| • Forklift Safety | Every 3 Years |
| • Site-Specific Spill Prevention Control & Countermeasures | Annually |
| • Site-Specific Stormwater Pollution Prevention Plan | Annually |
| • Confined Space Entry | Once |
| • Confined Space Refresher | Annually |
| • DOT FMCSR | Once |
| • DOT FMCSR Driver's Logs | Once |
| • DOT FMCSR Vehicle Inspection | Once |
| • DOT HAZMAT Initial Awareness Training | Once |
| • DOT In-Depth Security Plan | Once |
| • Site-Specific HAZMAT Security Plan | Annually |
| • Bloodborne Pathogens | Annually |
| • Biomedical Waste Handling Training | Annually |
| • FDEP Required Used Oil Transporters Certification & Training | Annually |

*8-Hour Refresher includes the following topics: HAZWOPER Overview, Toxicology, Chemical Hazards, Hazard Communication, Fire Hazards, Emergency Response Principles, Incident Command System, Hazard Assessment, Air Monitoring, Respiratory Protection, Site Control, Levels of Protection, Lockout/Tagout, Confined Space Awareness, & Decontamination.

**RCRA Refresher includes the following topics: Identification and listing of hazardous waste, Requirements for transfer facilities; requirements for hazardous waste permitted facilities, Hazardous Materials description and labeling; Manifesting and Recordkeeping, Permit Conditions & Application; Prevention, ignitables, reactives, & incompatibles; hazardous materials segregation and separation; Procedures, structures, and equipment used to prevent hazards; Contingency Plan; Emergency preparedness and procedures, Procedures developed for operation and processes, & Waste Analysis Plan.

**RCRA Hazardous Waste Management Job Descriptions**

Position Title: **Operations Manager, Orlando Facility**

RCRA Classification: **Plant/Environmental Personnel**

Duties:

- Supervise/oversee the preparation of hazardous waste shipments
- QA/QC hazardous waste manifests and accompanying land disposal restriction notification forms for compliance
- Resolves manifest discrepancies
- Prepares hazardous waste manifests and supporting documentation for outgoing shipments
- Ability to use computerized inventory control system
- Provides generator sites with signed copy of the hazardous waste manifest
- Inspects and inventories hazardous waste staging and storage areas
- Inspects containers to ensure proper container packaging, marking, and labeling
- Resolves any issues associated with container packaging, marking, and labeling
- Ensures proper procedures are followed for operation of trucks, forklifts, and other machinery to be used in waste movement
- Conducts waste container over-packing operations
- Able to assist emergency coordinator through knowledge of chemical characteristics of the wastes (i.e. reactivity potential, flammability, incompatibility, etc.)
- Ensures proper safety procedures are followed including use of appropriate Personal Protective Equipment (PPE)
- Has ability to shut down operations if necessary
- Oversees consolidation of wastes (if required)

Requisite Skills, Experience, and Education:

B.S. degree and 3 years hazardous waste handling experience, or 5 years hazardous waste handling experience or equivalent.

Training:

| Type | Frequency |
|---|---|
| OSHA 40 Hour HAZWOPER | Once |
| OSHA 8 Hour HAZWOPER Refresher* | Annually |
| RCRA Refresher** | Annually |
| Safety Orientation for New Hires | Once |
| Disposal Facility Overview | Once |
| Wasteland Overview | Once |

- Lab Packs & Lab Pack Bootcamp
- Reactives Training — Once
- Initial Training Transfer Station Operators & Material Recovery Facilities — Once
- 8 Hour Refresher Transfer Station Operators — Once
- 3 Years — Every
- Forklift Safety
- Site-Specific Spill Prevention Control & Countermeasures — Every 3 Years
- Site-Specific Stormwater Pollution Prevention Plan — Annually
- DOT FMCSR — Annually
- DOT FMCSR Driver's Logs — Once
- DOT FMCSR Vehicle Inspection — Once
- DOT FMCSR Reasonable Suspicion for Supervisors — Once
- Annually
- DOT HAZMAT Initial Awareness Training — Once
- DOT In-Depth Security Plan — Once
- Site-Specific HAZMAT Security Plan — Annually
- Bloodborne Pathogens
- Annually
- Biomedical Waste Handling — Annually
- FDEP Required Used Oil Transporters Certification & Training
- Annually

*8-Hour Refresher includes the following topics: HAZWOPER Overview, Toxicology, Chemical Hazards, Hazard Communication, Fire Hazards, Emergency Response Principles, Incident Command System, Hazard Assessment, Air Monitoring, Respiratory Protection, Site Control, Levels of Protection, Lockout/Tagout, Confined Space Awareness, & Decontamination.

**RCRA Refresher includes the following topics: Identification and listing of hazardous waste, Requirements for transfer facilities; requirements for hazardous waste permitted facilities, Hazardous Materials description and labeling; Permit Conditions & Application; Prevention, ignitables, reactives, & incompatibles; hazardous materials segregation and separation; Procedures, structures, and equipment used to prevent hazards; Contingency Plan; Emergency preparedness and procedures; Procedures developed for operation and processes; Waste Analysis Plan; & Manifesting and Recordkeeping.

**RCRA Hazardous Waste Management Job Descriptions**

Position Title: **Chemist, Orlando Facility**

RCRA Classification: **Plant/Environmental Personnel**

Duties:

- Work in teams to perform lab pack services including chemical segregation, packing, and disposal.
- Perform chemical inventories
- Perform audits and inspections of facilities and laboratories.
- Assist management in developing top accounts and devising standard operating procedures
- Demonstrate supervisory leadership skills through interactions with team members
- Develop an understanding of OSHA regulations as well as Triumvirate's Health and Safety Practices
- Obtain knowledge of technical, customer service, and business components of environmental services
- Learn and work with a computerized waste tracking system
- Ability to work as a team player
- Determination/eagerness to learn about the environmental health & safety field.
- Conduct Consolidations and stabilizations

Requisite Skills, Experience, and Education:

- BS/BA in environmental science, Chemistry, Biology, or Business preferred, but all majors are welcome. Must be able to submit college transcript. Successful completion of OSHA/DOT physical examination. Valid driver's license

Training:

| Type | Frequency |
|---|---|
| OSHA 40 Hour HAZWOPER | Once |
| OSHA 8 Hour HAZWOPER Refresher* | Annually |
| RCRA Refresher** | Annually |
| Safety Orientation for New Hires | Once |
| Disposal Facility Overview | Once |
| Wasteland Overview | Once |

- Lab Packs & Lab Pack Bootcamp — Once
- Reactives Training — Once
- Initial Training Transfer Station Operators & Material Recovery Facilities — Once
- 8 Hour Refresher Transfer Station Operators — Every 3 Years
- Forklift Safety — Every 3 Years
- Site-Specific Spill Prevention Control & Countermeasures — Annually
- Site-Specific Stormwater Pollution Prevention Plan — Annually
- DOT FMCSR — Once
- DOT FMCSR Driver's Logs — Once
- DOT FMCSR Vehicle Inspection — Once
- DOT FMCSR Reasonable Suspicion for Supervisors — Annually
- DOT HAZMAT Initial Awareness Training — Once
- DOT In-Depth Security Plan — Once
- Site-Specific HAZMAT Security Plan — Annually
- Bloodborne Pathogens — Annually
- Biomedical Waste Handling — Annually
- FDEP Required Used Oil Transporters Certification & Training — Annually

*8-Hour Refresher includes the following topics: HAZWOPER Overview, Toxicology, Chemical Hazards, Hazard Communication, Fire Hazards, Emergency Response Principles, Incident Command System, Hazard Assessment, Air Monitoring, Respiratory Protection, Site Control, Levels of Protection, Lockout/Tagout, Confined Space Awareness, & Decontamination.

**RCRA Refresher includes the following topics: Identification and listing of hazardous waste, Requirements for transfer facilities; requirements for hazardous waste permitted facilities, Hazardous Materials description and labeling; Permit Conditions & Application; Prevention, ignitables, reactives, & incompatibles; hazardous materials segregation and separation; Procedures, structures, and equipment used to prevent hazards; Contingency Plan; Emergency preparedness and procedures; Procedures developed for operation and processes; Waste Analysis Plan; & Manifesting and Recordkeeping.

Revision Number: 1
Date: 6/28/2013
2ATP-25

**RCRA Hazardous Waste Management Job Descriptions**

Position Title: **Technical Services Representative**

RCRA Classification: **Administrative**

Duties:

- Assists sales personnel with telephone or written correspondence with new and existing customers.
- Preparation of manifest, land ban forms, labels, waste profiles and related documents for waste pickups and transfers.
- Ensures all invoices and documentation are accurate and conform to contract documentation requirements.
- Assists potential and/or current customers with compliance issues related to waste disposal.
- Preparation of work orders and supporting documentation for customers and internal sales representatives.
- Assists accounts receivables with invoicing, collection and/or other contractual issues.
- Responsible for waste disposal tracking and inventory control, including proper accrual for all outbound transport and disposal services.
- Function as liaison between sales, transportation and disposal personnel, operations, and health and safety manager; providing assistance as needed.
- Maintain accurate customer files.
- Input of generator information and creation of profile information using computer software.
- Create profile re-certification forms and renew or cancel as indicated by the generator.
- Function as a back-up receptionist.
- Other duties as assigned.

Requisite Skills, Experience, and Education:

High school graduate. Vocational training or Higher Education preferred. Attention to detail, capability to multi-task, personality conducive to teamwork, ability to follow written and oral instructions, knowledge of computer applications, ability to maintain professionalism at all times and provide excellent customer services.

Work Environment:
Requires extended periods of sitting, telephone, and computer usage. Lifting and bending required during handling of records and filing.

Training:

| Type | Frequency |
|---|---|
| • OSHA 40 Hour HAZWOPER | Once |
| • OSHA 8 Hour HAZWOPER Refresher* Annually | |
| • RCRA Refresher** | Annually |
| • Safety Orientation for New Hires | Once |
| • Disposal Facility Overview | Once |
| • Wasteland/Integrate Business Systems Overview | Once |
| • Site-Specific Spill Prevention Control & Countermeasures | Annually |
| • Site-Specific Storm water Pollution Prevention Plan | Annually |
| • DOT FMCSR | Once |
| • DOT HAZMAT Initial Awareness Training | Once |
| • DOT In-Depth Security Plan | Once |

*8-Hour Refresher includes the following topics: HAZWOPER Overview, Toxicology, Chemical Hazards, Hazard Communication, Fire Hazards, Emergency Response Principles, Incident Command System, Hazard Assessment, Air Monitoring, Respiratory Protection, Site Control, Levels of Protection, Lockout/Tagout, Confined Space Awareness, & Decontamination.

**RCRA Refresher includes the following topics: Identification and listing of hazardous waste, Requirements for transfer facilities; requirements for hazardous waste permitted facilities, Hazardous Materials description and labeling; Permit Conditions & Application; Prevention, ignitables, reactives, & incompatibles; hazardous materials segregation and separation; Procedures, structures, and equipment used to prevent hazards; Contingency Plan; Emergency preparedness and procedures, Hazardous materials segregation and separation; Procedures developed for operation and processes; Waste Evaluation/Waste Analysis Plan, Processing Outbound Shipments; Processing Waste in Transfer, and Processing Inbound Shipments; and Manifesting and Recordkeeping.

2AWP
Waste Analysis Plan

*5. Attach a copy of the reports of the chemical and physical analysis of the hazardous wastes handled at the facility, including all information which must be known to treat, store or dispose of the wastes in accordance with 40 CFR 264.13 and 40 CFR 270.14(b)(2) .*

*6. Attach a copy of the waste analysis plan required by 40 CFR 264.13(b) and 40 CFR 270.14(b)(3). Include the following:*

*a. Parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters;*
*b. Test methods used;*
*c. Sampling methods used;*
*d. Frequency of analysis to ensure accuracy;*
*e. Waste analyses that generators supply;*
*f. Methods used to meet additional waste analysis requirements; and if applicable,*
*g. For off-site facilities, the procedures used to inspect and ensure that the wastes received match the accompanying manifest.*

---

Item 5 above requires the applicant to include copies of analysis reports for wastes managed at the facility. The number of pages of analysis reports the facility keeps in files for waste managed at the site would add several voluminous books to this application, without adding significant information that could be used to review the method used by the facility to evaluate incoming waste. Instead of submitting the analysis reports required in item 5, the facility's waste analysis plan included in this application to satisfy the requirements contained in item 6. above is considered to define the information to be shown in the waste evaluation documents. This information is that needed to properly treat, store, or dispose of the wastes in accordance with 264.13. This section of the permit application has been identified with the number 2AWP and addresses the requirements contained in items 5 and 6 above.

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| II.A.5/6.-1 | WASTE MATERIAL PROFILE FORM | 2AWP-60 |
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ATTACHMENTS


| Attachment No. | Attachment Name | Page No. |
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| II.A.5/6.-1 | WASTE COMPATIBILITY TEST MANUAL | 2AWP-65 |

# WASTE ANALYSIS PLAN

## 1.0 INTRODUCTION/PURPOSE

This Waste Analysis Plan will be followed to properly characterize hazardous wastes accepted at the facility. Under 40 CFR 270.14(b)(3), a hazardous waste management facility is required to develop and follow a Waste Analysis Plan (WAP) that meets the requirements of 40 CFR 264.13 (b) and (c).

This WAP describes the procedures and operations that should be utilized to determine the physical and chemical characteristics of the waste. This information is necessary to manage the waste in a safe and effective manner. Results from evaluation of the waste in accordance with this plan should provide information about each wastes' chemical and physical parameters, from which a classification of the hazards, regulatory status, and requirements for storage, treatment, and disposal can be made for proper management of the waste at the facility. This plan describes the evaluation process that is followed to approve the waste for receipt by the facility, the system used to verify that the waste conforms to the specifications of the Waste Profile, and the method utilized to ensure that the recommended management method for the waste is appropriate. The plan also describes the method used to evaluate the waste after it has been treated at the facility and the procedures followed to obtain the necessary information to ship the waste to off-site facilities for treatment or disposal. An explanation of the methods utilized by the facility to manage inbound waste streams is necessary before proceeding with the development of the plan.

## 2.0 FACILITY DESCRIPTION

Triumvirate Environmental manages hazardous and non-hazardous wastes onsite at the facility and does not have on-site generated wastes except for conditionally exempt small quantities of expired materials such as paints and cleaners. A list of acceptable wastes can be found on Table II.A.5/6-1 Permitted Hazardous Wastes. Hazardous wastes not on that list will not be accepted. Triumvirate Environmental has also developed a chart detailing chemicals that are not to be accepted at the facility (Table II.A.5/6-1a). Additionally a list of restricted chemicals can be found on Charts 2 – 9 of Table II.A.5.6.-1a.

For wastes accepted at Triumvirate Environmental they will managed by process codes which will correspond with the following four activities: storage, consolidation, re-packaging and treatment. Storage is conducted in containers and is used for all Transfer Waste. Treatment at the facility consists of stabilization of wastes in 55 gallon containers, or larger, with cement or fly ash. Consolidation consists of pouring containers equal to or greater than 1 gallon together into shippable drums. And re-packaging consists of removing inner containers from outer containers and placing them in appropriate containers for outbound shipments.

Wastes that are identified as hazardous will meet the criteria set forth under the EPA regulations and in the waste approval process identified in this plan.

## 3.0 MANAGEMENT OF INBOUND WASTE STREAMS

Waste approved to come into the facility is classified by process codes which determine how the waste will be handled. Wastes are either stored in the facility until transported off-site in the same containers that were used for transport into the facility, consolidated into larger containers or lab-packed, or stabilized in container(s) at the facility.

Triumvirate Environmental is knowledgeable and diligent in complying with DOT and RCRA requirements. DOT regulations include proper marking, labeling, placarding, and packaging of hazardous materials and wastes. The DOT description is required for marking the hazardous waste label affixed to the container, selecting the proper DOT label, and placarding in compliance with 40 CFR 262.31 through 262.33. The DOT description is also needed to complete the manifest. Segregation and separation of the wastes during transportation and storage is determined in accordance with the hazard class shown in the DOT description. Information contained in the DOT description identifies wastes exhibiting special hazards. Special hazards consist of explosive, radioactive, and some highly reactive chemicals. Triumvirate Environmental (Florida), Inc. does not accept waste that is considered a special hazard. The waste should also be evaluated for other hazards that may jeopardize the safety of personnel at the facility. The regulatory status of the waste and the hazards it presents are used to determine whether the waste may be accepted by the facility as "permitted waste". If the permit does not allow the facility to accept the waste as "permitted waste", the facility may elect to accept the waste as "transfer waste", which is subject to the transfer facility requirements of Rule 62-730.171 F.A.C. A discussion on "Transfer Waste" is outside the scope of this plan but information on the Transfer Facility is located in Part II.A Section 7.0.

Upon determination that the waste characterization meets the acceptance criteria for management at the facility, the next step in the waste approval process is to determine the appropriate process code for the waste at the facility. The management method is dictated by the physical and chemical characteristics of the waste. Wastes that cannot be treated at the facility are shipped to off-site facilities for treatment or disposal. Waste that cannot be treated at the facility may be consolidated with other wastes that have similar chemical and physical characteristics. Other waste may be shipped in the same container that was used to transport it into the facility without being treated or consolidated. The management method for the waste is indicated by a process code, which identifies how the waste will be managed onsite and shipped off site.

## 4.0 OBJECTIVES OF THE WASTE ANALYSIS PLAN

The waste analysis plan consists of a uniform set of instructions that have been prepared to:

a. Evaluate the waste for approval with procedures for qualifying, accepting, and analyzing the contents of each waste container;
b. Contain the information that will be required to characterize the waste;
c. Identify the waste verification process;
d. Document the recordkeeping and reporting procedures;

e. Ensure that it can be managed by the prescribed operation or process at the facility;
f. Determine the wastes' regulatory status after it has been treated at the facility in preparation for shipment to off-site facilities and;
g. Test methods used to obtain samples, and a quality assurance quality control program.

## 5.0 WASTE APPROVAL PROCESS

Before waste is accepted at Triumvirate Environmental, the waste characteristics must be evaluated and approved. The approval must contain all of the information so that the waste can be properly treated or stored in accordance with 40 CFR Part 264 or disposed in accordance with the Land Disposal Restriction (LDR) program. The approval process includes either (1) collecting a representative sample and conducting laboratory analysis, or (2) evaluation of published data and generator knowledge of the waste generating process. Conducting waste analysis's using published data and generator knowledge of the waste generating process can be referred to as acceptable knowledge, generator knowledge, or process knowledge. In this WAP the term acceptable knowledge will be used.

Acceptable knowledge consists of reviewing information pertaining to the waste stream in question and determining its regulatory status, special hazards, and the applicable process code. The waste stream information is provided in a waste profile form (The Profile) shown in Exhibit II. A.5/6.-1 and, if it is a lab-pack, information is detailed on lab-pack inventory sheets shown in Exhibit II.A.5/6.-4.

When acceptable knowledge is used for waste determinations Triumvirate Environmental uses the following checklist:

(1) Is published data as current as practicable?

(2) Do materials balances, if used, include the following information (among other things):

- Raw ingredients descriptions and physical and chemical properties
- Physical and chemical processes involved prior to and during generation
- Intermediate products
- Materials added and removed during the process?

(3) Does the generator review its original acceptable knowledge determination annually, randomly, and whenever the generating process/waste changes or the TSDF finds a nonconformance?

(4) Does the generator understand the potential changes in the waste and its classification due to environmental factors or spontaneous changes?

(5) Are records being kept demonstrating that periodic reviews are being conducted?

## 5.1 WASTE EVALUATION DOCUMENTS

The waste evaluation documents consist of the paperwork that should be completed and submitted by the generator to the facility for a waste approval determination. The paperwork is the waste material profile form (The Profile), which describes the chemical and physical characteristics of the waste and other information that is pertinent for establishing the regulatory status of the waste. When the facility accepts lab-pack waste the lab-pack inventory sheet is used for the approval process in place of The Profile. An example copy of The Profile is included in Exhibit II.A.5/6.-1 and the lab-pack inventory sheet is located in section IIA.5/6-4. In certain cases, only a completed profile form is needed to conduct the approval process, such as when the waste material consists of a discarded virgin material, or media that has been contaminated with a virgin material and an SDS for the contaminating material is available in the facility's data base. SDSs for the chemical compounds or products involved are required to support the information contained in the profile when the SDSs are not available in the facility's data base. When an SDS is not available or when it is necessary to clarify information shown in an SDS, other technical information obtained from chemical dictionaries or product literature may be used for the waste determination. Analysis reports are required to support information provided in the profile when there is a need to verify that regulatory concentration levels have not been exceeded or to establish the absence of hazardous constituents that may reasonably be expected to be present in the waste. The waste evaluation documents may include, as applicable, the profile, SDSs, analysis reports, and technical information submitted to support a request for approval of a waste stream for management at the facility.

## 5.2 INFORMATION ON THE PROFILE

The example waste material profile form included in Exhibit II.A.5/6.-1 contains several sections for information about the generator, the waste, and the packaging of the waste. The profile form referenced above may be subject to future modifications to accommodate new requirements, or to make the form easier to complete. The information required in the form for use in evaluating the waste as described in the waste approval process, will remain unchanged. The following discussion explains the criteria used for reviewing information contained in the profile form and for determining regulatory status and hazards of the waste. Only those parts in the profile form relevant for the evaluation of the waste are discussed here.

Part B of the Profile - Common Name of Waste:

The section details how the waste is approved and what information is used in the approval process. Acceptable knowledge determinations include the use of SDS (formally MSDSs), other chemical knowledge, and generator knowledge which are outlined in this section. When the waste is approved through analytical and sample data it is noted in this section at attached to the profile. This section also contains information for how the waste was generated (process generating waste) and the shipment method meaning drums, totes, sizes, and yearly volume.

Part C of the Profile – Physical Properties

This part of the profile contains information about ignitability, corrosivity, and physical state of the waste, which is necessary to establish the regulatory status for environmental management and transportation. It also provides data about chemical and physical parameters, which are important to determine the proper treatment, analytical methods, and operational procedures for the waste. This part requires several boxes to be completed addressing the following issues:

Odor is a relevant factor when handling certain chemicals because of problems caused by the emission of strong odors. Waste containing mercaptans and ammonia are studied carefully to ensure that emission problems for personnel at the site and at neighboring sites will not be created.

Separated layers corroborate the presence of multiphase components listed in the profile form and indicate caution regarding test results which may not reflect the waste mixture due to improper sampling techniques.

Pumpability is a relevant parameter when materials need to be transferred between containers using pumps.

The amount of sludge in a waste is a significant factor to determine if non-sludge and sludge components need to be handled or characterized separately.

The flash point of a waste determines if it is hazardous waste due to ignitability and its DOT description due to flammability.

Specific gravity helps corroborate information provided about the composition of the waste.

The pH value determines the corrosivity of the waste and the EPA regulatory status

The amount of water in a waste is an important factor to take into consideration for stabilization operations, and to determine if the untreated waste can be directly shipped to off-site fuel blenders/users.

The concentration of chlorides is a significant parameter to determine if the untreated waste can be directly shipped to off-site fuel blenders/users.

Heating value of the waste determines if the untreated waste can be directly shipped to off-site fuel blenders/users.

Information about the presence of free liquids is necessary for assigning the waste code that denotes corrosivity and the proper shipping name.

Part D – Waste Composition

The part is reviewed for the description of the constituents that make up the waste and it has approximate ranges for the percent of constituents. If a generic name is used either an SDS will be available at the facility or it will be attached to the profile.

The name and proportional amount of the constituents of the waste must be listed in this part of the profile. Constituents containing toxic components regulated in 261.24 (D004-D043) must be listed in this part. A study of the properties of the chemical components shown in this part, along with respective proportional amounts in the waste, may provide a rough estimate of the resulting characteristics exhibited by the waste. For example, large proportions of flammable or corrosive components most likely will result in a flammable or corrosive waste, respectively.

Part G – Metals

This part is reviewed for TCLP and or totals information on the metals in the waste. This section includes information for D004-D011 and copper, zinc and nickel.

Part E – Hazardous Properties

This part of the profile is designed to identify hazardous characteristics that are considered special hazards, and to describe the type of reactivity exhibited by the materials. This part of the profile also requests information about PCBs, which are regulated by the Toxic Substance and Control Act (TSCA). National Emission Standards for Hazardous Air Pollutants is also included in this section and this information is needed to satisfy requirements in the Clean Air Act.

Part H - Other Compounds.

This part is reviewed for TCLP or Totals information for hazardous waste codes D012-D043.

Part F – DOT Shipping Name

This part includes information on waste characterization. This section contains spaces to enter the EPA hazardous waste codes that are determined from information provided in the following parts of the profile.

D001 →Ignitable liquids are indicated by the flash point and by the presence of ignitable compounds. Oxidizers are often identified by the hazard classes 5.1 and 5.2 and are ignitable hazardous wastes. 4.1 and 4.3 and most 4.2 hazard class materials are often also classified as EPA ignitable.

D002 →Materials containing free liquids and having a pH unit equal or less than 2.0 or equal or greater than 12.5 as indicated in part C of the profile as being hazardous waste acids or caustics, respectively.

D003 →Wastes containing reactive cyanides and sulfides shown in part E to be present in concentrations greater than 250 and 500 ppm, respectively are hazardous waste reactive. Information provided in this part and in parts E and C should also be studied to determine whether the wastes meet the definition of reactivity in 261.23.

D004 - D043: Constituents listed in part D that meet the definition of D004-D043 hazardous waste codes

F001 — F039: Spent solvents should be listed in part D. Electroplating, conversion coating and metal heat treating sludges, plating, quenching, spent cyanide, and stripping bath solutions and residues should be identified as such, and the heavy metal and cyanide contaminants listed in part D. Products, process wastes, and manufacturing intermediates that either contain or result from the production of chlorophenols, chlorobenzenes, and chlorinated aliphatic hydrocarbons should be described in part B and have the components listed in part D. Wood preserving formulations and wastes, petroleum refinery separation sludges, and landfill leachate should be identified in part B and have the constituents listed in part D.

K001 - K136: Hazardous wastes from specific sources should be described in part B and have the contaminants listed in part D.

P001 – P123 Acute hazardous wastes consisting of discarded and off-specification chemical products, manufacturing intermediates, and container and spill residues should be identified in part C and have the components listed in D.

U001 - U359: Toxic hazardous wastes consisting of discarded and off-specification chemical products, manufacturing intermediates, and container and spill residues should have the components listed in part D.

The DOT description that should be entered in this part is one of those found in 49 CFR 172.101, the Hazardous Materials Table (HMT). The DOT description's hazard class and packing group is to be selected in accordance with requirements in the 49 CFR Part 173, and depend on the characteristics of the waste determined from information throughout the profile. Excluding wastes whose proper shipping name is hazardous waste liquid or solid, the two major components in the waste to be included in this part are the most predominant ones used for establishing the primary and subsidiary hazards of the waste listed in column (6) of the HMT.

## 5.3 SUPPORTING DOCUMENTS

Supporting documents include analysis reports, SDSs, and other technical information used to establish the presence and concentration levels of hazardous constituents and the characteristics of the waste. SDSs are not solely used to make hazardous waste determinations largely because SDSs normally list constituents at a minimum of 10,000 mg/kg. Analysis may be required when information provided in the profile indicates a deviation from a commonly received waste stream. This would trigger a need to verify concentration levels of hazardous constituents in the waste, and a need to determine the actual hazardous characteristics exhibited by the waste. The need for requesting analysis reports is based on the criteria described below:

When materials described in part D of the profile indicate the presence of significant amounts of certain hazardous constituents whose characteristics are not reflected in hazardous waste codes assigned to the waste.

When parameters indicated in parts G and H of the profile do not coincide with the properties of predominant components listed in part D.

When concentration levels indicated for constituents shown in part D of the profile do not correspond to the proportional amounts for such constituents shown in parts G and H.

When historical experience or technical information suggests that certain hazardous constituents or characteristics are not addressed in parts of the profile and they may be present in the waste.

When the profile shows a lack of information necessary to determine the regulatory status and hazards posed by the waste.

SDSs are required when part D of the profile lists chemical compounds and products for which SDSs are not available at the facility. Unless the component of the waste is a well-known and widely used chemical compound, an SDS for the component should be submitted with the profile form when one is not available at the facility. The facility has access to an extensive SDS library on the internet. Chemicals for which neither the generator nor the facility have SDSs available may utilize SDSs for chemicals that belong to the same family as the one listed in the profile, as long as both chemicals have similar formulas and relevant properties. Information from chemical dictionaries and product literature may also substitute for SDSs not available, or may be used to supplement information contained in SDSs.

The profile form and supporting documents described above constitute the waste evaluation documents that are used to review and approve the waste streams before shipment to the facility. The evaluation process explained above is the procedure used to review the documents from a regulatory standpoint. The waste stream must have an assigned process code before this process is complete. However, the assignment of a process code does not affect approval of the waste for receipt by the facility. The waste evaluation documents undergo other reviews related to operational and marketing issues. A review addressing operational issues is conducted by the facility with the following concerns:

Contaminants from commonly accepted waste streams/processes must match the contaminates that would typically be expected such waste streams

Contaminants in the waste group must be capable of being treated using the same process

Wastes in the group must be compatible with each other

Hazardous waste codes assigned to the waste must be accurate for the type of waste in consideration

The outbound process code, which identifies the outbound waste stream that has been approved for management at an off-site facility, is assigned after the waste has been accepted and reviewed at Triumvirate Environmental.

## 5.4 ASSIGNMENT OF PROCESS CODES

As explained in previous parts of this plan, the process code is an important factor in the development and implementation of the waste analysis plan, because procedures used to carry out the plan are contingent on the management activity of the waste which is dictated by the process code.

The facility has established a number of process codes, which designate how the waste will be managed at Triumvirate Environmental and how it will be shipped out of Triumvirate Environmental. The process codes correspond to the cost of the material, how it will be managed, and where it will be sent. When a profile is reviewed an inbound and outbound process code is assigned to the waste material. The assignment of the process code is dependent on a review of the profile by a competent employee at Triumvirate Environmental. Continuously, process codes are updated based on facility requirements and costs therefore, any list of process codes that would be submitted would not be up to date.

The steps involved include a complete review of the profile. Information that is especially important includes:

Waste properties such as pH and flash point.
That contaminants in the waste group must be capable of being treated using the same process.
Wastes in the group must be compatible with each other
Hazardous waste codes assigned to the waste must be accurate for the type of waste in consideration.

The consolidation system explained in the previous paragraphs works well for certain waste types like alkaline corrosives, fuel bendable (contingent upon facility NFPA upgrades), electroplating sludge's, and other widely generated wastes that contain a specific group of contaminants. Triumvirate will not consolidate acids (D002) and oxidizers (D001) under any circumstances. However, a system capable of providing a consolidation group for every possible waste type by using the criteria described above would be a cumbersome one. Compatible chemicals may be consolidated based on process codes and a review by a competent person. The review includes chemical literature and the attached waste compatibility test manual. The decision to consolidate the waste with others that have the same process code is left to the discretion of the person in charge of the consolidation operation.

The previous paragraphs describe the system used to determine the process codes that are going to be used to process the waste at the facility. Every management activity requires the implementation of specific procedures in the waste analysis plan for inspecting the waste received to verify that the waste conforms to the specifications of the waste that was approved

and for testing the waste to ensure that it may be managed by the prescribed operation or process at the facility.

Notwithstanding the above Triumvirate Environmental will not pour off lab packs (containers less than 1 gallon) under any circumstance.

## 5.5 REVIEW AND APPROVAL RECORDS

The outcome of the review conducted in accordance with the procedures described in the previous paragraphs is recorded in the Compliance Review form included in Exhibit II.A5/6.-2. This form is used to indicate deficiencies or discrepancies found in the evaluation documents. Once the deficiencies or discrepancies described in the form have been addressed in the evaluation documents, and the permit allows the waste to be managed at the facility, the decision to approve the waste for receipt at the facility or reject it is noted on the form. The Compliance Review form is filed with the waste profile form and supporting documents and is also used to conduct waste stream verification.

The generator is notified that the waste stream has been approved for shipment to the facility with a form letter known as the notice of approval, an example of which is shown in Exhibit II.A.5/6.-3. The approval letter shows the EPA and DOT regulatory status that apply to the waste in question, as well as the notices required by 40 CFR 264.12. The form letter also shows an inbound approval code. This code is the most important piece of data used to identify any waste stream managed at the facility. The notice of approval letter is part of the waste evaluation documents kept in files at the facility.

## 6.0 WASTE VERIFICATION PROCESS

This part of the waste analysis plan describes the procedures used to verify that wastes received at the facility conform to the profile. The procedures used to test incoming wastes depend on the management methods that are going to be used to process the waste at the facility. These management methods are identified by the process code that has been assigned to the waste. This process addresses three issues:

Compatibility of the incoming wastes with other wastes that have the same process code
Assurance of treatability by the prescribed process code.
Procedures used to address non -conforming wastes.

During the waste approval process, information on the waste is reviewed to ensure that it is compatible with other wastes having the same process code. The discovery that the incoming waste is not compatible with other wastes in the same group is an indication that the waste received does not conform to the information provided in the evaluation documents. Upon determination that the incoming waste does not conform to information provided in the evaluation documents, another set of procedures is initiated, resulting in either shipping the waste back to the generator or to an alternate facility, as instructed by the generator, or in

amending the evaluation documents to reflect the discrepancies discovered by the verification process.

The waste approval process is repeated as necessary to ensure that it is up to date. At a minimum, the analysis must be repeated:

(1) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous wastes, or non-hazardous wastes if applicable under 40 CFR 264/265.113(d) has changed; and

(2) For off-site facilities, when the evaluation of incoming shipments, indicates that the waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

To verify conformance with The Profile Triumvirate Environmental Inc. will verify incoming waste streams. However, the testing requirement may be removed if:

1. Additional hazards are created by inspecting the waste stream Triumvirate Environmental Inc. will not open the container(s). Examples would be inhalation hazards and air-reactive materials.
2. Triumvirate Environmental Inc. prepares and seals the waste for shipment. Triumvirate Environmental Inc. has an ongoing on-site program established with certain generators and is directly involved in managing the waste collection process. This information is noted on the inspection form and if the drums are received with seals intact, the hazardous waste will not be re-analyzed upon receipt at the facility.
3. Lab-Packs and inner containers will be visually inspected to verify that they match The Profile.

With standing the above, ten percent of hazardous wastes that are accepted at Triumvirate Environmental Inc. undergo a quality control, quality assurance (QA/QC) analysis. This QA/QC analysis consists of a visual identification of color and the state of the mater, liquid, solid, or semisolid. Additionally, wastes that are going to be consolidated undergo a QA/QC analysis to confirm matching characteristics such as pH, specific gravity, flash point, halogen content, and or percent water. Verification of waste using an off-site laboratory will be completed as required by the TSD facilities that Triumvirate Environmental Inc. utilizes. Verification will be documented on the form in Exhibit II.A.5/6.-2. The parameters below are used to identify acceptance procedures for Triumvirate Environmental.

- Ten Percent QA/QC of each waste stream shipment for each generator
- Using a tiered approach for analyzing incoming shipments, whereby all shipments are inspected and non-conformances between shipment and profiles trigger a mandatory comprehensive analysis to resolve it and update the profile (or create a new one) if needed.
- Documenting tolerance limits for at least one QA QC parameter based on the operating requirements of the facility's management systems. An example is if

the pH of an incoming shipment falls outside the regulatory range, causing a regulatory status change for the waste stream

- Visually inspecting lab packs is an acceptable alternative to QA QC for them (e.g. open the containers and verify their contents and packing materials) and reviewing their inventories.

## CONSOLIDATION

Wastes of the same type are approved at Triumvirate Environmental Inc. for consolidation into common containers. The containers are shipped off-site for treatment or disposal of the consolidated wastes. Wastes of the same type consist of materials that can be treated or disposed of by using the same method of treatment or disposal. Wastes for consolidation come in container sizes that vary from a cubic yard box to 55-gallon drums to containers having a volume equal to or greater than one gallon. Wastes accepted for consolidation come from many sources, which create concern about compatibility of commingling wastes in the consolidation container. Therefore, incoming waste streams should be tested for compatibility in accordance with procedures contained in Attachment II.A.5/6.-1 before being commingled for consolidation. Containers that are consolidated into a new drum will have the date of the oldest container that was consolidated into the drum. Triumvirate Environmental Inc. must remove containers within one year from the time the earliest (consolidation) container enters the facility.

### Re-Packaged Wastes

Containers may be re-packaged in DOT shippable containers to consolidate and comingle compatible wastes. Any container that is re-packaged will not be opened and will be placed inside the outer container in its original, sealed, container. These inner containers will come from lab-packed material that has been sorted and approved to be packaged in the same container per DOT and RCRA regulations.

### Treatment

Treatment refers to two operations: solidification of wastes containing free liquids and treating with stabilizing agents wastes containing leachable hazardous constituents (D004-D008 and D010-D011). These operations will be performed inside a container such as a roll-off. Mixing inside the roll-off is expected to be performed using a front-end loader or a backhoe. Treated hazardous waste will be sampled and analyzed to ensure it meets the land disposal restriction regulations before shipping it to a permitted landfill. The analyses will include RCRA metals by TCLP Method and, if applicable, other constituents (i.e., underlying hazardous constituents as outlined in 40 CFR 268). Materials to be treated will be 55 gallon drums of homogenous materials or roll off containers. An example would be sandblast grit contaminated with lead.

## 6.1 MANAGEMENT OF NON CONFORMING WASTES

When inbound waste streams are tested and inspected in accordance with the procedures described in the preceding paragraphs and are found not to conform to information provided in the waste profile evaluation documents, these waste streams are subject to the procedures explained below. Regulations in 40 CFR 264.72(c) indicate the facility may resolve discrepancies in waste types within 15 days from the date the waste in question was received and if not resolved the FDEP must be notified. The first step to resolve a discrepancy created by a non-conforming waste is to obtain instructions from the generator indicating whether the waste should be returned to the generator or an amendment to the waste evaluation documents to correct the deficiencies discovered by the verification process is possible. If the generator chooses to amend the evaluation documents, the waste profile must be modified by the generator and, depending on the nature of the discrepancy, additional analyses or SDSs may be required. If it is found that the waste can be processed by Triumvirate Environmental (FL), Inc, under its permit, a corrected letter of approval is issued, and processing of the waste is initiated. If efforts to resolve the discrepancy determine the waste should be assigned waste codes not permitted at the facility, or that the waste exhibits characteristics prohibited at the facility, the waste in question must be rejected by Triumvirate Environmental (FL), Inc. Under instructions from the generator, the facility has the option to ship the waste back to the generator or to manage the waste under the transfer facility provisions of Rule 62-730.171 F.A.C., which requires shipment of the waste to an off-site facility within ten days after the discovery date. Waste exhibiting characteristics prohibited at the facility are shipped out immediately after discovery as specified by the generator.

## 7.0 EVALUATION OF WASTES FOR PROCESSING

In accordance with the Solid Waste Permit that Triumvirate Environmental Inc. holds wastes with free liquids (e.g., sludges) would be primary candidates for solidification. The solidification process will use cement kiln dust, flue dust, fly ash, or other suitable material as a solidification agent. After solidification, the waste will be inspected to confirm that it does not contain free liquids. Wastes with RCRA metal codes would be primary candidates for stabilization treatment.

## 8.0 EVALUATION OF WASTES FOR SHIPMENT

Before wastes are shipped by the facility, an evaluation of the EPA and DOT regulatory status for each shipment is necessary to prepare it for packaging, labeling, marking, and placarding requirements contained in Subpart C of Part 262 in the 40 CFR, and with the land disposal restriction requirements of Part 268. Waste streams that are being shipped off-site in the same containers as received by the facility (Transfer Waste) do not require further evaluation for shipment because the waste's status has not changed during facility storage. Waste streams that were consolidated and treated at the facility are subject to changes in EPA and DOT status, which are determined as described below.

## 8.1 CONSOLIDATED WASTE

Incoming waste streams of similar type are commingled in larger containers for shipment to off-site treatment or disposal facilities. Incoming waste streams are received in DOT-approved containers. The consolidation container may be a roll-off box, a dump trailer, a tank trailer, a tote, a 55-gallon drum, or smaller container. Information for the manifest used to ship the consolidation container, as well as the markings used on the container and the transport vehicle, are obtained in the following manner:

EPA Hazardous Waste Codes and Land Disposal Restriction (LDR) Notification

The manifest and the container hazardous waste label will show the waste codes assigned to every waste stream consolidated in the consolidation container. The LDR notification form and the Universal Treatment Standard (UTS) form will show the waste codes and constituents recorded on the inbound shipping documents for every waste stream consolidated in the consolidation container.

DOT Description

Waste streams consolidated in a consolidation container may have had different DOT descriptions. The manifest and hazardous waste label for the consolidation container, however, may show only one DOT description. This DOT description shall be the generic shipping name that best describes the consolidated waste. Wastes that are consolidated may belong to one or several hazard classes; however, there is always one hazard class that is easily distinguishable and predominant among the ones involved. That hazard class will be shown in the manifest and hazardous waste label. Criteria developed from knowledge of the DOT regulations with respect to the use of the Hazardous Materials Table and knowledge of the definitions of hazard classes are required to determine the resulting DOT description for the consolidated waste.

## 8.2 TREATED WASTE

The container in which waste was treated (i.e., stabilized) will be transported to an off-site permitted facility. Information for the manifest used to ship such containers, as well as the markings used on the containers and the transport vehicles are obtained in the following manner:

EPA Hazardous Waste Codes and Land Disposal Restriction (LDR) Notification

The manifest and the container hazardous waste label will show the waste codes assigned to every waste stream solidified in the solidification container. The LDR notification form and the Universal Treatment Standard (UTS) form will show the waste codes and constituents recorded on the inbound shipping documents for every waste stream solidified in the solidification container. Any waste to be stabilized will be tested to ensure that it meets LDR standards with exception the RCRA metals (D004-D008, D010-D011) prior to stabilization. Treatment will only be done to treat RCRA metals. After stabilization all batches will be

tested to verify that the concentrations of RCRA metals are below regulatory guidelines for the determination of hazardous waste characteristics for metals (D004-D008, D010-D011). Grab samples will be utilized for obtaining the testing material. UHCs will be determined by the generator and verified by reviewing the profile and process generating.

DOT Description

Waste streams solidified in the solidification container may have had different DOT descriptions. The manifest and hazardous waste label for the solidification container, however, may show only one DOT description. This DOT description shall be the generic shipping name that best describes the solidified waste. Wastes that are solidified may belong to one or several hazard classes; however, there is always one hazard class that is easily distinguishable and predominant among the ones involved. That hazard class will be shown in the manifest and hazardous waste label. Criteria developed from knowledge of the DOT regulations with respect to the use of the Hazardous Materials Table and knowledge of the definitions of hazard classes are required to determine the resulting DOT description for the solidified waste. The stabilized waste will be handled as non-hazardous waste if it met the LDR restrictions.

## 9.0 LABPACKS

The facility receives waste in labpacks. A labpack is a container that holds small containers filled with wastes. The small containers inside a labpack are identified in this plan as inner containers. Inner containers may hold various waste types. Waste removed from a labpack container either remains in the inner container or if it is equal to or greater than 1 gallon it may be bulked with other wastes in a 55—gallon, or smaller, drum. Wastes that remain in inner containers are re-packaged individually and placed in a larger container with other wastes to complete a new labpack to be shipped off-site for treatment or disposal. Labpack wastes to be bulked, if it is equal to or greater than 1 gallon in size, with other wastes are placed in a 55—gallon, or smaller, drum. These bulked drums are then shipped off-site. The same procedures used for approval of shipments of other wastes to the facility are used for accepting labpacks. A few aspects of the approval process for labpacks deviate somewhat from the acceptance procedure for other wastes. The difference in the approval process for labpacks and other waste is explained as follows.

### 9.1 WASTE PROFILE FORM FOR LAB PACKS

Triumvirate Environmental does not require a waste material profile describing every waste inside a labpack container. A complete labpack inventory form must be submitted with the waste evaluation documents. An example copy of the labpack inventory form is shown in Exhibit II.A.5/6.-4. The inventory form is completed for all lab-packs so that it contains the necessary information that would be required on a profile.

The inventory forms provide information not included in a profile for labpacks, as well as other information necessary to process labpacks. Several labpack containers having different EPA and DOT regulatory status may be included in a single profile as long Triumvirate Environmental approves each lab-pack inventory sheet. The labpack generator drum number

is shown in the upper right hand corner of the labpack inventory form. Completed copies of the inventory forms are also required to be included outside the labpack container and with the shipping documents.

Completed labpack inventory sheets are approved by either approving a unique profile or by signing off on the individual labpack inventory sheets.

## 9.2 EVALUATION OF WASTES IN LABPACKS

Evaluation of wastes conducted for approval of labpacks relies heavily on SDSs. The facility does not require generators to include SDSs for wastes inside labpacks unless sufficient information is not available at the facility through available SDSs or other sources. Criteria for evaluation of wastes for approval are simple for labpack waste consisting of small amounts of well-identified virgin chemical compounds or widely known products.

## 9.3 CLASSIFICATION AND SEGREGATION OF WASTES IN LAB PACKS

Wastes placed inside a labpack container have to be of the same hazard class or division to comply with DOT regulations. The facility may require a more stringent segregation procedure with respect to the type and amount of material in a labpack container for operational and safety reasons.

## 10.0 WASTES PERMITTED AND PROHIBITED

Waste permitted at the Triumvirate Environmental facility are those wastes streams that have been assigned hazardous waste codes included in Table II.A.5/6.-1 of this plan. Wastes prohibited at the TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC. facility consist of the following waste types:

a. Prohibited Materials

(i) Forbidden Materials: Materials showing the word "forbidden" in column (3) of the 49 CFR 172.101 — Hazardous Materials Table (HMT), except for the organic peroxides that are not included in the provision for Prohibited Organic Peroxide Materials shown below.

(ii) "Do Not Accept" Materials: These materials are listed in Chart 1 of Table II.A.5/6.-1 a.

b. Explosive Materials

Materials having a DOT hazardous class 1 (Divisions 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6). are not permitted.

c. Bio-Hazardous Materials

Materials having a DOT hazard division 6.2 or otherwise designated as infectious and medical waste or etiologic agent will not be accepted for storage in container storage area or for on-site treatment. Biomedical waste, however, may be stored on-site in box truck(s) and in the transfer area per license issued by the Florida Department of Health – "Operating Permit, Biomedical Waste – Storage".

d. Radioactive Materials

Materials having a DOT hazard class 7 are not permitted

e. Listed Self-Reactive Materials

Materials listed in the 49 CFR 173.224(b) as self-reactive materials.

f. Prohibited Organic Peroxide Materials

(i) Organic peroxides types A and B listed in the HMT and defined at 49 CFR 173.128.

(ii) Organic peroxides types C, D, E, and F defined in 49 CFR 173.128 and listed in the HMT requiring temperature control.

g, Volume Restricted Low Flash and Low Boiling Point Liquids

Liquids defined by NFPA 30 as Class IA (flashpoint below 73°F and boiling point below 100°F) packed in containers having a volume larger than 25 gallons.

h. Volume and Concentration Restricted Materials

Materials listed in Charts 2 through 10 of Table II.A.5/6.-Ia in excess of volumes or concentrations listed.

## 11.0 FREQUENCY OF ANALYSIS

For every waste stream approved for shipment to the facility, an annual certification will be required from the generator stating that the waste stream has not changed since its approval or previous annual certification. A change in a waste stream has occurred if EPA and DOT regulatory status or safety considerations vary (due to a change in the process generating the waste) from those determined during the approval process. Incoming waste is verified in accordance with procedures outlined in Section 6.0 of this plan.

Any waste to be stabilized will be tested to ensure that it meets LDR standards with exception the RCRA metals (D004-D008, D010-D011) prior to stabilization. After stabilization all batches will be tested to verify that the concentrations of RCRA metals are below regulatory guidelines for the determination of hazardous waste characteristics for metals (D004-D008, D010-D011).

## 12.0 SAMPLING METHODS

Sampling operations at the facility are conducted on solid and liquid wastes, which may be in containers, and bulk transport containers. Solid wastes may range from flow able sludges' to a consistency that is almost rock-hard. Liquids may be free-flowing or highly viscous. Chemical characteristics of the waste managed at the facility that have a bearing on sampling procedures are corrosivity and the presence of highly volatile halogenated and non-halogenated compounds. Table II.A.5/6.-2 summarizes the methods used to sample wastes at the facility. These methods were developed taking into consideration the factors described in the previous sentences. Table II.A.5/6.-3 shows additional sampling requirements for general parameters to be tested at the facility. Sampling procedures used at the facility conform to methods specified in Appendix I to Part 261 in the 40 CFR (EPA's SW-846), the American Society for Testing Materials (ASTM) methods, or equivalent.

## 13.0 ANALYTICAL METHODS

The facility utilizes two sets of methods for field testing and for laboratory analysis. One set of the field test methods has been briefly described in the waste verification process of the waste analysis plan. These methods consist of the test paper methods for determining pH value, the floatation test method to determine specific gravity, and the bench test methods for determining compatibility of different waste streams. Visual inspections are also used to determine separation of liquid layers and viscosity of the waste samples.

Analytical test methods used by Triumvirate Environmental Inc.. to test for waste parameters are standard laboratory methods as listed in EPA publication SW-846, entitled Test Methods for Evaluating Solid Waste, Physical/Chemical Methods or American Society for Testing and Materials (ASTM) methodologies, or equivalent. Such analyses may be performed at an off-site laboratory, NELAC-approved. A listing of the analytical methods that may be used for pre-approval analysis and received waste inspection is provided in Table II.A.5/6.-3. In any event, characterization of the waste remains the responsibility of the generator.

## 14.0 COMPATIBILITY TEST METHODS

Testing procedures developed and used by Triumvirate Environmental Inc. to determine compatibility of different waste streams consist of mixing a small sample collected from each waste stream and observing the mixture for reaction signs. The signs of reactions are outlined in Waste compatibility test at the end of the plan. Waste materials to be processed for consolidation in transport and shipping containers are tested to determine compatibility with the waste materials in the containers. Compatibility test procedures are described in Attachment II.A.5/6.-1. Similar test procedures have been put in practice at other facilities that conduct operations analogous to the ones included in this permit application. These procedures have been successful in preventing incidents related to mixing incompatible waste.

Chemical showing an "X' in the column having a DNC (do not consolidate) heading in Charts 2 through 10 of Table II.A.5/6.-Ia will not be consolidated. This table consists of ten charts that list the names of highly hazardous chemicals. One purpose of this table is to prevent the consolidation of chemicals that are dangerous to handle outside the container and may react with a large number of other materials. DOT shipping classifications can vary based on concentration and composition therefore the DOT shipping classifications that are listed are the most common for the associated chemicals. Additionally, Hazardous Waste Codes can vary depending on the composition, concentration, and state of the chemicals listed and the Hazardous Waste Codes listed the most common waste code for that waste.

## 15.0 RECORDKEEPING

An electronic system is used to track and maintain generators, wastes, and analytical data. This includes an electronic version of the manifest with the date/time, quantity of waste, waste type and customer. It also includes the process code (management method), any discrepancies on the manifest or profile, waste specific information on how it was managed on the inbound and outbound shipments. The electronic system also tracks the waste that is accepted at the facility by a bar-code system that tracks all inbound and out bound drums that are terminated at the facility. Waste that is transferred is still electronically tracked, but they do not receive bar codes.

## Table II.A.4.b.-3

## Waste Permitted to be Stored at TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC., Inc.

| Waste Description | Hazardous Waste Code | CAS Registry Number | DOT Hazard Class |
|---|---|---|---|
| Ignitable Liquid | D001 | N/A | Varies |
| Corrosive (Acid, Caustic) | D002 | N/A | Varies |
| Reactive Liquids & Solids | D003 | N/A | Varies |
| Arsenic | D004 | 7440-38-2 | 6.1 |
| Barium | D005 | 7440-39-3 | 4.3 |
| Cadmium | D006 | 7440-43-9 | 6.1 |
| Chromium (Haz. Substance) | D007 | 7440-47-3 | 9 |
| Lead | D008 | 7439-92-1 | 6.1 |
| Mercury | D009 | 7439-97-6 | 8 |
| Selenium (Powder) | D010 | 7782-49-2 | 6.1 |
| Silver (Haz. Substance) | D011 | 7440-22-4 | 9 |
| Endrin (Haz. Substance) | D012 | 72-20-8 | 9 |
| Lindane (Haz. Substance) | D013 | 58-89-9 | 9 |
| Methoxychlor (Haz. Substance) | D014 | 72-43-5 | 9 |
| Toxaphene (Haz. Substance) | D015 | 8001-35-2 | 9 |
| 2,4-D (Acid – Haz. Substance) | D016 | 94-75-7 | 9 |
| 2,4,5-TP (Silvex) (Haz. Substance) | D017 | 93-72-1 | 9 |
| Benzene | D018 | 71-43-2 | 3 |
| Carbon Tetrachloride | D019 | 56-23-5 | 6.1 |
| Chlordane (Haz. Substance) | D020 | 57-74-9 | 9 |
| Chlorobenzene | D021 | 108-90-7 | 3 |
| Chloroform | D022 | 67-66-3 | 6.1 |
| o-Cresol | D023 | 95-48-7 | 6.1 |
| M-Cresol | D024 | 108-39-4 | 6.1 |
| P-Cresol | D025 | 106-44-5 | 6.1 |
| Cresol | D026 | 1319-77-3 | 6.1 |
| 1,4-Dichlorobenzene | D027 | 106-46-7 | 6.1 |
| 1,2-Dichloroethane (Ethylene Dichloride) | D028 | 107-06-2 | 3 |
| 1,1-Dichloroethylene (Vinylidene Chloride) | D029 | 75-35-4 | 3 |
| 2,4-Dinitrotoluene | D030 | 121-14-2 | 6.1 |
| Heptachlor (Haz. Substance) | D031 | 76-44-8 | 9 |
| Hexachlorobenzene | D032 | 118-74-1 | 6.1 |
| Hexachlorobutadiene | D033 | 87-68-3 | 6.1 |
| Hexachloroethane (Haz. Substance) | D034 | 67-72-1 | 9 |
| Methyl Ethyl Ketone (Ethyl Methyl Ketone) | D035 | 78-93-3 | 3 |
| Nitrobenzene | D036 | 98-95-3 | 6.1 |
| Pentachlorophenol (Haz. Substance) | D037 | 87-86-5 | 9 |
| Pyridine | D038 | 110-86-1 | 3 |
| Tetrachloroethylene | D039 | 127-18-4 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Trichloroethylene | D040 | 79-01-6 | 6.1 |
| 2,4,5-Trichlorophenol (Haz. Substance) | D041 | 95-95-4 | 9 |
| 2,4,6-Trichlorophenol (Haz. Substance) | D042 | 88-06-2 | 9 |
| Vinyl Chloride | D043 | 75-01-4 | 2.1 |
| Spent Halogenated Solvents (Haz. Substance) | F001 | N/A | 9 |
| Spent Halogenated Solvents (Haz. Substance) | F002 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F003 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F004 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F005 | N/A | 9 |
| Electroplating Sludges (Haz. Substance) | F006 | N/A | 9 |
| Spent Cyanide Plating Solutions (Haz. Substance) | F007 | N/A | 9 |
| Plating Bath Residues (Haz. Substance) | F008 | N/A | 9 |
| Spent Stripping Solutions (Haz. Substance) | F009 | N/A | 9 |
| Quenching Bath Residues (Haz. Substance) | F010 | N/A | 9 |
| Spent Cyanide Solution (Haz. Substance) | F011 | N/A | 9 |
| Quench Wastewater Sludge (Haz. Substance) | F012 | N/A | 9 |
| Wastewater Treatment Sludge (Haz. Substance) | F019 | N/A | 9 |
| Discarded Unused Formulations of Chlorophenols | F027 | N/A | 6.1 |
| Chlorophenolic Residuals (Haz. Substance) | F032 | N/A | 9 |
| Creosote Residuals (Haz. Substance) | F034 | N/A | 9 |
| Arsenic/Chromium Residuals (Haz. Substance) | F035 | N/A | 9 |
| Petroleum Refinery Primary Sludge (Haz. Substance) | F037 | N/A | 9 |
| Petroleum Refinery Secondary Sludge (Haz. Subs.) | F038 | N/A | 9 |
| Leachate from Wastes (Haz. Substance) | F039 | N/A | 9 |
| Bottom Sediment Sludge | K001 | NA | 4.1, 9 |
| Dissolved Air Float (Haz. Substance) | K048 | N/A | 9 |
| Slop Oil Emulsion Solids (Haz. Substance) | K049 | N/A | 9 |
| Heat Exchanger Sludge (Haz. Substance) | K050 | N/A | 9 |
| API Separator Sludge (Haz. Substance) | K051 | N/A | 9 |
| Petroleum Tank Bottoms (Haz. Substance) | K052 | N/A | 9 |
| Emission Control Dust/Sludge (Haz. Substance) | K061 | N/A | 9 |
| Spent Pickle Liquor (Haz. Substance) | K062 | N/A | 9 |
| Solvent Washes & Sludge (Haz. Substance) | K086 | N/A | 9 |
| Organic Wastes | K156 | N/A | 9 |
| Wastewaters | K157 | N/A | 9 |
| Baghouse Dusts & Filter Separator Solids | K158 | N/A | 9 |
| Organics from Treatment of Thiocarbamate Wastes | K159 | N/A | 9 |
| Purification Solids | K161 | N/A | 9 |
| Warfarin & Salts when >.3% (Haz. Substance) | P001 | 81-81-2 | 9 |
| Acetamide, N-(Aminothioximethyl) (Haz. Substance) | P002 | 591-08-2 | 9 |
| Acrolein | P003 | 107-02-8 | 6.1 |
| Aldrin | P004 | 309-00-2 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Allyl Alcohol | P005 | 107-18-6 | 6.1 |
| Aluminum Phosphide | P006 | 20859-73-8 | 4.3, 6.1 |
| 5-(Aminomethyl)-3-Isoxazolol (Haz. Substance) | P007 | 2763-96-4 | 9 |
| 4-Aminopyridine | P008 | 504-24-5 | 6.1 |
| Ammonium picrate | P009 | 131-74-8 | 4.1 |
| Arsenic Acid ($H_3AsO_4$) | P010 | 778-39-4 | 6.1 |
| Arsenic Oxide ($As_2O_5$) | P011 | 1303-28-2 | 6.1 |
| Arsenic Oxide ($As_2O_3$) | P012 | 1327-53-3 | 6.1 |
| Barium Cyanide | P013 | 542-62-1 | 6.1 |
| Benzenethiol (Phenyl Mercaptan) | P014 | 108-98-5 | 6.1 |
| Beryllium (Powder) | P015 | 7440-41-7 | 6.1 |
| Dichloromethylether ((Haz. Substance) | P016 | 542-88-1 | 9 |
| Bromoacetone | P017 | 598-31-2 | 6.1 |
| Brucine | P018 | 357-57-3 | 6.1 |
| Dinoseb | P020 | 88-85-7 | 9 |
| Calcium Cyanide | P021 | 592-01-8 | 6.1 |
| Carbon Disulfide | P022 | 75-15-0 | 3, 6.1 |
| Acetaldehyde, Chloro- (Haz. Substance) | P023 | 107-20-0 | 9 |
| Benzenamine, 4-Chloro- (Haz. Substance) | P024 | 106-47-8 | 9 |
| 1-(o-Chlorophenyl)thiourea (Haz. Substance) | P026 | 5344-82-1 | 9 |
| 3-Chloropropionitrile (Haz. Substance) | P027 | 542-76-7 | 9 |
| Benzene, Chloromethyl (Benzyl Chloride) | P028 | 100-44-7 | 6.1 |
| Copper Cyanide | P029 | 544-92-3 | 6.1 |
| Cyanides (Solutions & Inorganics) | P030 | 57-12-5 | 6.1 |
| Cyanogen | P031 | 460-19-5 | 6.1 |
| Cyanogen Chloride | P033 | 506-77-4 | 6.1 |
| 2-Cyclohexyl-4,6-dinitrophenol (Haz. Substance) | P034 | 131-89-5 | 9 |
| Arsonous Dichloride, Phenyl (Haz. Substance) | P036 | 696-28-6 | 9 |
| Dieldrin | P037 | 60-57-1 | 6.1 |
| Arsine, Diethyl- (Haz. Substance) | P038 | 692-42-2 | 9 |
| Disulfoton (Haz. Substance) | P039 | 298-04-4 | 9 |
| O,O-Diethyl O-pyrazinyl Phosphorothioate (Haz. Subs.) | P040 | 297-97-2 | 9 |
| Diethyl-p-nitrophenyl Phosphate (Haz. Substance) | P041 | 311-45-5 | 9 |
| Epinephrine | P042 | 51-43-4 | 6.1 |
| Diisopropylfluorophosphate (Haz. Substance) | P043 | 55-91-4 | 9 |
| Dimethoate (Haz. Substance) | P044 | 60-51-5 | 9 |
| Thiofanox (Haz. Substance) | P045 | 39196-18-4 | 9 |
| Benzeneethanamine, alpha, alpha-dimethyl (Haz. Subs.) | P046 | 122-09-8 | 9 |
| 4,6-Dinitro-o-cresol & Salts (Solid or Solutions) | P047 | 1 534-52-1 | 6.1 |
| 2,4-Dinitrophenol (Haz. Substance) | P048 | 51-28-5 | 9 |
| Dithiobiuret (Haz. Substance) | P049 | 541-53-7 | 9 |
| Endosulfan (Haz. Substance) | P050 | 115-29-7 | 9 |
| Endrin (Haz. Substance) | P051 | 1 72-20-8 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Aziridine (Ethyleneimine) | P054 | 151-56-4 | 6.1 |
| Fluorine | P056 | 7782-41-4 | 6.1 |
| Acetamide, 2-Fluoro- (Haz. Substance) | P057 | 640-19-7 | 9 |
| Acetic Acid, Fluoro-, Sodium Salt (Haz. Substance) | P058 | 62-74-8 | 9 |
| Heptachlor (Haz. Substance) | P059 | 76-44-8 | 9 |
| Isodrin (Haz. Substance) | P060 | 465-73-6 | 9 |
| Hexaethyl Tetraphosphate | P062 | 757-58-4 | 6.1 |
| Hydrogen Cyanide | P063 | 74-90-8 | 6.1, 3 |
| Methyl Isocyanate | P064 | 624-83-9 | 6.1 |
| Fulminc Acid,, mercury (2+), salt | P065 | 628-86-4 | 6.1 |
| Methomyl (Haz. Substance) | P066 | 16752-77-5 | 9 |
| Aziridine, 2-methyl | P067 | 75-55-8 | 3 |
| Methyl Hydrazine (Haz. Substance) | P068 | 60-34-4 | 9 |
| 2-Methyllactonitrile | P069 | 75-86-5 | 6.1 |
| Aldicarb (Haz. Substance) | P070 | 116-06-3 | 9 |
| Methyl Parathion | P071 | 298-00-0 | 6.1 |
| alpha-Naphthylthiourea | P072 | 86-88-4 | 6.1 |
| Nickel Carbonyl | P073 | 13463-39-3 | 6.1, 3 |
| Nickel Cyanide | P074 | 557-19-7 | 6.1 |
| Nicotine & Salts | P075 | 1 54-11-5 | 6.1 |
| Benzenamine, 4-Nitro- (p-Nitroaniline) | P077 | 100-01-6 | 6.1 |
| Nitrogen oxide NO | P078 | 10102-44-0 | 6.1 |
| Nitroglycerine | P081 | 55-63-0 | 3, 4.1 |
| N-Nitrosodimethylamine (Haz. Substance) | P082 | 62-75-9 | 9 |
| N-Nitrosomethylvinylamine (Haz. Substance) | P084 | 4549-40-0 | 9 |
| Octamethylpryophosphoramide (Haz. Substance) | P085 | 152-16-9 | 9 |
| Osmium Tetroxide | P087 | 20816-12-0 | 6.1 |
| Endothall (Haz. Substance) | P088 | 145-73-3 | 9 |
| Parathion | P089 | 56-38-2 | 6.1 |
| Phenylmercury Acetate | P092 | 62-38-4 | 6.1 |
| Phenylthiourea (Haz. Substance) | P093 | 103-85-5 | 9 |
| Phorate (Haz. Substance) | P094 | 298-02-2 | 9 |
| Carbonic dichloride | P095 | 75-44-5 | 9 |
| Hydrogen Phosphide | P096 | 7803-51-2 | 9 |
| Famphur (Haz. Substance) | P097 | 52-85-7 | 9 |
| Potassium Cyanide | P098 | 151-50-8 | 6.1 |
| Potassium Silver Cyanide (Haz. Substance) | P099 | 506-61-6 | 9 |
| Ethyl Cyanide (Haz. Substance) | P101 | 107-12-0 | 9 |
| Propargyl Alcohol | P012 | 107-19-7 | 3 |
| Selenourea (Haz. Substance) | P103 | 630-10-4 | 9 |
| Silver Cyanide | P104 | 506-64-9 | 6.1 |
| Sodium Azide | P105 | 26628-22-8 | 6.1 |
| Sodium Cyanide | P106 | 143-33-9 | 6.1 |
| Strychnine & Salts | P108 | 1 157-24-9 | 6.1 |
| Tetraethyldithiopryophosphate | P109 | 3689-24-5 | 6.1 |
| Tetraethyl Lead (Liquid) | P110 | 78-00-2 | 6.1 |
| Tetraethyl Pryophosphate (Liquid & Solid) | P111 | 107-49-3 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Thallic Oxide (Haz. Substance) | P113 | 1314-32-5 | 9 |
| Selenious Acid, dithallium (1+) Salt | P114 | 12039-52-0 | 6.1 |
| Sulfuric acid, dithallium(1+) salt | P115 | 7446-18-6 | 6.1 |
| Thiosemicarbazide (Haz. Substance) | P116 | 79-19-6 | 9 |
| Perchloromethanethiol | P118 | 75-70-7 | 6.1 |
| Ammonium Vanadate (Ammonium Metavanadate) | P119 | 7803-55-6 | 6.1 |
| Vanadium Pentoxide (Nonfused Form) | P120 | 1314-62-1 | 6.1 |
| Zinc Cyanide | P121 | 557-21-1 | 6.1 |
| Zinc Phosphide when present at concentrations above 10% | P122 | 1314-84-7 | 4.3, 6.1 |
| Toxaphene (Haz. Substance) | P123 | 8001-35-2 | 9 |
| Carbofuran | P127 | 1563-66-2 | 6.1 |
| Mexacarbate | P128 | 315-18-4 | 6.1 |
| Tirpate | P185 | 26419-73-8 | 6.1 |
| Physostigmine Salicylate | P188 | 57-64-7 | 6.1 |
| Carbosulfan | P189 | 55285-14-8 | 9 |
| Metolcarb | P190 | 1129-41-5 | 6.1 |
| Dimetilan | P191 | 644-64-4 | 6.1 |
| Isolan | P192 | 119-38-0 | 6.1 |
| Oxamyl | P194 | 23135-22-0 | 6.1 |
| Manganese Dimethyldithiocarbamate | P196 | 15339-36-3 | 6.1 |
| Formparanate | P197 | 17702-57-7 | 6.1 |
| Formetanate Hydrochloride | P198 | 23422-53-9 | 6.1 |
| Methiocarb | P199 | 2032-65-7 | 6.1 |
| Promecarb | P201 | 2631-37-0 | 6.1 |
| m-Cumenyl Methylcarbamate | P202 | 64-00-6 | 6.1 |
| Aldicarb Sulfone | P203 | 1646-88-4 | 6.1 |
| Physostigmine | P204 | 57-47-6 | 6.1 |
| Ziram | P205 | 137-30-4 | 6.1 |
| Acetaldehyde | U001 | 75-07-0 | 3 |
| Acetone | U002 | 67-64-1 | 3 |
| Acetonitrile (Methyl Cyanide) | U003 | 75-05-8 | 3 |
| Acetophenone (Haz. Substance) | U004 | 98-86-2 | 9 |
| 2-Acetylaminofluorene (Haz. Substance) | U005 | 53-96-3 | 9 |
| Acetyl Chloride | U006 | 75-36-5 | 3, 8 |
| Acrylamide | U007 | 79-06-1 | 6.1 |
| Acrylic Acid | U008 | 79-10-7 | 8 |
| Acrylonitrile | U009 | 107-13-1 | 3 |
| Mitomycin C (Haz. Substance) | U010 | 50-07-7 | 9 |
| Amitrole (Haz. Substance) | U011 | 61-82-5 | 9 |
| Aniline | U012 | 62-53-3 | 6.1 |
| Auramine (Haz. Substance) | U014 | 492-80-8 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Azaserine (Haz. Substance) | U015 | 115-02-6 | 9 |
| Benz[c]acridine (Haz. Substance) | U016 | 225-51-4 | 9 |
| Benzal Chloride (Haz. Substance) | U017 | 98-87-3 | 9 |
| Benz[a]anthracene (Haz. Substance) | U018 | 56-55-3 | 9 |
| Benzene | U019 | 71-43-2 | 3 |
| Benzenesulfonyl chloride | U020 | 98-09-9 | 8 |
| Benzidine | U021 | 92-87-5 | 6.1 |
| Benzo[a]pyrene (Haz. Substance) | U022 | 50-32-8 | 9 |
| Benzotrichloride | U023 | 98-07-7 | 8 |
| Dichloromethyoxy Ethane (Haz. Substance) | U024 | 111-91-1 | 9 |
| Dichloroethyl Ether (Haz. Substance) | U025 | 111-44-4 | 9 |
| Chlornaphazine (Haz. Substance) | U026 | 494-03-1 | 9 |
| Dichloroisopropyl Ether | U027 | 108-60-1 | 6.1 |
| Diethylhexyl Phthalate (Haz. Substance) | U028 | 117-81-7 | 9 |
| Methyl Bromide | U029 | 74-83-9 | 2.3 |
| 4-Bromophenyl Phenyl Ether (Haz. Substance) | U030 | 101-55-3 | 9 |
| n-Butyl Alcohol (Butanols) | U031 | 71-36-3 | 3 |
| Calcium Chromate (Haz. Substance) | U032 | 13765-19-0 | 9 |
| Carbonic difluoride | U033 | 353-50-4 | NA |
| Chloral (anhydrous) | U034 | 75-87-6 | 6.1 |
| Chlorambucil (Haz. Substance) | U035 | 305-03-3 | 9 |
| Chlordane, Alpha & Gamma Isomers (Haz. Substance) | U036 | 57-74-9 | 9 |
| Chlorobenzene | U037 | 108-90-7 | 3 |
| Chlorobenzilate (Haz. Substance) | U038 | 510-15-6 | 9 |
| p-Chloro-m-cresol | U039 | 59-50-7 | 6.1 |
| Epichlorohydrin | U041 | 106-89-8 | 6.1 |
| 2-Chloroethyl Vinyl Ether (Haz. Substance) | U042 | 110-75-8 | 9 |
| Vinyl Chloride | U043 | 75-01-4 | 2.1 |
| Chloroform | U044 | 67-66-3 | 6.1 |
| Methyl Chloride | U045 | 74-87-3 | 2.1 |
| Chloromethyl Methyl Ether | U046 | 107-30-2 | 3 |
| beta-Chloronaphthalene (Haz. Substance) | U047 | 91-58-7 | 9 |
| o-Chlorophenol | U048 | 95-57-8 | 6.1 |
| 4-Chloro-o-toluidine, Hydrochloride | U049 | 3165-93-3 | 6.1 |
| Chrysene (Haz. Substance) | U050 | 218-01-9 | 9 |
| Creosote (Haz. Substance) | U051 | 8001-58-9 | 9 |
| Cresol | U052 | 1319-77-3 | 6.1 |
| Crotonaldehyde (Stabilized) | U053 | 4170-30-3 | 3 |
| Cumene (Haz. Substance) | U055 | 98-82-8 | 9 |
| Cyclohexane | U056 | 110-82-7 | 3 |
| Cyclohexanone | U057 | 108-94-1 | 3 |
| Cyclophosphamide (Haz. Substance) | U058 | 50-18-0 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Daunomycin (Haz. Substance) | U059 | 20830-81-3 | 9 |
| DDD (Haz. Substance) | U060 | 72-54-8 | 9 |
| DDT (Haz. Substance) | U061 | 50-29-3 | 9 |
| Diallate (Haz. Substance) | U062 | 2303-16-4 | 9 |
| Diben(a, h)anthracene (Haz. Substance) | U063 | 53-70-3 | 9 |
| Dibenzo(a, i)pyrene (Haz. Substance) | U064 | 189-55-9 | 9 |
| 1,2-Dibromomo-3-chloropropane | U066 | 96-12-8 | 6.1 |
| Ethane, 1,2-dibromo- (Ethylene Dibromide) | U067 | 106-93-4 | 6.1 |
| Methylene Bromide (Dibromomethane) | U068 | 74-95-3 | 6.1 |
| Dibutyl Phthalate (Haz. Substance) | U069 | 84-74-2 | 9 |
| o-Dichlorobenzene | U070 | 95-50-1 | 6.1 |
| m-Dichlorobenzene (Haz. Substance) | U071 | 541-73-1 | 9 |
| p-Dichlorobenzene | U072 | 106-46-7 | 6.1 |
| 3,3-Dichlorobenzidine (Haz. Substance) | U073 | 91-94-1 | 9 |
| 1,4-Dichloro-2-butene (Haz. Substance) | U074 | 764-41-0 | 9 |
| Dichlorodifluoromethane | U075 | 75-71-8 | 2.2, 6.1 |
| Ethane, 1,1-Dichloro- (1,1-Dichloroethane) | U076 | 75-34-3 | 3 |
| Ethane, 1,2-Dichloro- (Ethylene Dichloride) | U077 | 107-06-2 | 3 |
| 1,1-Dichloroethylene (Haz. Substance) | U078 | 75-35-4 | 9 |
| 1,2-Dichloroethylene (Haz. Substance) | U079 | 156-60-5 | 9 |
| Methylene Chloride (Dichloromethane) | U080 | 75-09-2 | 6.1 |
| 2,4-Dichlorophenol (Haz. Substance) | U081 | 120-83-2 | 9 |
| 2,6-Dichlorophenol (Haz. Substance) | U082 | 87-65-0 | 9 |
| Propylene Dichloride | U083 | 78-87-5 | 3 |
| 1,3-Dichloropropene (Dichloropropene) | U084 | 542-75-6 | 3 |
| 1,2:3,4-Diepoxybutane (Haz. Substance) | U085 | 1464-53-5 | 9 |
| N,N'-Diethyhydrazine (Haz. Substance) | U086 | 1615-80-1 | 9 |
| O,O-Diethyl S-methyl Dithiophosphate (Haz. Subs.) | U087 | 3288-58-2 | 9 |
| Diethyl Phthalate (Haz. Substance) | U088 | 84-66-2 | 9 |
| Diethystilbesterol (Haz. Substance) | U089 | 56-53-1 | 9 |
| Dihydrosafrole (Haz. Substance) | U090 | 94-58-6 | 9 |
| 3,3'-Dimethoxybenzidine (Haz. Substance) | U091 | 119-90-4 | 9 |
| Dimethylamine (Anhydrous, Solution) | U092 | 124-40-3 | 2.1, 3 |
| p-Dimethylaminoazobenzene (Haz. Substance) | U093 | 60-11-7 | 9 |
| 7,12-Dimethylbenz (a) anthracene (Haz. Substance) | U094 | 57-97-6 | 9 |
| 3,3'-Dimethylbenzidine (Haz. Substance) | U095 | 119-93-7 | 9 |
| alpha,alpha-Dimethylbenzylhydroperoxide | U096 | 80-15-9 | 9 |
| Dimethylcarbamoyl Chloride | U097 | 79-44-7 | 8 |
| Hydrazine, 1,1-dimethyl- | U098 | 57-14-7 | 3, 6.1 |
| 1,2-Dimethylhydrazine | U099 | 540-73-8 | 3, 6.1 |
| 2,4-Dimethylphenol (Haz. Substance) | U101 | 105-67-9 | 9 |
| Dimethyl Phthalate (Haz. Substance) | U102 | 131-11-3 | 9 |
| Dimethyl Sulfate | U103 | 77-78-1 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| 2,4-Dinitrotoluene | U105 | 121-14-2 | 6.1 |
| 2,6-Dinitrotoluene | U106 | 606-20-2 | 6.1 |
| Di-n-Octyl Phthalate (Haz. Substance) | U107 | 117-84-0 | 9 |
| 1,4-Dioxane | U108 | 123-91-1 | 3 |
| 1,2-Diphenylhydrazine (Haz. Substance) | U109 | 122-66-7 | 9 |
| Dipropylamine | U110 | 142-84-7 | 3 |
| Di-n-propylnitrosoamine (Haz. Substance) | U111 | 621-64-7 | 9 |
| Ethyl Acetate | U112 | 141-78-6 | 3 |
| Ethyl Acrylate | U113 | 140-88-5 | 3 |
| Ethylenebisdithiocarbamic Acid, Salts & Esters (Haz. Substance) | U114 | 111-54-6 | 9 |
| Ethylene Oxide | U115 | 75-21-8 | 2.3 |
| Ethylenthiourea (Haz. Substance) | U116 | 96-45-7 | 9 |
| Ethyl Ether (Diethyl Ether) | U117 | 60-29-7 | 3 |
| Ethyl Methacrylate | U118 | 97-63-2 | 3 |
| Ethylmethanesulfonate (Haz. Substance) | U119 | 62-50-0 | 9 |
| Fluoranthene (Haz. Substance) | U120 | 206-44-0 | 9 |
| Trichloromonofluoromethane (Haz. Substance) | U121 | 75-69-4 | 9 |
| Formaldehyde (Solutions-Flammable, Non-Flammable) | U122 | 50-0-0 | 3, 9 |
| Formic Acid | U123 | 64-18-6 | 8 |
| Furan | U124 | 110-00-9 | 3 |
| Furfural | U125 | 98-01-1 | 3 |
| Glycidylaldehyde | U126 | 765-34-4 | 3 |
| Hexachlorobenzene | U127 | 118-74-1 | 6.1 |
| Hexachlorobutadiene | U128 | 87-68-3 | 6.1 |
| Lindane (Haz. Substance) | U129 | 58-89-9 | 9 |
| Hexachlorocyclopentadiene | U130 | 77-47-4 | 6.1 |
| Hexachloroethane (Haz. Substance) | U131 | 67-72-1 | 9 |
| Hexachlorophene | U132 | 70-30-4 | 6.1 |
| Hydrazine | U133 | 302-01-2 | 3, 6.1, 8 |
| Hydrofluoric Acid | U134 | 7664-39-3 | 8 |
| Hydrogen Sulfide | U135 | 7783-06-4 | 2.3, 2.1 |
| Cacodylic Acid | U136 | 75-60-5 | 6.1 |
| Ideno [1,2,3-cd] pyrene (Haz. Substance) | U137 | 193-39-9 | 9 |
| Methyl Iodide | U138 | 74-88-4 | 6.1 |
| Isobutyl Alcohol (Isobutanol) | U140 | 78-83-1 | 3 |
| Isosafrole (Haz. Substance) | U141 | 120-58-1 | 9 |
| Kepone (Haz. Substance) | U142 | 143-50-0 | 9 |
| Lasiocarpine (Haz. Substance) | U143 | 303-34-4 | 9 |
| Lead Acetate | U144 | 301-04-2 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Lead Phosphate (Haz. Substance) | U145 | 7446-27-7 | 9 |
| Lead Subacetate (Haz. Substance) | U146 | 1335-32-6 | 9 |
| Maleic Anhydride | U147 | 108-31-6 | 8 |
| Maleic Hydrazide (Haz. Substance) | U148 | 123-33-1 | 9 |
| Malononitrile | U149 | 109-77-3 | 6.1 |
| Melphalan (Haz. Substance) | U150 | 148-82-3 | 9 |
| Mercury | U151 | 7439-97-6 | 8 |
| Methacrylonitrile | U152 | 126-98-7 | 3 |
| Methanethiol | U153 | 74-93-1 | 2.3, 2.1 |
| Methanol | U154 | 67-56-1 | 3 |
| Methapyrilene (Haz. Substance) | U155 | 91-80-5 | 9 |
| Methyl Chlorocarbonate (Methyl Chloroformate) | U156 | 79-22-1 | 6.1 |
| 3-Methylcholanthrene (Haz. Substance) | U157 | 56-49-5 | 9 |
| 4,4'-Methylenebis(2-Chloraniline) (Haz. Substance) | U158 | 101-14-4 | 9 |
| Methyl Ethyl Ketone (Ethyl Methyl Ketone) | U159 | 78-93-3 | 3 |
| Methyl Ethyl Ketone Peroxide | U160 | 1338-23-4 | 5.2 |
| Methyl Isobutyl Ketone | U161 | 108-10-1 | 3 |
| Methyl Methacrylate (Monomer) | U162 | 80-62-6 | 3 |
| N-Methyl-N'-Nitro-N-Nitrosognanidine | U163 | 70-25-7 | 4.1 |
| Methylthiouracil (Haz. Substance) | U164 | 56-04-2 | 9 |
| Naphthalene (Crude or Refined) | U165 | 91-20-3 | 4.1 |
| 1,4-Naphthalenedione (Haz. Substance) | U166 | 130-15-4 | 9 |
| alpha-Naphthylamine | U167 | 134-32-7 | 6.1 |
| beta-Naphthylamine | U168 | 91-59-8 | 6.1 |
| Nitrobenzene | U169 | 98-95-3 | 6.1 |
| p-Nitrophenol | U170 | 100-02-7 | 6.1 |
| Nitropropane | U171 | 79-46-9 | 3 |
| N-Nitrosodi-n-butylamine (Haz. Substance) | U172 | 924-16-3 | 9 |
| N-Nitrosodiethanolamine (Haz. Substance) | U173 | 1116-54-7 | 9 |
| N-Nitrododiethylamine (Haz. Substance) | U174 | 55-18-5 | 9 |
| N-Nitroso-N-ethylurea (Haz. Substance) | U176 | 759-73-9 | 9 |
| N-Nitroso-N-Methylurea (Haz. Substance) | U177 | 684-93-5 | 9 |
| N-Nitroso-N-Methylurethane (Haz. Substance) | U178 | 615-53-2 | 9 |
| N-Nitrosopiperidine (Haz. Substance) | U179 | 100-75-4 | 9 |
| N-Nitrosopyrrolidine (Haz. Substance) | U180 | 930-55-2 | 9 |
| 5-Nitro-o-toluidine (mono) | U181 | 99-55-8 | 6.1 |
| Paraldehyde | U182 | 123-63-7 | 3 |
| Pentachlorobenzene (Haz. Substance) | U183 | 608-93-5 | 9 |
| Pentachloroethane | U184 | 76-01-7 | 6.1 |
| Pentachloronitrobenzene (Haz. Substance) | U185 | 82-68-8 | 9 |
| 1,3-Pentadiene (Haz. Substance) | U186 | 504-60-9 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Phenacetin (Haz. Substance) | U187 | 62-44-2 | 9 |
| Phenol (molten, solid, solutions) | U188 | 108-95-2 | 6.1 |
| Phosphorus Sulfide | U189 | 1314-80-3 | 4.3, 4.1 |
| Phthalic Anhydride | U190 | 85-44-9 | 8 |
| 2-Picoline | U191 | 109-06-8 | 3 |
| Pronamide (Haz. Substance) | U192 | 23950-58-5 | 9 |
| 1,3-Propane Sultone (Haz. Substance) | U193 | 1120-71-4 | 9 |
| n-Propylamine | U194 | 107-10-8 | 3 |
| Pyridine | U196 | 110-86-1 | 3 |
| p-Benzoquinone | U197 | 106-51-4 | 6.1 |
| Reserpine (Haz. Substance) | U200 | 50-55-5 | 9 |
| Resorcinol | U201 | 108-46-3 | 6.1 |
| Safrole (Haz. Substance) | U203 | 94-59-7 | 9 |
| Selenium Dioxide | U204 | 7783-00-8 | 6.1 |
| Selenium Sulfide | U205 | 7488-56-4 | 6.1 |
| Streptozotocin (Haz. Substance) | U206 | 18883-66-4 | 9 |
| 1,2,4,5-Tetrachlorobenzene (Haz. Substance) | U207 | 95-94-3 | 9 |
| 1,1,1,2-Tetrachloroethane (Haz. Substance) | U208 | 630-20-6 | 9 |
| 1,1,2,2-Tetrachloroehtane (Haz. Substance) | U209 | 79-34-5 | 9 |
| Tetrachloroethylene | U210 | 127-18-4 | 6.1 |
| Carbon Tetrachloride | U211 | 56-23-5 | 6.1 |
| Tetrahydrofuran | U213 | 109-99-9 | 3 |
| Thallium (I) Acetate (Thallium Compound) | U214 | 563-68-8 | 6.1 |
| Thallium (I) Carbonate (Thallium Compound) | U215 | 6533-73-9 | 6.1 |
| Thallium (I) Chloride (Thallium Compound) | U216 | 7791-12-0 | 6.1 |
| Thallium (I) Nitrate (Thallium Compound)) | U217 | 10102-45-1 | 6.1, 5.1 |
| Thioacetamide (Haz. Substance) | U218 | 62-55-5 | 9 |
| Thiourea (Haz. Substance) | U219 | 62-56-6 | 9 |
| Toluene | U220 | 108-88-3 | 3 |
| Toluenediamine (Haz. Substance) | U221 | 25376-45-8 | 9 |
| o-Toluidine Hydrochloride (Haz. Substance) | U222 | 636-21-5 | 9 |
| Toluene Diisocyanate | U223 | 26471-62-5 | 6.1 |
| Bromoform | U225 | 75-25-2 | 6.1 |
| Methyl Chloroform (1,1,1-Trichloroethane) | U226 | 71-55-6 | 6.1 |
| 1,1,2-Trichloroethane (Haz. Substance) | U227 | 79-00-5 | 9 |
| Trichloroethylene | U228 | 79-01-6 | 6.1 |
| Benzene, 1,3,5-trinitro- | U234 | 99-35-4 | 4.1 |
| Tris(2,3-dibromopropyl)phosphate (Haz. Substance) | U235 | 126-72-7 | 9 |
| Trypan Blue (Haz. Substance) | U236 | 72-57-1 | 9 |
| Uracil Mustard (Haz. Substance) | U237 | 66-75-1 | 9 |
| Ethyl Carbamate (Urethane) (Haz. Substance) | U238 | 51-79-6 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Xylene | U239 | 1330-20-7 | 3 |
| 2,4-D, Salts & Esters (Haz. Substance) | U240 | 1 94-75-7 | 9 |
| 1-Propene 1,1,2,3,3,3-hexachloro (Haz. Substance) | U243 | 1888-71-7 | 9 |
| Thiram (Haz. Substance) | U244 | 137-26-8 | 9 |
| Cyanogen Bromide | U246 | 506-68-3 | 6.1 |
| Methoxychlor (Haz. Substance) | U247 | 72-43-5 | 9 |
| Warfarin & Salts (<0.3%) (Haz. Substance) | U248 | 1 81-81-2 | 9 |
| Zinc Phosphide | U249 | 1314-84-7 | 4.3, 6.1 |
| Benoyml | U271 | 17804-35-2 | 9 |
| Sulfallate | U277 | 95-06-7 | 9 |
| Bendiocarb | U278 | 22781-23-3 | 6.1 |
| Carbaryl | U279 | 63-25-2 | 9 |
| Barban | U280 | 101-27-9 | 9 |
| o-Toluidine | U328 | 95-53-4 | 6.1 |
| p-Toluidine | U353 | 106-49-0 | 6.1 |
| Ethylene Glycol Monoethyl Ether | U359 | 110-80-5 | 3 |
| Bendiocarb Phenol | U364 | 22961-82-6 | 6.1 |
| Carbofuran Phenol | U367 | 1563-38-8 | 6.1 |
| Carbendazin | U372 | 10605-21-7 | 9 |
| Propham | U373 | 122-42-9 | 9 |
| Prosulfocarb | U387 | 52888-80-9 | 9 |
| Triallate | U389 | 2303-17-5 | 9 |
| A2213 | U394 | 30558-43-1 | 9 |
| Diethylene Glycol, Dicarbamate | U395 | 5952-26-1 | 6.1 |
| Triethylamine | U404 | 121-44-8 | 3 |
| Ethyl Ziram | U407 | 14324-55-1 | 9 |
| Thiophanate-Methyl | U409 | 23564-05-8 | 9 |
| Thiodicarb | U410 | 59669-26-0 | 9 |
| Propoxur | U411 | 114-26-1 | 6.1 |

N/A: Not Applicable, None Found

## Table II.A.5/6-Ia
## HIGHLY HAZARDOUS CHEMICALS

Table II.A.5/6.-1a is a set of eleven charts containing chemicals selected because of their highly hazardous characteristics. This table intends to address material types different from commonly prohibited materials, such as radioactive and bio-hazardous waste, DOT-classified explosives, and not permitted waste codes. More chemicals will be included in this table as more information is obtained about other materials having highly hazardous characteristics.

The Ten charts in the set may be divided into five groups. Chart 1 displays the name of the chemicals that are not accepted at the facility. Chart 2 lists the chemicals whose acceptability is restricted based on their concentration, physical state, or use. This listing also indicates the largest container size and type in which the chemical may be accepted, as well as whether it can be opened and consolidated at the facility. Charts 3 through 9 segregate other chemicals by DOT hazard class. They also specify the largest size and type of inbound shipping containers, and controls on container opening and consolidation. Chart 10 is a listing of chemicals that present an inhalation hazard.. A setup summary for these charts is shown below.

- Chart 1: Chemicals not accepted at the facility
- Chart 2: Chemicals with restrictions on acceptance
- Charts 2a — 9: Chemicals with Restrictions
- Chart 10: Chemicals having an inhalation hazard

A table explaining abbreviations used in the charts is presented below.

| | |
|---|---|
| Chemical: Chemical name | • A peroxide test entry requires to run such a test prior to approval |
| Haz Class: DOT Hazard | • Comb: Combustible |
| DNA: Do Not Accept | • **%**: Applies if chemical is in this percent solution<br>• **Cyl**: Applies if chemical is a gas<br>• **Dry**: Applies if chemical is devoid of moisture<br>• **Pure:** Applies if chemical is by itself<br>• **Solid:** Applies if chemical is in solid state<br>• **Used**: Applies if chemical is used or contaminated<br>• **X**: Applies to this chemical |
| Size: Inbound container size | • **SQ**: 5 gallons or less<br>• **VSQ**: 1 gallon or less<br>• **VVSQ**: 1 pint or less |
| **DNO:** Do Not Open | • **X**: Container should not be opened |
| **DNC**: Do Not Consolidate | • **X**: Container should not be consolidated |
| Sol'n: Chemical in solution | • **%**: Acceptable chemical percent solution<br>• **Used:** Acceptable when used<br>• **X**: Acceptable only in solution |
| **LP/B/E:** Inbound packing type | • **LP:** Labpack<br>• **B:** Bulk — 5 gallons or more<br>• **E**: Labpack or bulk |

## Table II.A.5/6.-Ia
## Chart 1: Chemicals Not Accepted

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Acetyl Acetone Peroxide | | X | | | | | |
| Acetyl Benzoyl Peroxide | | X | | | | | |
| Acetylcyclohexane Sulfonyl Peroxide | | X | | | | | |
| Acetyl Peroxide | | X | | | | | |
| Ammonium Chlorate | | X | | | | | |
| p-Nitrobenzoyl Azide | | X | | | | | |
| 4-Nitrobenzoyl Azide | | X | | | | | |
| Aluminum Picrate | | X | | | | | |
| Ammonium Perchlorate | | X | | | | | |
| Ammonium Picrate | | X | | | | | |
| Barium Azide | | X | | | | | |
| Carbon Oxyfluoride | | X | | | | | |
| Carbonyl Fluoride | | X | | | | | |
| Cellulose Nitrate | | X | | | | | |
| Cumyl Peroxyneodecanoate | | X | | | | | |
| Cumyl Peroxyneoheptanoate | | X | | | | | |
| Cumyl Peroxypivalate | | X | | | | | |
| Cuprous Acetylide | | X | | | | | |
| Cyanogen | | X | | | | | |
| Cyanogen Chloride | | X | | | | | |
| Di(Ethylhexyl) Peroxydicarbonate | | X | | | | | |
| Di(Methylbenzoyl) Peroxide | | X | | | | | |
| Di (Neodecanoylperoxyisopropyl) Benzene | | X | | | | | |
| Di9Succinic Acid) Peroxide | | X | | | | | |
| Di(t-Butyl Cyclohexyl) Peroxydicarbonate | | X | | | | | |
| Di(Trimethyldioxolanyl) Peroxide | | X | | | | | |
| Di(Trimethylhexanoyl) Peroxide | | X | | | | | |
| D i-2,4-D ichlorobenzoyl Peroxide | | X | | | | | |
| Di-n-Butyl Peroxydicarbonate | | X | | | | | |
| Di-n-Propyl Peroxydicarbonate | | X | | | | | |
| Di-Nonanoyl Peroxide | | X | | | | | |
| Di-Octanoyl Peroxide | | X | | | | | |
| Di-Sec-Butyl Peroxydicarbonate | | X | | | | | |
| Diacetone Alcohol Peroxide | | X | | | | | |
| Diacetylene | | X | | | | | |
| Diazodinitrophenol | | X | | | | | |
| Diazomethane | | X | | | | | |
| Dibenzyl Peroxydicarbonate | | X | | | | | |
| Dibromoacetylene | | X | | | | | |
| Dicetyl Peroxydicarbonate | | X | | | | | |
| Dichlorodiethyl Sulfide | | X | | | | | |
| Dichlorodifluoromethane | | X | | | | | |
| Dicyclohexyl Peroxydicarbonate | | X | | | | | |
| Didecanoyl Peroxide | | X | | | | | |
| Diethylene Glycol Dinitrate | | X | | | | | |
| Dihydroperoxypropane | | X | | | | | |

**Table II.A.5/6.-Ia**
**Chart 1: Chemicals Not Accepted (continued)**

| Chemical | Haz | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Diisobutyryl Peroxide | | X | | | | | |
| Diisopropyl Peroxydicarbonate | | X | | | | | |
| Diisotridecyl Peroxydicarbonate | | X | | | | | |
| Dimethyl Hydroxybutyl Peroxyneoheptanoate | | X | | | | | |
| Dimethyl-Di(ethylhexanoylperoxy) Hexane | | X | | | | | |
| Dimyristyl Peroxydicarbonate | | X | | | | | |
| Dinitrosoresorcinol | | X | | | | | |
| Diperoxy Azelaic Acid | | X | | | | | |
| Dipicryl Sulfide | | X | | | | | |
| Dipicrylamine | | X | | | | | |
| Dipropionyl Peroxide | | X | | | | | |
| Ethyl Nitrite | | X | | | | | |
| Fluorine | | X | | | | | |
| Fluorine Nitrate | | X | | | | | |
| Hydrazine Nitrate | | X | | | | | |
| Hydrazine Perchlorate | | X | | | | | |
| Hydrazoic Acid | | X | | | | | |
| Hydroylamine | | X | | | | | |
| Isoamyl Nitrite | | X | | | | | |
| Isocyanic Acid | | X | | | | | |
| Isopropyl Percarbonate | | X | | | | | |
| Lead Azide | | X | | | | | |
| Lead Trinitroresorcinate | | X | | | | | |
| Lithium Azide | | X | | | | | |
| Mercuric Oxycyanide | | X | | | | | |
| Mercurous Acetylide | | X | | | | | |
| Mercury Fulminate | | X | | | | | |
| Methyl Hydrazine | | X | | | | | |
| Methyl Nitrate | | X | | | | | |
| Methyl Nitrite | | X | | | | | |
| Methyl cyclohexanone Peroxide | | X | | | | | |
| Nitric Oxide | | X | | | | | |
| Nitrogen Dioxide | | X | | | | | |
| Nitrogen Oxide | | X | | | | | |
| Nitroglycerine (not desensitized liquid; Hazard Class I-ID) | | X | | | | | |
| Nitrosoguanidine | | X | | | | | |
| p-Nitrobenzoyl Azide | | X | | | | | |
| P-Nitrosophenol | | X | | | | | |
| Phosgene | | X | | | | | |
| Phosphine | | X | | | | | |
| Picramic Acid | | X | | | | | |
| Picramide | | X | | | | | |
| Picryl Achloride | | X | | | | | |
| Pyroxyline | | X | | | | | |
| Silver Acetylide | | X | | | | | |
| Silver Perchlorate | | X | | | | | |
| Sodium Thiopental | | X | | | | | |

**Table II.A.5/6.-Ia (continued)**
**Chart 1: Chemicals Not Accepted**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| t-Amyl peroxydeconoate | | X | | | | | |
| t-Amyl peroxyethylhexanoate | | X | | | | | |
| t-Amyl Peroxypivalate | | X | | | | | |
| t-Amyl Peroxytrimethylhexanoate | | X | | | | | |
| t-Butyl Hypochlorite | | X | | | | | |
| t-Butyl Peroxylacetate | | X | | | | | |
| t-Butyl Peroxydiethylacetate | | X | | | | | |
| t-Butyl Peroxyethylhexanoate | | X | | | | | |
| t-Butyl Peroxyisobutyrate | | X | | | | | |
| t-Butyl Peroxyneodecanoate | | X | | | | | |
| t-Butyl Peroxyneoheptanoate | | X | | | | | |
| t-Butly Peroxyphthalate | | X | | | | | |
| t-Butyl Peroxypivalate | | X | | | | | |
| Tabun | | X | | | | | |
| Tetramethylbutylperoxy Ethylhexanoate | | X | | | | | |
| Tetranitroaniline | | X | | | | | |
| Tetranitromethane | | X | | | | | |
| Tetryl | | X | | | | | |
| Trimethylpentyl Peroxyneodecanoate | | X | | | | | |
| Trimethylpentyl Peroxyphenoxyacetate | | X | | | | | |
| Trinitroaniline | | X | | | | | |
| Trinitroanisole | | X | | | | | |
| Trinitrobenzene | | X | | | | | |
| Trin itromethane | | X | | | | | |
| Trinitrotoluene | | X | | | | | |

**Table II.A.5/6.-Ia (continued)**
**Chart 2: Chemicals with Restrictions on Acceptance**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| t-Butyl Peroxytrimethylhexanoate | 5.2 | <32% | SQ | X | | >32% | E |
| Diperoxyl Dodecanediacid | 5.2 | >13% | SQ | X | | <13% | E |
| Benzoyl Peroxide | 5.2 | >51% | SQ | X | | <51% | E |
| Di-4-Chlorobenzoyl Peroxide | 5.2 | >52% | SQ | X | | <52% | E |
| Hexamethyl Tetraoxacyclonoane | 5.2 | >52% | SQ | X | | <52% | E |
| t-Butyl Peroxymaleate | 5.2 | >5.2% | SQ | X | | <52% | e |
| 3-Chloroperoxybenzoic Acid | 5.2 | >57% | SQ | X | | <57% | E |
| Perchloric Acid | 5.2 | >72% | SQ | | | <72% | E |
| Di(t-Butyl Peroxy) Cyclohexane | 5.2 | '>80% | SQ | X | | <80% | E |
| Dimethyl-Di(Benzoylperoxy) Hexane | 5.2 | >82% | SQ | X | | <82% | E |
| Di(Phenoxyethyl) Peroxydicarbonate | 5.2 | >85% | SQ | X | | <85% | E |
| Di(t-Butylperoxy) Trimethylcyclohexane | 5.2 | >90% | SQ | X | | <90% | E |
| Dinitrophenylhydrazine | 4.1 | Dry | SQ | | X | X | E |
| Nitrocellulose | 4.1 | Dry | SQ | | X | <25% | E |
| Nitrostarch | 4.1 | Dry | VVSQ | | X | <25% | LP |
| Picric Acid | 4.1 | Dry | SQ | | X | Wet | E |
| Sodium Dinitro-o-cresolate | 4.1 | Dry | VSQ | X | | X | LP |
| Sodium Picramate | 4.1 | Dry | VSQ | | X | <25% | LP |
| Trinitrobenzoic Acid | 4.1 | Dry | VSQ | X | | <25% | LP |
| Urea Nitrate | 4.1 | Dry | VSQ | X | | X | LP |
| Mercuric Perchlorate | 5.1 | Dry | VSQ | X | | <50% | LP |
| Mercury Perchlorate | 5.1 | Dry | VSQ | X | | <50% | LP |
| Dinitro-o-Cresol | 6.1 | Dry | SQ | X | | X | E |
| Dinitrobenzene | 6.1 | Dry | VSQ | | X | X | LP |
| p-Nitrophenylhydrazine | 9 | Dry | VVSQ | X | | X | LP |
| Cumene Hydroperoxide | 5.2 | Pure | VSQ | X | | <90% | LP |
| Bromopicrin | 6.1 | Pure | VSQ | | X | X | LP |
| Chloropicrin | 6.1 HZ B | Pure | VSQ | | X | X | LP |
| Dinitrophenol | 5.1 | Used | SQ | | X | X | E |

**Table II.A.5/6.-Ia (continued)**
**Chart 2a: Chemicals with Restrictions on Acceptance (Hazard Class 2)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 2.1 | | SQ | | | | |
| Hydrogen Sulfide | 2.3 HZ B | | SQ | | | | |
| Methanethiol | 2.3 | | SQ | | | | |
| Thiomethanol | 2.3 | | SQ | | | | |

**Table II.A.5/6.-Ia (continued)**
**Chart 3: Chemicals with Restrictions on Acceptance (Hazard Class 3)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| ((l-Ethoxycyclopropyl)oxy)trimethyl | 3 | | VSQ | X | | | LP |
| (Iodomethyl)trimethyl Silane | 3 | | SQ | X | | | E |
| (Trimethylsilyl) Methanol | 3 | | | | X | | E |
| 1,2-Epoxybutane | 3 | | SQ | | X | | E |
| 1,2-Propyleneimine | 3 | | VSQ | X | | | LP |
| 1,3,3-Trimethoxypropene | 3 | | | Peroxide Test | | | B |
| 1-(Trimethylsilyloxy)cyclopentene | 3 | | VSQ | X | | | LP |
| 1-Butanethiol | 3 | | | X | | | B |
| 1-Methoxybutane | 3 | | | Peroxide Test | | | B |
| 1-Pentanethiol | 3 | | | X | | | B |
| 1-Propanethiol | 3 | | | X | | | B |
| 2,2-Dimethoxypropane | 3 | | | Peroxide Test | | | B |
| 2-Butanethiol | 3 | | | X | | | B |
| 2-Chloroethoxytrimethyl silane | 3 | | VSQ | X | | | LP |
| 2-Methyl-I -Propanethiol | 3 | | | X | | | B |
| 2-Methyl-2-Propanethiol | 3 | | | X | | | B |
| 2-Methylaziridine | 3 | | VSQ | X | | | LP |
| 2-Propanethiol | 3 | | | X | | | B |
| 3-(Trimethoxysilyl)propanethiol | 3 | | SQ | X | | | E |
| 3-Chloro-I-Propanethiol | 3 | | | X | | | B |
| 3-Chloropropyl Mercaptan | 3 | | | X | | | B |
| 3-Chloropropyldimethylchlorosilane | 3 | | SQ | | X | | E |
| 3-Methyl- I -Trimethylsiyl-2-Butene | 3 | | SQ | | X | | E |
| Acetyl Nitrate | 3 | | SQ | X | | | E |
| Acrylonitrile | 3 | | | | X | | E |
| Allyl Bromide | 3 | | SQ | X | | | E |
| Allyl Chloride | 3 | | SQ | X | | | E |
| Allyl Mercaptan | 3 | | | X | | | B |
| Allyl Methacrylate | 3 | | SQ | | X | | E |
| Allyl Sulfide | 3 | | | X | | | B |
| Allyloxytrimethylsilane | 3 | | VSQ | X | | | LP |
| Allylthiol | 3 | | | X | | | B |
| Allyltriethoxysilane | 3 | | SQ | X | | | E |
| Allyltrimethylsilane | 3 | | SQ | | X | | E |
| Benzenethiol | 3 | | | X | | | B |
| Benzyl Azide | 3 | | SQ | | X | | E |
| Bicyclo [2.2. 1 ]hepta-2,5-diene | 3 | | | Peroxide Test | | | B |
| bis(Trimethylsilyl) Acetylene | 3 | | VSQ | X | | | LP |
| bis(Trimethylsiy1) Methane | 3 | | | | X | | E |
| Butanediol Dimethacrylate | 3 | | SQ | X | | | E |
| Butyl Ether | 3 | | SQ | Peroxide Test | | | E |
| Butyl Methyl Ether | 3 | | | Peroxide Test | | | B |
| Carbon Disulfide | 3 | | | X | | | E |
| Chloro(Chloromethyl)dimethyl Silane | 3 | | SQ | | X | | E |
| Chlorodimethylsilane | 3 | | VSQ | | X | | LP |
| Chloromethylvinylsilane | 3 | | VSQ | X | | | LP |

**Table II.A.5/6.-Ia (continued)**
**(Chart 3 continued): Chemicals with Restrictions on Acceptance (Hazard Class 3)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Chloromethyl Methyl Ether | 3 | | SQ | X | | | B |
| cis-2,3-Epoxybutane | 3 | | SQ | | X | | E |
| Collodion | 3 | | VSQ | | X | | LP |
| Cyanotrimethylsilane | 3 | | VSQ | X | | | LP |
| Cyclohexyl Methacrylate | 3 | | SQ | | X | | E |
| Diethoxymethane | 3 | | SQ | Peroxide Test | | | B |
| Dimethoxydimethylsilane | 3 | | SQ | X | | | E |
| Dimethyl Sulfide | 3 | | | X | | | B |
| Dimethyldichlorosilane | 3 | | VSQ | X | | | LP |
| Dimethylisopropylsilane | 3 | | VSQ | X | | | LP |
| Dimethylphenylsilane | 3 | | VSQ | X | | | LP |
| Ethanedithiol | 3 | | | X | | | B |
| Ethanethiol | 3 | | | X | | | B |
| Ethyl Acrylate | 3 | | SQ | X | | | E |
| Ethyl chlorosulfonate | 3 | | | X | | | B |
| Ethyl Dizaoacetate | 3 | | SQ | | X | | E |
| Ethyl mercaptan | 3 | | | X | | | B |
| Ethyl Methyl Sulfide | 3 | | | X | | | B |
| Ethyl Nitrate | 3 | | VVSQ | X | | | LP |
| Ethyl Nitrite | 3 | | VVSQ | X | | | LP |
| Ethyltrichlorosilane | 3 | | VSQ | X | | | LP |
| Ethynyltrimethylsilane | 3 | | VVSQ | X | | | LP |
| Glyoxal | 3 | | | X | | | E |
| Hexanethiol | 3 | | | X | | | B |
| Hydrazine | 3 | | | X | X | >64% | E |
| Isobutyl Isocyanate | 3 | | SQ | | X | | E |
| Isobutyl Mercaptan | 3 | | | X | | | B |
| Isobutyl Methacrylate | 3 | | | | X | | E |
| Isobutyl Nitrate | 3 | | VVSQ | X | | | LP |
| Isobutyl Nitrile | 3 | | VVSQ | X | | | L[ |
| Isopropyl Chloroformate | 3 | | VVSQ | X | | | LP |
| Isopropyl Ether - | 3 | | SQ | Peroxide Test | | | |
| Isopropyl Isocyanate | 3 | | SQ | | X | | E |
| Isopropyl Mercaptan | 3 | | | X | | | B |
| Isopropyl Nitrate | 3 | | VVSQ | X | | | LP |
| Isopropyl Nitrate | 3 | | VVSQ | X | | | LP |
| Methacrylonitrile | 3 | | SQ | X | | | E |
| Methaminodimethyl Acetal | 3 | | | X | | | E |
| Methyl Acrylate | 3 | | VSQ | X | | | LP |
| Methyl Chloromethyl Ether | 3 | | SQ | | X | | E |
| Methyl Methacrylate | 3 | | SQ | Peroxide Test | | | B |
| Methylaminoacetaldehyde Dimethyl | 3 | | | X | | | E |
| Methyltrichlorosilane | 3 | | VSQ | X | | | LP |
| Methylvinyldiethoxysilane | 3 | | SQ | | X | | E |
| N, N-Diethyl-1,1,1-trimethylsilanamine | 3 | | SQ | | X | | E |
| n-Amyl Mercaptan | 3 | | | X | | | B |
| n-Amyl Nitrate | 3 | | SQ | | X | | E |

**Table H.A.5/6.-Ia (continued)**
**Chart 3 (continued): Chemicals with Restrictions on Acceptance (Hazard Class 3)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| n-Amyl Nitrite | 3 | | VSQ | X | | | LP |
| n-Butyl Acrylate | 3 | | SQ | X | | | E |
| n-Butyl Isocyanate | 3 | | SQ | | X | | E |
| n-Butyl Mercaptan | 3 | | | X | | | B |
| n-Butyl Methacrylate | 3 | | | | X | | E |
| n-Butyl Nitrate | 3 | | VVSQ | X | | | LP |
| n-Butyl Nitrite | 3 | | VVSQ | X | | | LP |
| n-Butyl Sulfide | 3 | | | X | | | B |
| Nitroglycerine | 3 | | SQ | X | | | LP |
| n-Propyl Mercaptan | 3 | | | X | | | B |
| n-Propyl Nitrate | 3 | | VVSQ | X | | | LP |
| Nitromethane | 3 | | VSQ | | X | | LP |
| Octamethyltrisiloxane | 3 | | | | X | | E |
| Pentanethiol | 3 | | | X | | | B |
| Phenyl Mercaptan | 3 | | | X | | | E |
| Propanethiol | 3 | | | X | | | B |
| Propargyl Bromide | 3 | | SQ | | X | | E |
| Propylene Oxide | 3 | | SQ | X | | | E |
| Propylene Sulfide | 3 | | | X | | | B |
| Propyleneimine | 3 | | | X | | | E |
| sec-Butyl Mercaptan | 3 | | | X | | | B |
| t-Butyl Disulfide | 3 | | | X | | | B |
| t-Butyl Mercaptan | 3 | | | X | | | B |
| t-Butyl Nitrite | 3 | | VSQ | X | | | LP |
| t-Butyldimethyl Silane | 3 | | SQ | | X | | E |
| Tetraethylsilane | 3 | | SQ | | X | | E |
| Tetramethyl Lead | 3 | | VSQ | X | | | LP |
| Thioanisole | 3 | | | X | | | B |
| Thiophene | 3 | | | X | | | LP |
| Triethoxyphenylsilane | 3 | | | | X | | E |
| Triethoxyvinylsilane | 3 | | SQ | | X | | E |
| Triethyl Phosphite | 3 | | | | X | | E |
| Triethylsilane | 3 | | SQ | | X | | E |
| Trimethyl Phosphite | 3 | | SQ | X | | | E |
| Trimethyl(Phenylthiomethyl) Silane | 3 | | SQ | X | | | E |
| Trimethyl-2-Thienylsilane | 3 | | SQ | | X | | E |
| Trimethylchlorosilane | 3 | | VSQ | X | | | LP |
| Trimethylvinylsilane | 3 | | VSQ | X | | | LP |

**Table II.A.5/6.-Ia (continued)**
**Chart 4: Chemicals with Restrictions on Acceptance (Hazard Class 4)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| 2-Diazo-l-Naphthone-5-Sulfonyl | 4.1 | | SQ | X | | | E |
| Cobalt Resinate | 4.1 | | SQ | | | | B |
| Decaborane | 4.1 | | SQ | | | | B |
| Dinitrobenzoyl Chloride | 4.1 | | VSQ | X | | | LP |
| Dinitrobenzoyl Chloride | 4.1 | | SQ | | X | | E |
| Dinitrotoluene | 4.1 | | VSQ | X | | <25% | LP |
| Lithium Diethylamide | 4.1 | | VSQ | X | | | LP |
| Lithium Hexamethyldisilazide | 4.1 | | VSQ | X | | | LP |
| MNNG | 4.1 | | VSQ | X | | | LP |
| Nitroglycerine | 4.1 | | SQ | X | | | LP |
| N-Methyl-N'-Nitro-N-Nitrosoguaridine | 4.1 | | VSQ | X | | | LP |
| Oxazine Perchlorate | 4.1 | | SQ | | X | | E |
| Phosphorus Sesquisulfide | 4.1 | | SQ | X | | | E |
| Phosphorus Trisulfide | 4.1 | | SQ | X | | | E |
| Potassium Amide | 4.1 | | VSQ | X | | | LP |
| Titanium Subhydride | 4.1 | | VSQ | X | | | LP |
| Calcium Sulfide | 4.2 | | SQ | | X | | E |
| Cyclopentadienyliron Dicarbonyl | 4.2 | | VSQ | X | | | LP |
| Diethyl Magnesium | 4.2 | | VSQ | X | | | LP |
| Diethyl Zinc | 4.2 | | VSQ | X | | | LP |
| Diethylaluminum Chloride | 4.2 | | VVSQ | X | | | LP |
| Diethylarsine | 4.2 | | VSQ | X | | | LP |
| Diisobutylaluminum Hydride | 4.2 | | VSQ | X | | | LP |
| Dimethyl Magnesium | 4.2 | | VVSQ | X | | | LP |
| Dimethyl Zinc | 4.2 | | VSQ | X | | | LP |
| Dimethylarsenic | 4.2 | | VSQ | X | | | LP |
| Magnesium Diamide | 4.2 | | SQ | X | | | E |
| Magnesium Diphenyl | 4.2 | | VSQ | X | | | LP |
| Pentaborane | 4.2 | | SQ | X | | | E |
| Phenylmagnesium Chloride | 4.2 | | VVSQ | X | | Solid | LP |
| Phenylmagnesium Chloride | 4.2 | | VSQ | X | | X | LP |
| Phosphorus | 4.2 | | VSQ | X | | | LP |
| Potassium Sulfide | 4.2 | | VSQ | X | | | LP |
| Titanium Boride | 4.2 | | VSQ | X | | | LP |
| Titanous Chloride | 4.2 | | SQ | X | | | E |
| Triethylaluminum | 4.2 | | VSQ | X | | | LP |
| Triethylborane | 4.2 | | VSQ | X | | | LP |
| Triisobutylaluminum | 4.2 | | VSQ | X | | | LP |
| Trimethylaluminum | 4.2 | | VSQ | X | | | LP |
| Trimethylaminealuminum Hydride | 4.2 | | VSQ | X | | | LP |
| Aluminum Carbide | 4.3 | | SQ | X | | | E |
| Aluminum Hydride | 4.3 | | SQ | X | | | E |
| Aluminum Hypophosphite | 4.3 | | | | X | | E |
| Aluminum Phosphide | 4.3 | | SQ | X | | | E |
| Boron Trifluoride Dimethyl Etherate | 4.3 | | SQ | X | | | E |
| Calcium Carbide | 4.3 | | SQ | | | | B |
| Calcium Cyanamide | 4.3 | | SQ | | X | | B |

**Table II.A.5/6.-Ia (continued)**
**Chart 4: Chemicals with Restrictions on Acceptance (Hazard Class 4)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Calcium Phosphide | 4.3 | | VSQ | X | | | LP |
| Dimethylisopropylsilane | 4.3 | | VSQ | X | | | LP |
| Ethyldichlorosilane | 4.3 | | VSQ | X | | | LP |
| Gallium Phosphide | 4.3 | | VSQ | X | | | LP |
| Magnesium Aluminum Phosphide | 4.3 | | VSQ | X | | | LP |
| Magnesium Hydride | 4.3 | | SQ | X | | | E |
| Magnesium Phosphide | 4.3 | | VSQ | X | | | LP |
| Manganese Hypophosphite | 4.3 | | VSQ | X | | | LP |
| Phosphorus Sulfide | 4.3 | | SQ | X | | | E |
| Sodium Aluminum Hydride | 4.3 | | VSQ | X | | | LP |
| Sodium Phosphide | 4.3 | | VSQ | X | | | LP |
| Stannic Phosphide | 4.3 | | VSQ | X | | | LP |
| Strontium Phosphide | 4.3 | | VSQ | X | | | LP |
| Tin Phosphide | 4.3 | | SQ | X | | | E |
| Zinc Phosphide | 4.3 | | VSQ | X | | | LP |

**Table II.A.5/6.-Ia (continued)**
**Chart 5: Chemicals with Restrictions on Acceptance (Hazard Class 5.1, 5.2)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Aminoquanidine Nitrate | 5.1 | | VVSQ | X | | | LP |
| Barium Peroxide | 5.1 | | SQ | X | | | E |
| bis(Triphenylphosphoranylidene) Ammon Nitrate | 5.1 | | VVSQ | X | | | LP |
| Cupric Perchlorate | 5.1 | | VSQ | X | | | LP |
| Erbium Nitrate | 5.1 | | VSQ | X | | | LP |
| Guanidine Nitrate | 5.1 | | VSQ | | | | LP |
| Iodine Pentafluoride | 5.1 | | VSQ | X | | | LP |
| Lithium Hypochlorite | 5.1 | | SQ | X | | | E |
| Lithium Nitrate | 5.1 | | VSQ | | | | LP |
| Lithium Peroxide | 5.1 | | SQ | X | | | E |
| Neodymium Nitrate | 5.1 | | VSQ | | X | | LP |
| Nitronium Perchlorate | 5.1 | | VSQ | X | | | LP |
| Potassium Dichloroisocyanurate | 5.1 | | SQ | | X | | E |
| Potassium Peroxide | 5.1 | | VSQ | X | | | LP |
| Pyridinium Dichromate | 5.1 | | VSQ | | X | | LP |
| Silver Chlorate | 5.1 | | VSQ | X | | | LP |
| Silver Perchlorate | 5.1 | | VSQ | X | | | LP |
| Silver Permanganate | 5.1 | | VSQ | X | | | LP |
| Sodium Dichloroisocyanurate | 5.1 | | SQ | | X | | E |
| Tetramethylammonium Nitrate | 5.1 | | VSQ | X | | | LP |
| Chlorobenzoyl Peroxide | 5.2 | | SQ | | | | E |
| Di-t-Butyl Peroxide | 5.2 | | SQ | | X | | E |
| Lauroyl Peroxide | 5.2 | | SQ | X | X | | E |
| Methyl Ethyl Ketone Peroxide | 5.2 | | VSQ | X | | <45% | LP |
| Myristoyl Peroxide | 5.2 | | SQ | | | | E |
| Performic Acid | 5.2 | | SQ | | X | | E |
| Peroxybenzoyl Nitrate | 5.2 | | SQ | X | | | E |
| Propionyl Peroxide | 5.2 | | SQ | X | X | | E |

**Table II.A.5/6.-Ia (continued)**
**Chart 6: Chemicals With Restrictions on Acceptance (Hazard Class 6.1)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| 3-(Dichloromethylsily)propyl Isocyante | 6.1 | | SQ | | X | | E |
| Acrylyl Chloride | 6.1 | | VSQ | X | | | LP |
| Allyl Isothiocyante | 6.1 | | | X | | | B |
| Barium Borotungslate | 6.1 | | | X | | | E |
| Barium Oxide | 6.1 | | SQ | | X | | E |
| Bis(chloromethyl) Ether | 6.1 | | VSQ | X | | | LP |
| Bromophosgene | 6.1 | | SQ | X | | | LP |
| Chloral | 6.1 | | | X | | | B |
| Chlorodinitrobenzene | 6.1 | | SQ | | X | | E |
| Cyanogen Bromide | 6.1 | | SQ | X | | | E |
| Dichloromethyl Ether | 6.1 | | VSQ | X | | | LP |
| Dinitroaniline | 6.1 | | SQ | | X | | E |
| Glycidol | 6.1 | | | X | | | E |
| Hydrazine | 6.1 | | | X | X | <37% | E |
| Hydrocyanic Acid | 6.1 | | SQ | | X | | E |
| Mercaptoethanol | 6.1 | | | X | | | E |
| Mercurous Nitrate | 6.1 | | VSQ | | X | | LP |
| Methacrylic Anhydride | 6.1 | | SQ | X | | | E |
| Methyl Isothiocyanate | 6.1 | | | | X | | E |
| Methyl Parathion | 6.1 | | VSQ | X | | | LP |
| n-Butyltin Trichloride | 6.1 | | SQ | X | | | E |
| N-Nitroso-N-Methylurea | 6.1 | | VVSQ | X | | | LP |
| Octamethyl Pyrophosphoramide | 6.1 | | SQ | X | | | E |
| o-Nitroaniline | 6.1 | | VSQ | | X | | LP |
| Paraquat | 6.1 | | SQ | Pure | | <50% | E |
| Paraquat Dichloride | 6.1 | | | X | | | E |
| Parathion | 6.1 | | | Pure | | <50% | E |
| Phenyl Chloroformate | 6.1 | | | X | | | E |
| Phenyldichloroarsine | 6.1 | | SQ | X | | | E |
| Potassium Azide | 6.1 | | SQ | | X | | E |
| Schradan | 6.1 | | SQ | X | | | E |
| Sodium Azide | 6.1 | | SQ | | X | | E |
| Thiolactic Acid | 6.1 | | | X | | | B |
| Thiophenol | 6.1 | | | X | | | B |
| Toluene Diisocyanate | 6.1 | | | | X | | E |
| Toluenesulfonyl Isocyanate (All Isomers) | 6.1 | | VSQ | X | | | LP |
| Trichloromethyl Chloroformate | 6.1 | | VSQ | X | | | LP |
| Trichloronitrosomethane | 6.1 | | VSQ | X | | | LP |
| Trimethoxysilane | 6.1 | | SQ | | X | | E |
| | | | | | | | |

**Table II.A.5/6.-Ia (continued)**
**Chart 7: Chemicals With Restrictions on Acceptance (Hazard Class 8)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| (2-Bromoally)trimethyl Silane | 8 | | SQ | | X | | E |
| (Diethylamino)sulfur Trifluoride | 8 | | VSQ | X | | | LP |
| 1,2-bis(Dichloromethylsiy1) Ethane | 8 | | SQ | | X | | E |
| 1,4-Dichloro-2-Butyne | 8 | | SQ | | X | | E |
| 3,3,3-Trifluoropropyltrichlorosilane | 8 | | | | X | | E |
| 3,5-Dichlorobenzoyl Chloride | 8 | | | X | | | E |
| 4-Biphenylcarbonyl Chloride | 8 | | SQ | | X | | E |
| 4-Chlorophenyltrichlorosilane | 8 | | SQ | | X | | E |
| Allytrichlorosilane | 8 | | VSQ | X | | | LP |
| Ammonium Sulfide | 8 | | | X | | | E |
| Anisoyl Chloride | 8 | | VSQ | | X | | LP |
| Antimony Pentachloride | 8 | | | X | | | E |
| Benzenetricarbonyl Trichloride | 8 | | SQ | X | | | E |
| Benzoyl Chloride | 8 | | SQ | | X | | E |
| Benzyl Chloroformate | 8 | | | X | | | E |
| Bromotrimethylsilane | 8 | | SQ | X | | | E |
| Butyroyl Chloride | 8 | | SQ | | X | | E |
| Chlorocyclohexyldimethylsilane | 8 | | SQ | | X | | E |
| Chlorodimethyloctadecylsilane | 8 | | SQ | | X | | E |
| Chlorodimethylphenylsilane | 8 | | SQ | X | | | E |
| Chlorophenylmethyldiehlorosilane | 8 | | SQ | | X | | E |
| Chlorosulfonyl Isocyanate | 8 | | SQ | X | | | E |
| Chlorotributylsilane | 8 | | SQ | | X | | E |
| Chlorotriethylsilane | 8 | | SQ | | X | | E |
| Chromium Oxychloride | 8 | | SQ | | X | | E |
| Chromyl Chloride | 8 | | SQ | | X | | E |
| Cyanuric Chloride | 8 | | | | X | | E |
| Cyclohexyltrichlorosilane | 8 | | SQ | X | | | E |
| Dibutyl Phosphite | 8 | | | | X | | E |
| Diethyldichlorosilane | 8 | | VSQ | X | | | LP |
| Dimethylcarbambyl Chloride | 8 | | SQ | | X | | E |
| Disulfuryl Chloride | 8 | | SQ | X | | | E |
| Dodoecytrichlorosilane | 8 | | SQ | X | | | E |
| Heptanedioyl Dichloride | 8 | | VSQ | X | | | LP |
| Hexamethylsilandeiamine | 8 | | VSQ | X | | | LP |
| Hexyltrichlorosilane | 8 | | SQ | X | | | E |
| Hydrazine | 8 | | SQ | X | X | >37% & <64% | E |
| Hydrofluoric Acid | 8 | | | | >10% | | E |
| Hydroxylamine Nitrate | 8 | | SQ | | X | | E |
| Iodotrimethylsilane | 8 | | VSQ | X | | | LP |
| Malonyl Dichloride | 8 | | SQ | | X | | E |
| Mercaptoacetic Acid | 8 | | | X | | | B |
| Mercaptopropionic cid | 8 | | | X | | | B |
| Methanesulfonic Anhydride | 8 | | SQ | | X | | E |

**Table II.A.5/6.-Ia (continued)**
**Chart 7 continued: Chemicals with Restrictions on Acceptance (Hazard Class 8)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Methylaluminum Dichloride | 8 | | SQ | | X | | E |
| Methylbenzoyl Chloride (All | 8 | | SQ | X | | | E |
| N-(3-Trimethoxysilyppropy1)-1,2-Ethanediamine | 8 | | SQ | X | | | E |
| Naphthalenesulfonyl Chloride | 8 | | | | X | | E |
| Nonyltrichlorosilane | 8 | | SQ | X | | | E |
| Octyltrichlorosilane | 8 | | SQ | X | | | E |
| Oxalyl Chloride | 8 | | SQ | X | | | E |
| Perfluoropropionic Anhydride | 8 | | SQ | X | | | E |
| Phenyl Isothiocyanate | 8 | | | X | | | E |
| Phenyl Mustard Oil | 8 | | | X | | | E |
| Phosphorus Oxybromide | 8 | | SQ | | X | | E |
| Phosphorus Oxychloride | 8 | | VSQ | X | | | LP |
| Phosphorus Pentachloride | 8 | | SQ | X | | | E |
| Phosphorus Pentoxide | 8 | | SQ | | X | | E |
| Phosphorus Tribromide | 8 | | SQ | X | | | E |
| Phosphorus Trichloride | 8 | | SQ | X | | | E |
| Phosphoryl Bromide | 8 | | SQ | | X | | E |
| Phosphoryl Chloride | 8 | | SQ | X | | | E |
| Pimeloyl Chloride | 8 | | VSQ | X | | | LP |
| Potassium Oxide | 8 | | SQ | | X | | E |
| Propyltrichlorosilane | 8 | | VSQ | X | | | LP |
| Pyrosulfuryl Chloride | 8 | | SQ | X | | | E |
| Silicon Tetrachloride | 8 | | -SQ | X | | | E |
| Sodium Hexamethyldisilazane | 8 | | VSQ | X | | | LP |
| Sulfur Dichloride | 8 | | SQ | X | | | E |
| Sulfur Monochloride | 8 | | VSQ | | X | | LP |
| t-Butylchlorodimethylsilane | 8 | | VSQ | X | | | LP |
| t-Butylchlorodiphenylsilane | 8 | | SQ | | X | | E |
| Tetrabutyl Titanate | 8 | | | X | | | E |
| Thioacetic Acid | 8 | | | X | | | B |
| Thioglycolic Acid | 8 | | | X | | | B |
| Thionyl Chloride | 8 | | SQ | X | | | E |
| Thiophosphoryl Chloride | 8 | | SQ | X | | | E |
| Titanic Chloride | 8 | | SQ | | X | | E |
| Toluoyl Chloride (All Isomers) | 8 | | SQ | X | | | E |
| Trichloro(3-Chloropropyl)silane | 8 | | SQ | X | | | E |
| Trichloroacetonitrile | 8 | | | X | | | B |
| Triisopropylsilyl Chloride | 8 | | | | X | | E |
| Vanadium Tetrachloride | 8 | | VSQ | | X | | LP |

**Table II.A.5/6.-Ia (continued)**
**Chart 8: Chemicals With Restrictions on Acceptance (Hazard Class 9)**

| Chemical | Haz | DNA | Size | DNO | DNC | Sol'n | LP/B/ |
|---|---|---|---|---|---|---|---|
| (p-Bromophenoxy)trimethyl Silane | 9 | | SQ | X | | | E |
| 1,3-Benzenedimethanethiol | 9 | | | X | | | B |
| 1,3-dithiane | 9 | | | X | | | B |
| 1-(Trimethylsilyl)cyclopropyl Phenyl Sulfide | 9 | | | X | | | B |
| 1-Decanethiol | 9 | | | X | | | B |
| 1-Dodecanethiol | 9 | | | X | | | B |
| 1-Isocyanobutane | 9 | | | X | | | E |
| 2,5-Dimercapto-1,3,4-Thiadizaole | 9 | | | X | | | B |
| 2-(3,4-Epoxycyclohexyl)ethyltrimethoxy Silane | 9 | | | | X | | E |
| 2-Chlorophenyl-2,2,2-Trichloroethyl Chlorophosphate | 9 | | SQ | X | | | E |
| 2-Mercaptoethylamine | 9 | | | X | | | B |
| 2-Phenyl-1,3-Dithiane | 9 | | | X | | | B |
| 2-Trimethylsily1-1,3-Dithiane | 9 | | | | X | | E |
| 3,4-Dimercaptotoluene | 9 | | | X | | | B |
| 4-Mercaptoanisole | 9 | | | X | | | B |
| 4-Methoxybenzenethiol | 9 | | | X | | | B |
| Allyl Propyl Sulfide | 9 | | | X | | | B |
| Aminoethyl Hydrogen Sulfide | 9 | | | | X | | E |
| Cresyl Violet 670 Perchlorate | 9 | | SQ | | X | | E |
| Cyanamide | 9 | | SQ | | X | | E |
| Cyanuric Acid | 9 | | VSQ | X | | | LP |
| Dibromoquionone Chlorimide | 9 | | VSQ | | X | | LP |
| Dimercaptopropanol | 9 | | | X | | | B |
| Diphenyl Phosphorazidate | 9 | | | | X | | E |
| Dodecanethiol | 9 | | | X | | | B |
| Dodecyl Mercaptan | 9 | | | X | | | B |
| Ferric Hypophosphite | 9 | | SQ | | X | | E |
| Ferrous Phosphide | 9 | | | X | | | E |
| Glycidoxypropyltrimethoxysilane | 9 | | | | X | | E |
| Hexadecyl Methacrylate | 9 | | | X | | | E |
| Hydroxyethyl Methacrylate | 9 | | | X | | | E |
| Iron Phosphide | 9 | | SQ | X | | | E |
| Lauryl Mercaptan | 9 | | | X | | | B |
| Lauryl Methacrylate | 9 | | | X | | | E |
| Mercaptoethylamine Hydrochloride | 9 | | | | X | | E |
| Mercaptophenol | 9 | | | X | | | E |
| Mercaptosuccinic Acid | 9 | | | X | | | E |
| Methoxysilane | 9 | | VSQ | X | | | LP |
| Methyl (Methylsulfinyl)methyl Sulfide) | 9 | | | X | | | B |
| N-Bromosuccinimide | 9 | | | X | | | E |
| n-Decyl Mercaptan | 9 | | | X | | | B |
| O,O-(Methoxymethylsilylene)dioxime 2-Butanone | 9 | | SQ | X | | | E |

**Table II.A.5/6.-Ia (continued)**
**Chart 8 continued: Chemicals With Restrictions on acceptance (Hazard Class 9)**

| Chemical | Haz | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| p-Bromophenyl Isocyanate | 9 | | | X | | | E |
| Phenyl Sulfide | 9 | | | X | | | E |
| Phenyl Tributyltin Sulfide | 9 | | | X | | | B |
| Propylene Glycol Dinitrate | 9 | | SQ | | X | | E |
| Sodium Hypophosphite | 9 | | VSQ | | X | | LP |
| Tetrakis(trimethylsiliyl) Silane | 9 | | SQ | X | | | E |
| Thiodiethanol | 9 | | | X | | | B |
| Thiodiglycol | 9 | | | X | | | B |
| Triallyl Isocyanurate | 9 | | | X | | | E |
| Triethyl Phosphate | 9 | | VSQ | | X | | LP |
| Trimethoxysilylchlcoromethylphenyl Ethane | 9 | | | | X | | E |

**Table II.A.5/6.-Ia (continued)**

**Chart 9: Chemicals With Restrictions on Acceptance Multi le Hazard Classes**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| (3-Chloropropyl)trimethoxy Silane | Comb | | VSQ | X | | | LP |
| (Bromophenyl)trichlorosilane | Comb | | SQ | X | | | E |
| 2,6-Dimethylthiophenol | Comb | | | X | | | |
| 2-(Trimethylsilyloxy)ethyl | Comb | | SQ | | X | | E |
| 2-Chlorobenzyl Mercaptan | Comb | | | X | | | B |
| 2-Diethylarninoethyl Methacrylate | Comb | | SQ | X | | | E |
| 2-Ethylhexyl Nitrate | Comb | | VSQ | | X | | LP |
| 3-(Methacryloxypropyl)trimethoxy | Comb | | SQ | | X | | E |
| 3-Phenyl- 1 -Propanethiol | Comb | | | X | | | B |
| 3-Phenylpropyl Mercaptan | Comb | | | X | | | B |
| 4-Mercaptotoluene | Comb | | | X | | | B |
| 4-Thiocresol | Comb | | | X | | | B |
| 4-Toluenethiol | Comb | | | X | | | B |
| Benzyl Mercaptan | Comb | | | X | | | B |
| Furfuryl Methacrylate | Comb | | | | X | | E |

**Table II.A.5/6.-Ia (continued)**
**Chart 10: Chemicals With Inhalation Hazard**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Perchloryl Fluoride | 2.3 HZ B | | VSQ | | X | | LP |
| Ethyl Isocyanate | 3 HZ A | | SQ | | X | | E |
| (E)-Cronaldehyde | 3 HZ B | | | | | | |
| Crotonaldehyde | 3 HZ B | | | X | | | B |
| Bromine Pentafluoride | 5.1 HZ A | | VSQ | X | | | LP |
| Bromine Trifluoride | 5.1 HZ B | | VSQ | | X | | LP |
| 2-Propenal | 6.1 HZ A | | | PURE | | | E |
| Acrolein | 6.1 HZ A | | | PURE | | | E |
| Aziridine | 6.1 HZ A | | VSQ | X | | | LP |
| Chloroacetyl Chloride | 6.1 HZ A | | SQ | X | | | E |
| Ethleneimine | 6.1 HZ A | | SQ | X | | | E |
| Hydrogen Cyanide | 6.1 HZ A | | VSQ | X | | X | LP |
| Iron Pentacarbonyl | 6.1 HZ A | | SQ | X | | | E |
| Methyl Chloroformate | 6.1 HZ A | | SQ | X | | | E |
| Methyl Isocyanate | 6.1 HZ A | | SQ | | X | | E |
| Nickel Carbonyl | 6.1 HZ A | | VSQ | | X | | LP |
| t-Butyl Isocyanate | 6.1 HZ A | | SQ | | X | | E |
| t-Butyl Isocyanate | 6.1 HZ A | | | X | | | E |
| 2-Chloroethanal | 6.1 HZ B | | | X | | | E |
| Acetone Cyanohydrin | 6.1 HZ B | | | X | | | E |
| Allyl Alcohol | 6.1 HZ B | | SQ | | X | | B |
| Allyl Chloroformate | 6.1 HZ B | | SQ | | X | | E |
| Allylamine | 6.1 HZ B | | SQ | X | | | E |
| Bromoacetone | 6.1 HZ B | | | | X | | E |
| Chloroacetaldehyde | 6.1 HZ B | | | X | | | E |
| Chloroacetone, Stabilized | 6.1 HZ B | | | X | | | E |
| Chloroacetonitrile | 6.1 HZ B | | | X | | | E |
| Dimethylhydrazine | 6.1 HZ B | | SQ | X | | | E |
| Ethyl Chloroformate | 6.1 HZ B | | | X | | | E |
| Isopropyl-Methyl-Phosphoryl Fluoride | 6.1 HZ B | | VSQ | X | | | LP |
| Meth 1 Phosphonothioic Dichloride | 6.1 HZ B | | VSQ | X | | | LP |
| n-Butyl Chloroformate | 6.1 HZ B | | | | X | | E |
| n-Butyl Isocyanate | 6.1 HZ B | | SQ | X | | | E |
| Perchloromethylmercaptan | 6.1 HZ B | | | X | | | E |
| Phenyl Isocyanate | 6.1 HZ B | | | X | | | E |
| Phenyl Isocyanate | 6.1 HZ B | | | X | | | E |
| Phenyl Mercaptan | 6.1 HZ B | | | X | | | E |
| Propyl Chloroformate | 6.1 HZ B | | | X | | | E |
| Sarin | 6.1 HZ B | | VSQ | X | | | LP |
| sec-Butyl Chloroformate | 6.1 HZ B | | | | X | | E |
| Thiophenol | 6.1 HZ B | | | X | | | B |
| Thiophosgene | 6.1 HZ B | | SQ | X | | | E |
| Trichloromethanethiol | 6.1 HZ B | | | X | | | E |
| Bromine | 8 HZ A | | SQ | | X | 20-60% | E |
| Bromine | 8 HZ A | | SQ | X | | <60% | E |

**Table II.A.5/6.-Ia (continued)**
**Chart 10 (continued I: Chemicals with Inhalation Hazard**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Sulfuryl Chloride | 8 HZ A | | SQ | X | | | E |
| Boron Tribromide | 8 HZ B | | VSQ | X | | | LP |
| Phosphorus Trichloride | 8 HZ B | | SQ | X | | | E |
| Sulfur Trioxide | 8 HZ B | | VSQ | X | | | LP |

## Table II.A.5/6-2
## METHODS USED TO SAMPLE WASTES

| Hazardous Waste Types | Sample Method | Description of Sampling | Method Reference |
|---|---|---|---|
| Homogeneous Liquids in Containers | Grab Sample | Disposable Coliwasa, Glass Tube, Composite Sample of Grabs from Top, Middle, and Bottom | (1) |
| Homogeneous Liquids in Bulk | Grab Sample | Same | (1) |
| Bi-Layered Liquids in Containers | Grab Sample | Same | (1) |
| Bi-Layered Liquids in Bulk | Grab Sample | Same | (1) |
| Multi-Layered Liquids in Containers | Grab Sample | Same | (1) |
| Multi-Layered Liquids in Bulk | Grab Sample | Same | (1) |
| Solid-Liquid Mixtures in Containers | Grab Sample | (2) Coliwasa, Trowel, or Scoop Composite Sample of Grabs from Top, Middle, and Bottom | (1) |
| Solid-Liquid Mixtures in Bulk | Grab Sample | (2) Same | (1) |

| | |
|---|---|
| (1) | DEP-SOP-001/01. FS 5000 Waste Sampling |
| (2) | Devise used is dependent upon density of waste materials. |

**Table II.A.5/6-3**
**ANALYSIS METHODS**

| CONSTITUENT | SW-846 ANALYSIS METHOD |
|---|---|
| Cyanide (Total & Amenable) | 9010C |
| Mercury | 7470A, 7171B |
| Sulfide | 9030B |
| Metals (Except Mercury) | 7000 Series/6010 [7000B, 7010, 7061A, 7062, 7063, 7195, 7196A] |
| Volatile Organics | 8240B |
| Semi-Volatile Organics | 8270D |
| TCLP Extraction | 1311 |
| Hazardous Waste Corrosivity | 1110A |
| Hazardous Waste Ignitibility | 1010A, 1020B |
| Hazardous Waste Reactivity-Cyanide/Sulfide | The regulations do not require specific test methods for any of these properties. Therefore, generators must use waste knowledge to determine if their waste exhibits the characteristic of reactivity. |

## Exhibit II.A.5/6.-2: COMPLIANCE REVIEW FORM

## Exhibit II.A.5/6.-2: COMPLIANCE REVIEW FORM

# INCOMING TRACKING-QA/QC LAB FORM

Shipment # Date:

Customer Name: Manifest #

| Container # | Line Item | Drum Size | Drum Type | Pad Gal | Storage Area | Approval # | Drum Space Quantity | Waste Type Comments | pH | Specific Gravity | % Liquid | % Solid | Layers | Water Soluble | Water Reactive | Chlor-n-Oil Test | fp | Lab Release |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | |

Drum Type: DM=Drum Metal
CF=Carton Fiber Box
TP=Tote
BA=Bag
CW=Carton Wood

Water Solubility: S=Slight Y=Yes N=No

Water Reactive Y=Yes N=No

Chlor-n-oil Test: P=Pos N=Neg

Lab Release Y=Yes N=No

ALL WASTE RECEIVED IS IN UN SPECIFICATION CONTAINERS

Revised 8-15-01

## Exhibit II.A.5/6.-3: NOTICE OF APPROVAL LETTER

**Triumvirate Environmental –**

**NOTICE OF APPROVAL**

TSD Facility: Triumvirate Environmental Inc. Auth. Date:

Expires:

Waste
Name:
Profile #:

As required per 40 CFR 264.12(b), this letter serves as notification that Triumvirate Environmental has the appropriate permits in place to accept and manage your waste(s). Due in part to our permit, non- conforming waste may be rejected at a rate of $250.00, plus round trip transportation if the discrepancy cannot be resolved via manifest correction or price adjustment.

We appreciate your interest in Triumvirate Environmental and we look forward to assisting you with the disposal of your waste. To place an order, please contact our customer service department. Our telephone numbers are (407) 859-4441, (800) 345-6393.

Sincerely,

James F.
Green Vice
President
Triumvirate Environmental (Florida), Inc.

## Exhibit II.A.5/6.-4: LABPACK/DRUM INVENTORY FORM

Triumvirate Environmental / Providing Long-Term, Innovative Solutions / Serving New England to the South-Atlantic
Corporate Headquarters: Somerville, MA 02143 Tel: (800) 966-9282 Fax: (617) 628-8099

Approval #: _____
Labels:
Manifest #:
Process Code _____

Drum # Size: _____ Type: _____

Proper Shipping

Class.Div / UN/NA # / P / /

Special Permits

Waste Code Itemizatio

| Container List | Comments | Source |
|---|---|---|

# ATTACHMENT II.A.5/6.-1

# WASTE COMPATIBILITY TEST MANUAL

## FOR

## TRIUMVIRATE ENVIRONMENTAL, INC.

## ORLANDO, FLORIDA

Revised May 2008
Revised January 2013

# WASTE COMPATIBILITY TEST MANUAL
# FOR
# TRIUMVIRATE ENVIRONMENTAL INC.
# ORLANDO, FLORIDA

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## 1.0 INTRODUCTION

The testing procedures contained in this manual are designed to simulate actual operating conditions that occur during consolidation operations. The objective of this test is to determine whether or not waste streams intended for consolidation will react when mixed. A reaction would result in a change in temperature, a change in state (liquid, solid, semi-solid), or an off-gas reaction. An incompatible test result may not indicate the waste streams must be banned from consolidation. Such a result will lead to a more exhaustive evaluation to establish the magnitude of the expected reaction and ways to mitigate the reaction, within permissible health and safety limits.

Another objective is to impose as little burden as possible on the existing sampling and testing process. This manual seeks to develop a plan that is easy to follow and to minimize necessary tasks.

## 2.0 OPERATIONS DESCRIPTION

Consolidation of waste takes place in the facility inside the lower warehouse. In the consolidation area in the lower warehouse, liquid and solid waste is consolidated into containers (totes, 55-gallon drums, or smaller sized containers). The consolidation area is identified in Figure I D 1.

Waste consolidated in the consolidation areas may be from labpacks or wastes of similar type arriving in small containers or partially empty containers. Placement in a larger container is intended to take advantage of shipping in larger containers. The term container means pails, drums, tanks, and other relatively small size containers that can be moved around by hand, with drum carts, or with forklift trucks. Transportation container refers to a larger sized container intended for bulk transport, such as a roll-off box, dump trailer, and tank trailer (tanker).

## 3.0 TEST CRITERIA

Incompatible materials are seldom present among a group of wastes that have been determined to be similar in type. The cause of incompatibility may be due to an anomaly in the identification of the name or property of materials. The intensity of the reaction between an incompatible waste and each waste stream in a consolidation batch will depend on the concentration levels and types of components present in the incompatible waste.

Chemical reactions caused by an incompatible waste during operations conducted in the consolidation areas may result in the generation of toxic and/or flammable gases or an exothermic reaction. Waste in the inner containers are consolidated by mixing in a 5 gallon compatibility container before being transferred to the final, larger shipping container. Small portions of the inner containers are mixed in the compatibility container to reduce the consequences of reaction incident.

The following test procedures apply to waste in a liquid state. Consolidation of solids occurs for labpack wastes, wastewater treatment sludge from electroplating operations, and when filling partially full containers.

## 4.0 TEST DESCRIPTION

A compatibility test for consolidation operations will be conducted as follows:

For labpacks, samples similar in volume from containers to be consolidated are combined in a 20 liter test vessel one after another within a reasonable period of time to achieve the maximum effect of a reaction. Volumetric ratios will be considered when the waste streams are mixed. The test samples will range from single drops from small containers to a half-liter from the largest lab packs. This part of the test is designed to detect any reactions that may occur if all waste streams to be mixed are mixed together. At this point, physical and chemical changes are observed. The test vessel will be examined for five minutes after the waste streams are consolidated. Visual cues for chemical reactions such as combustion, gas formation, and polymerization will be observed as well as any temperature change will be. A temperature change of greater than 10 degrees Celsius and any visual reaction signs will require retesting or remove the waste from consolidation. All observations will be noted on the Waste Compatibility Testing Log (Exhibit II.A.5/6.-5)

The next step consists of adding to the mixture in the test vessel described above to sample of the waste stored in the consolidation container. The sample size should be about two times larger than the original test vessel mixture and representative of the waste currently stored in the consolidation container. Physical and chemical changes are observed. This step of the test is designed to determine the compatibility of waste streams to be added to the waste stored in the consolidation container.

For Bulk Containers

Samples similar in volume from containers to be consolidated are combined in the test vessel one after another within the shortest possible period of time to achieve the maximum effect of a reaction. This part of the test is designed to detect any reactions that may occur if all waste streams to be mixed are mixed together. At this point, a reading of the mixture temperature, time, observation of gases emanating from the mixture, bubbling action in the mixture, and any other visual observation that may indicate a reaction is taking place is entered in the log. This part of the compatibility test is labeled "STEP A."

The next step, labeled "STEP B," consists of adding to the mixture resulting from STEP A to a sample of the waste stored in the consolidation container. The sample size should be about two times larger than the STEP A mixture and representative of the waste currently stored in the consolidation container. Another record of the mixture temperature, time, and visual observations, as described for STEP A, should be entered in the log. This step of the test is designed to determine the compatibility of waste streams to be added to the waste stored in

the consolidation container. A reading of the ambient temperature and its reading time is completed in STEP C, which should be entered in the log immediately after STEP B.

STEP D and STEP E consist of recording the mixture temperature, time, and visual observations fifteen and thirty minutes, respectively, after the temperature and time readings entered in the log for STEP C. An alarm watch or clock should be used to keep the fifteen- and thirty-minute time. An example of the test log used for the compatibility test for bulk containers is included as Exhibit II.A.5/6.-5.

Consolidation of waste could take place in a tanker. For such consolidation, waste in containers should be transferred into a tote tank before pumping it into a tanker. The same compatibility test operations must be followed for consolidation of waste in tankers..

## 5.0 HEALTH AND SAFETY CONSIDERATIONS

The following precautions and personnel protection equipment should be used when conducting the compatibility test:

Respiratory: Respirators are not needed provided an exhaust fan is in use for removing fumes and gases from the test area. Otherwise, respirators equipped with cartridges for organic vapor or acid gas should be used for waste consolidation. No hazardous by inhalation chemicals will be consolidated.

Face Protection: A face shield or full mask respirator should be worn.

Hand Protection: A latex or rubber glove covering up to the wrist or to the elbow should be worn for fuel blending or waste consolidation, respectively.

Body Protection: Level D protection clothing (same as the one used for normal plant operations) should be worn.

Precautions: If gas generation or bubbling action is observed, the exhaust fan should be left on, the test area should be evacuated, and nearby personnel should be advised that gases with toxic and/or flammable characteristics are being generated.

## 6.0 TEST EQUIPMENT

The following equipment should be used for conducting the compatibility test:

Testing vessel
Alarm clock or watch
Ambient temperature
indicator Mixture temperature
indicator

## 7.0 INDICATION OF SUSPECTED REACTANTS

Any physical change in the mixture indicated a reaction may be occurring. The physical changes may be: combustion, rapid decomposition (explosion), polymerization or the formation of gases (bubbling).

## 8.0 EVALUATION OF SUSPECTED REACTANTS

Should compatibility test results indicate the presence of reactants, an evaluation of waste streams in the shipment or group of drums will be made to identify the reacting waste streams and determine the type and magnitude of the reaction. From this evaluation, a decision is made on the potential to obtain successful consolidation of the reacting waste streams. Mitigation will be applied in a manner that eliminates or minimizes the reaction effects under permissible safety and health limits. The decision to proceed with the consolidation of suspected reactants is made by the Facility Manager following the criteria described in the paragraph below.

Reacting materials will be classified with reaction codes depending on the consequences described in the table shown below. Only reacting materials classified with Reaction Codes H and G will be considered for mixing.

**Reaction Codes and Consequences**

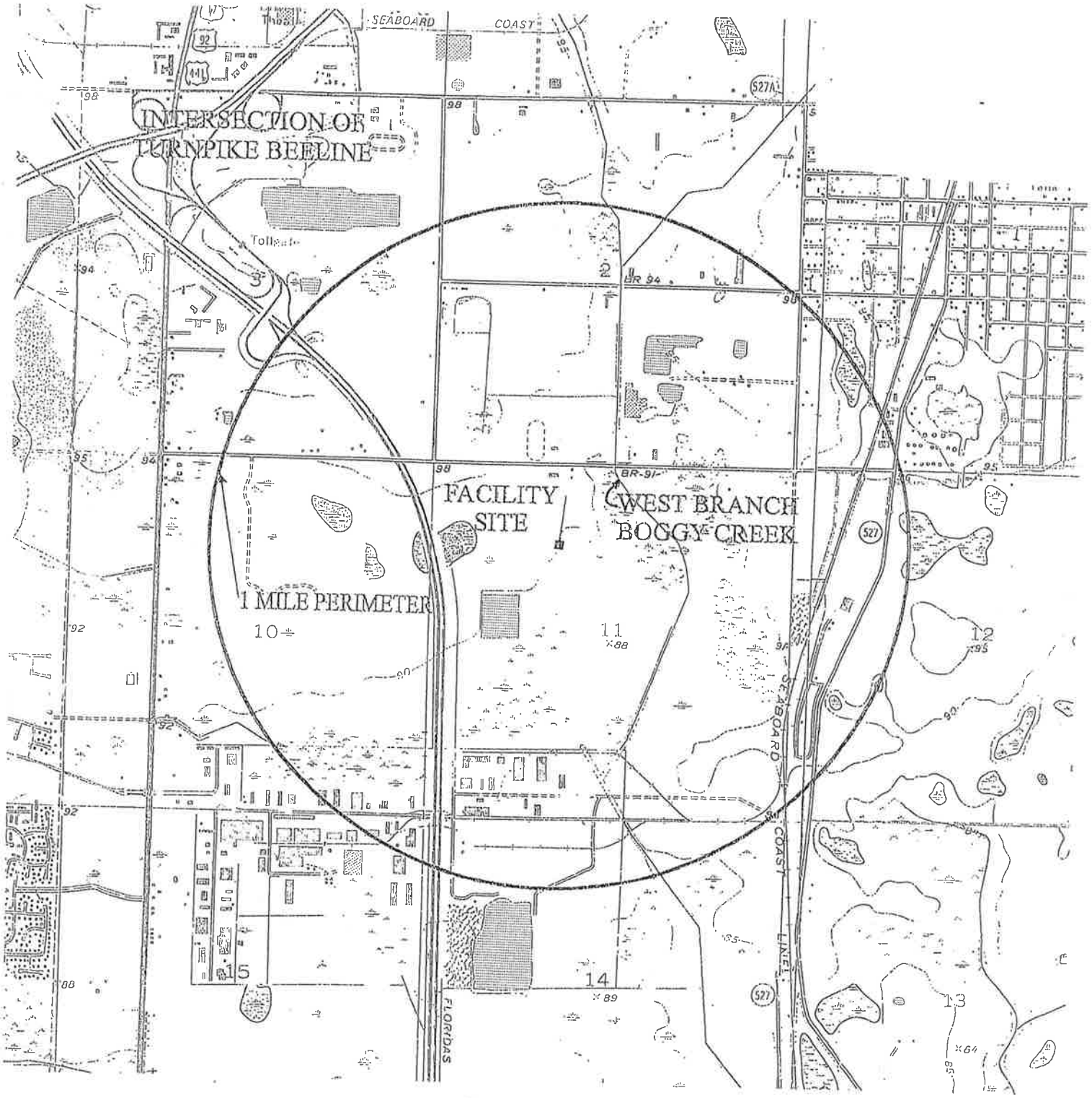
| Reaction Codes | Reaction Consequences |
|---|---|
| H | Generates heat by chemical reactions |
| F | Produces fire from extremely exothermic reactions, ignition of reaction mixtures, or of the reaction products |
| G | Generates innocuous gases such as nitrogen gas (N2), carbon dioxide (CO2), etc. |
| GT | Generates toxic gases such as hydrogen cyanide (HCN), hydrogen sulfide (H2S), etc. |
| GF | Generates flammable gases such as hydrogen gas (H2), acetylene (C2H2), etc. |
| E | Produces explosion due to extremely vigorous reactions or reactions producing enough heat to detonate unstable reactants or reaction products |
| P | Produces violet polymerization resulting in the generation of extreme heat and sometimes toxic and flammable gases |

## Exhibit II.A.5/6.-5: WASTE COMPATIBILITY TESTING LOG

## WASTE COMPATIBILITY TESTING LOG

| Inbound Drum# | Lab Pack/Bulk | Outbound Container # | Ti | Tf | Reaction | Comments |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |

Maps/Figures




SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 1 KILOMETER

MN GN

2° 0°13'

36 MILS 4 MILS

UTM GRID AND 1980 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

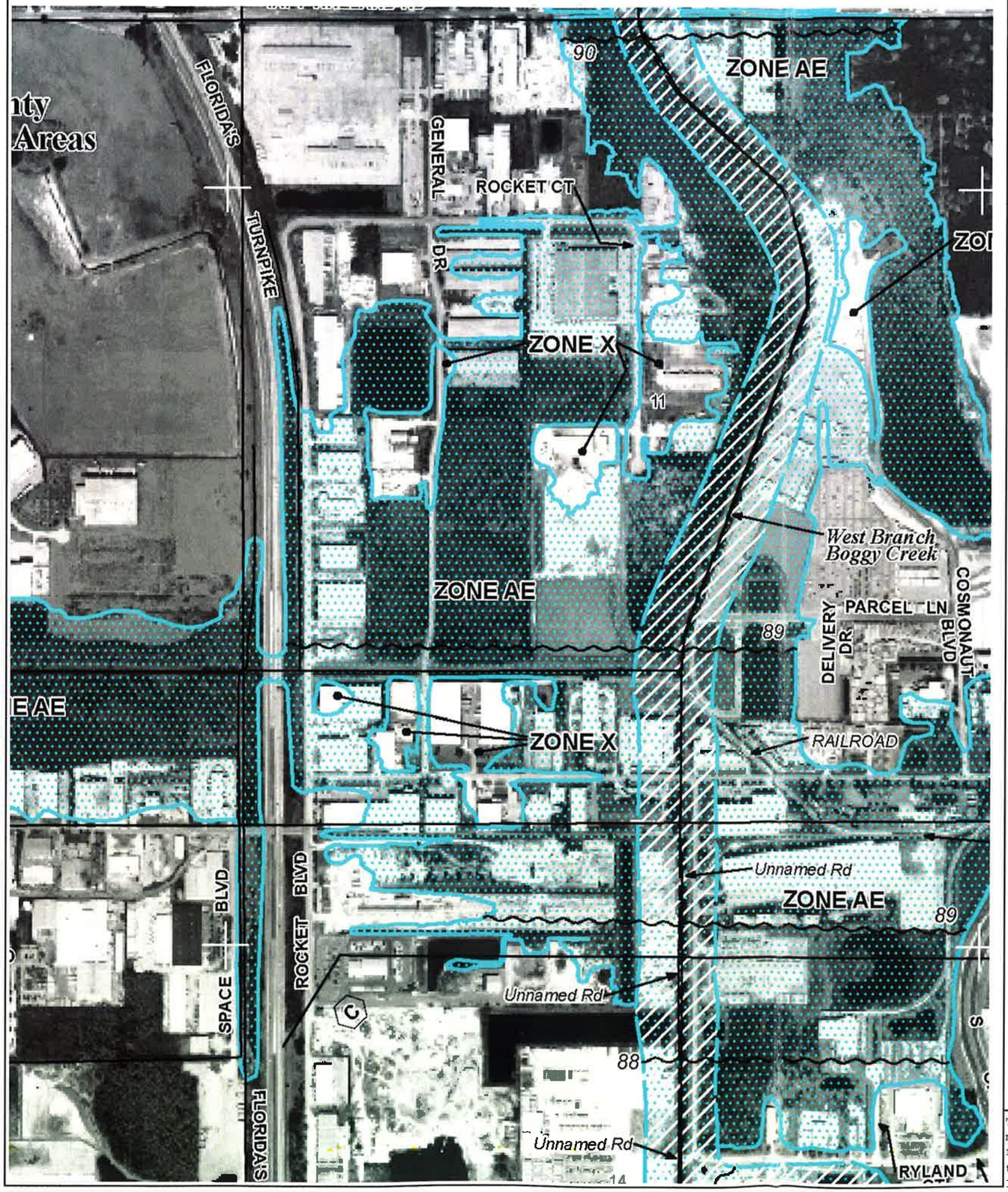
LAKE JESSAMINE, FLA.
N2822.5—W8122.5/7.5

1953
PHOTOREVISED 1980
DMA 4740 IV NW—SERIES V847

# FIGURE I B 3

Triumvirate Environmental

| 10100 ROCKET BOULEVARD | |
|---|---|
| SCALE: 1:24000 | DATE: 3-29-95 |
| 1 MILE RADIUS TOPOGRAPHIC MAP | |




e if flood insurance is available in this community, contact your insurance
Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 500 1,000 1,500 2,000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0420F

# FIRM

## FLOOD INSURANCE RATE MAP

## ORANGE COUNTY, FLORIDA

## AND INCORPORATED AREAS

**PANEL 420 OF 750**

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---|---|---|---|
| ORANGE COUNTY | 120179 | 0420 | F |

Figure I.B.4

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**
**12095C0420F**

**MAP REVISED**
**SEPTEMBER 25, 2009**

**Federal Emergency Management Agency**

This is an official copy of a portion of the above referenced flood map. It was extracted using FIRMette - Desktop version 3.0. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. Further information about National Flood Insurance Program flood hazard maps is available at http://www.msc.fema.gov/.

## NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

**Coastal Base Flood Elevations** shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was State Plane Florida East FIPS Zone 0901. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/, or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3191

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242** or visit its website at http://www.ngs.noaa.gov/.

**Base map** information shown on this FIRM was provided in digital format by Orange County, Florida.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

**Corporate limits** shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

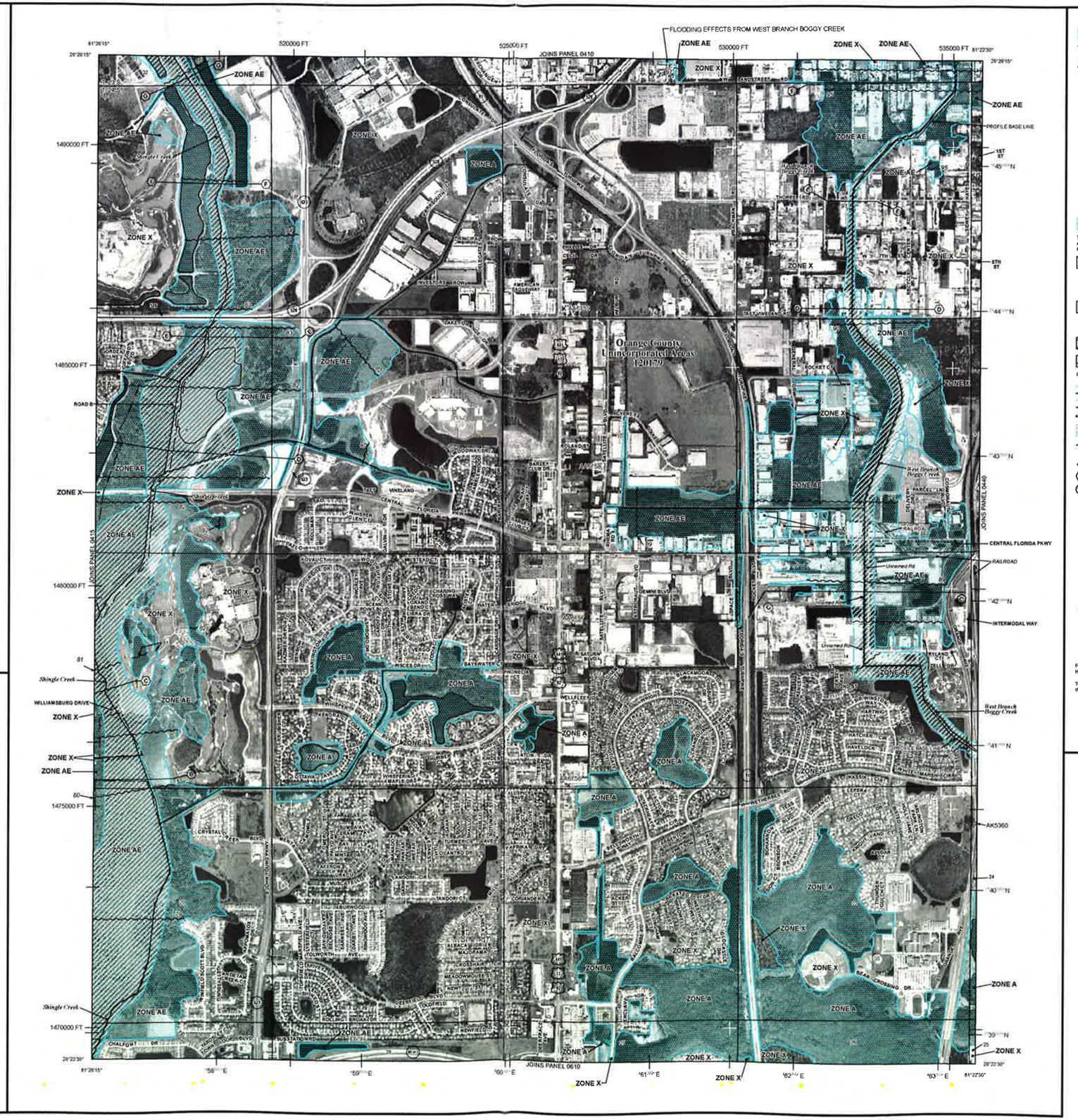
Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip/.

**NGVD29 to NAVD88 Vertical Datum Conversion Table (feet)**

| Watershed Name | Minimum Conversion | Maximum Conversion | Average Conversion | Maximum Offset |
|---|---|---|---|---|
| Big Econlockhatchee River | -1.03 | -1.15 | -1.09 | 0.06 |
| Boggy Creek | -0.91 | -1.01 | -0.96 | 0.05 |
| Cypress Creek | -0.87 | -0.91 | -0.89 | 0.02 |
| Howell Branch | -0.96 | -1.05 | -0.98 | 0.07 |
| Lake Apopka | -0.87 | -0.87 | -0.91 | 0.06 |
| Lake Hart | -0.97 | -1.07 | -1.02 | 0.05 |
| Little Econlockhatchee River | -0.92 | -1.07 | -1.01 | 0.09 |
| Little Wekiva River | -0.91 | -1.02 | -0.95 | 0.07 |
| Reedy Creek | -0.86 | -0.89 | -0.88 | 0.03 |
| Shingle Creek | -0.98 | -0.95 | -0.91 | 0.04 |
| St. Johns River | -1.06 | -1.33 | -1.19 | 0.14 |
| Wekiva River | -0.86 | -1.01 | -0.94 | 0.07 |




## LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A — No Base Flood Elevations determined.

ZONE AE — Base Flood Elevations determined.

ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR — Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 — Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V — Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X — Areas determined to be outside the 0.2% annual chance floodplain

ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary

0.2% annual chance floodplain boundary

Floodway boundary

Zone D boundary

CBRS and OPA boundary

Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

513 (EL 987) — Base Flood Elevation line and value; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

A — A — Cross section line

23 — 23 — Transect line

97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere

1000-meter Universal Transverse Mercator grid ticks, zone 17

6000000 FT — 5000-foot grid values: Florida State Plane coordinate system, East Zone (FIPSZONE = 901), Transverse Mercator projection

DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)

M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
DECEMBER 6, 2000

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
SEPTEMBER 25, 2009 - to update corporate limits, to change Base Flood Elevations, to add Base Flood Elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to delete Special Flood Hazard Areas, to update map format, to add roads and road names, to incorporate previously issued Letters of Map Revision, to reflect updated topographic information, and to incorporate previously issued Letters of Map Amendment

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 500 1,000 1,500 2,000 FEET
250 0 250 500 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0420F

# FIRM

## FLOOD INSURANCE RATE MAP

## ORANGE COUNTY, FLORIDA AND INCORPORATED AREAS

PANEL 420 OF 750

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---|---|---|---|
| ORANGE COUNTY | 120179 | 0420 | F |

**Figure 1.B.5**

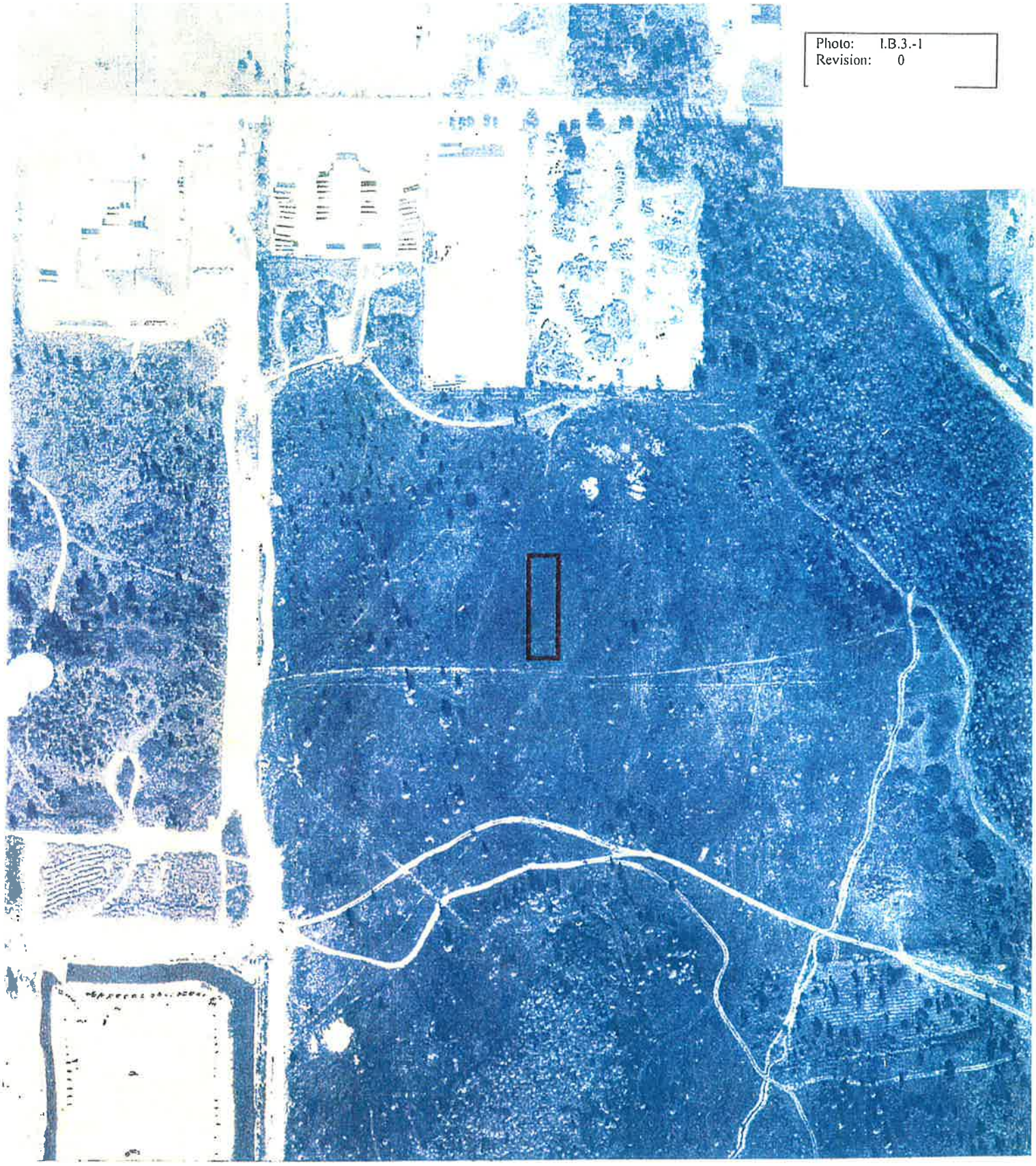
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
12095C0420F

MAP REVISED
SEPTEMBER 25, 2009

Federal Emergency Management Agency

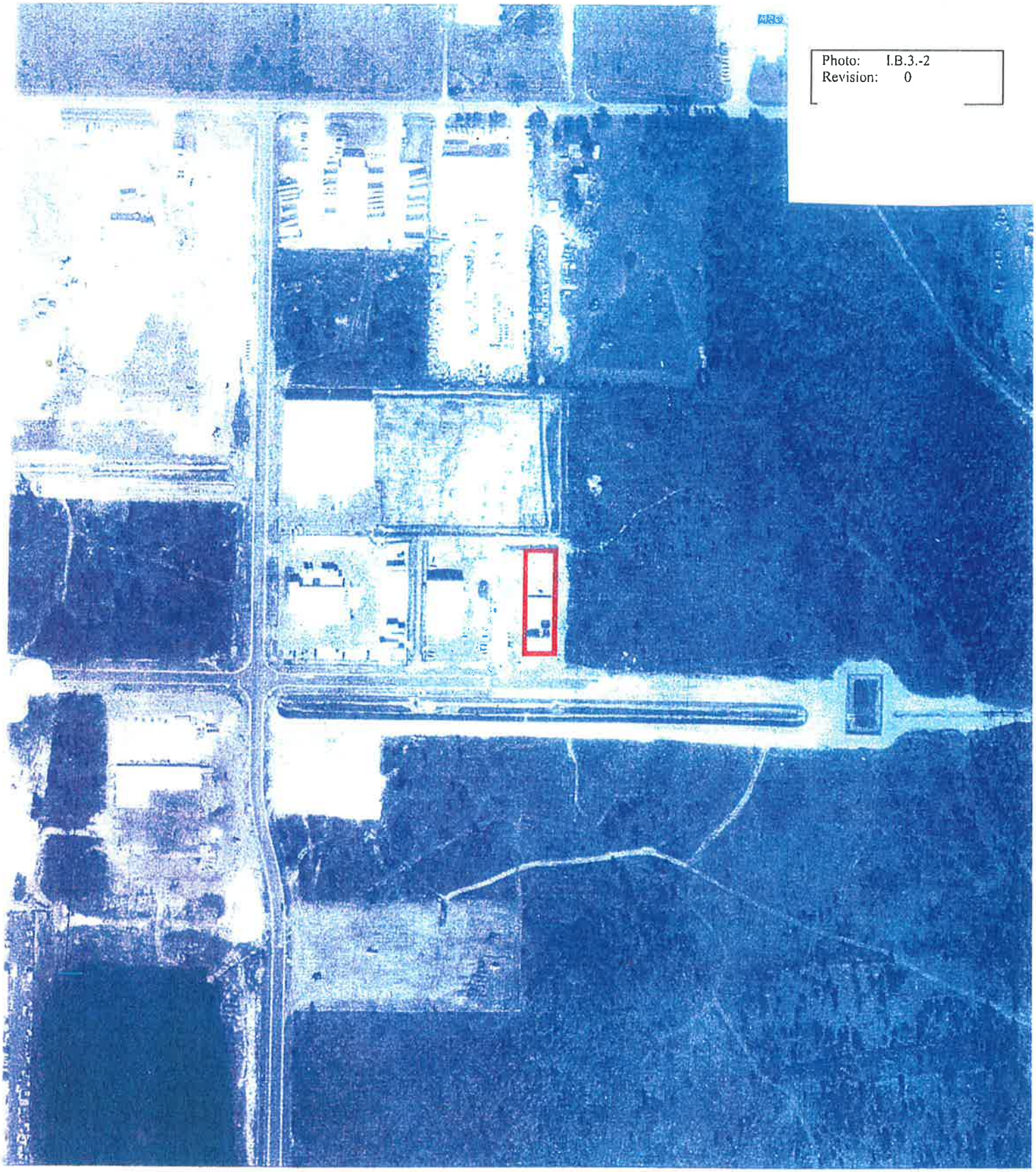
Photo: I.B.3.-1
Revision: 0



| SCALE / | 1"=300' | SECTION | TWP. | RANGE | SHEET NO. | MAP |
|---|---|---|---|---|---|---|
| PHOTO DATE | JAN. 81 | 11 | 24 S | 29 E | 442 | |
| PHOTO JOB NO. | PD-2693 | | | | | |

N
W E
S

Photo: I.B.3.-2
Revision: 0



| SCALE / | 1"=300' | SECTION | TWP. | RANGE | SHEET NO. | MAP |
|---|---|---|---|---|---|---|
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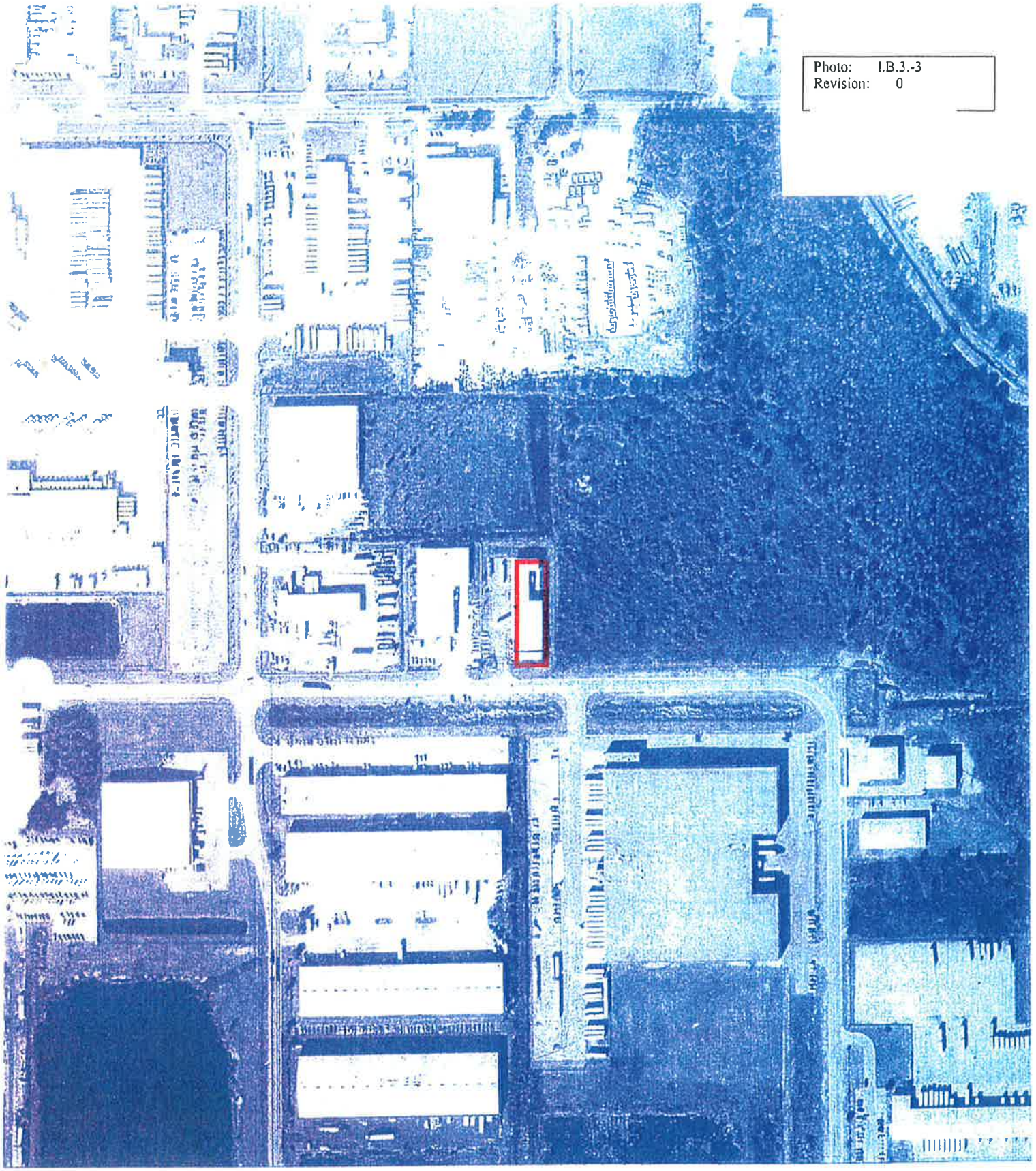
| PHOTO JOB NO. | PD-3118 | | | | | |

N
W E
S

Photo: I.B.3.-3
Revision: 0



| SCALE / | 1"=300' | SECTION | TWP. | RANGE | SHEET NO. | MAP |
|---|---|---|---|---|---|---|
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| PHOTO JOB NO. | PD-4223 | | | | | |

N
W E
S

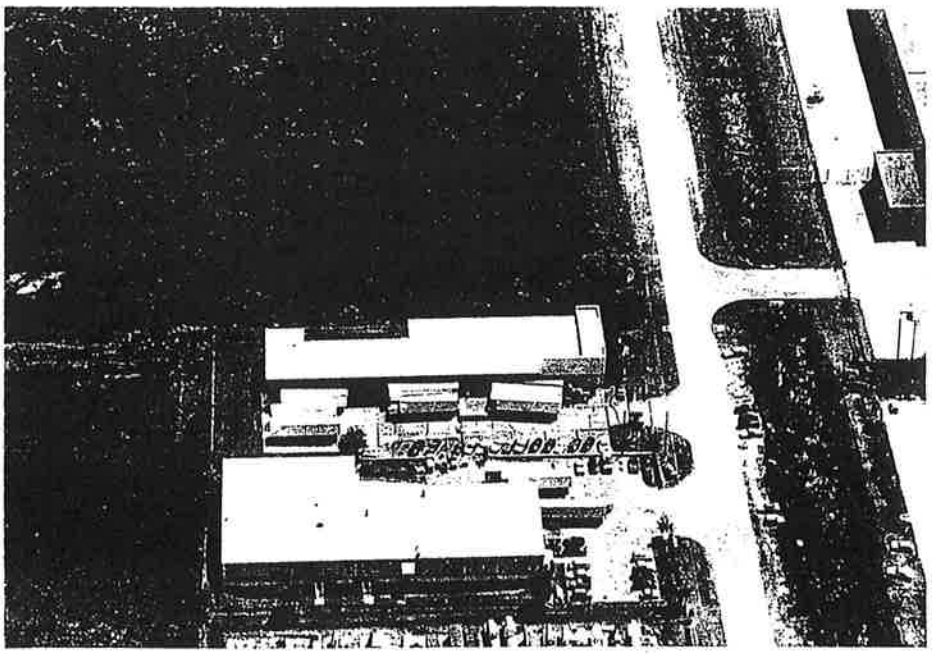


PHOTO I.B. 3-4. FACILITY AERIAL VIEW;
TAKEN FROM THE WEST

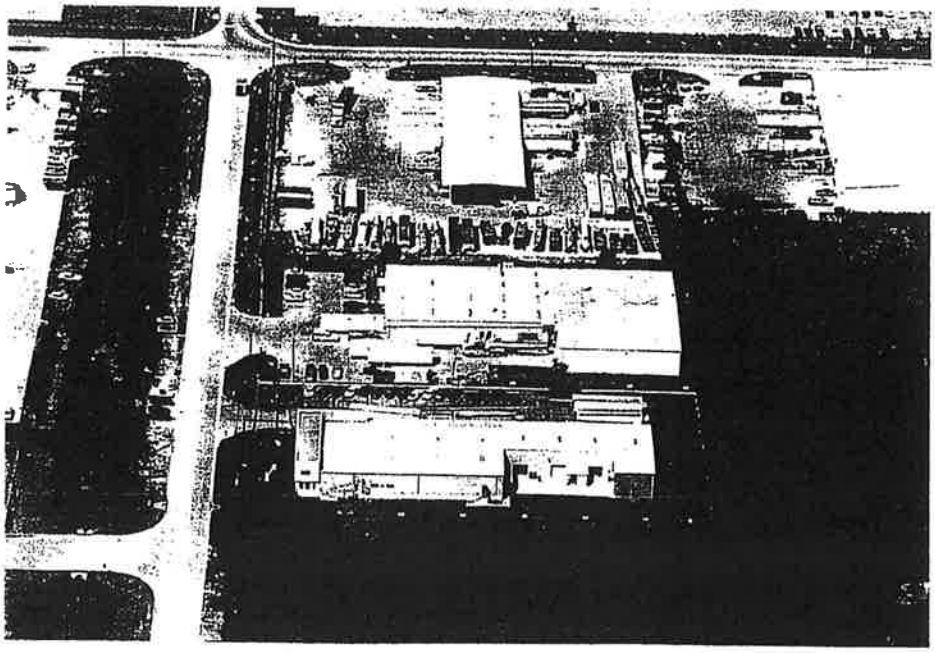


PHOTO I.B. 3-5. FACILITY AERIAL VIEW;
TAKEN FROM THE EAST

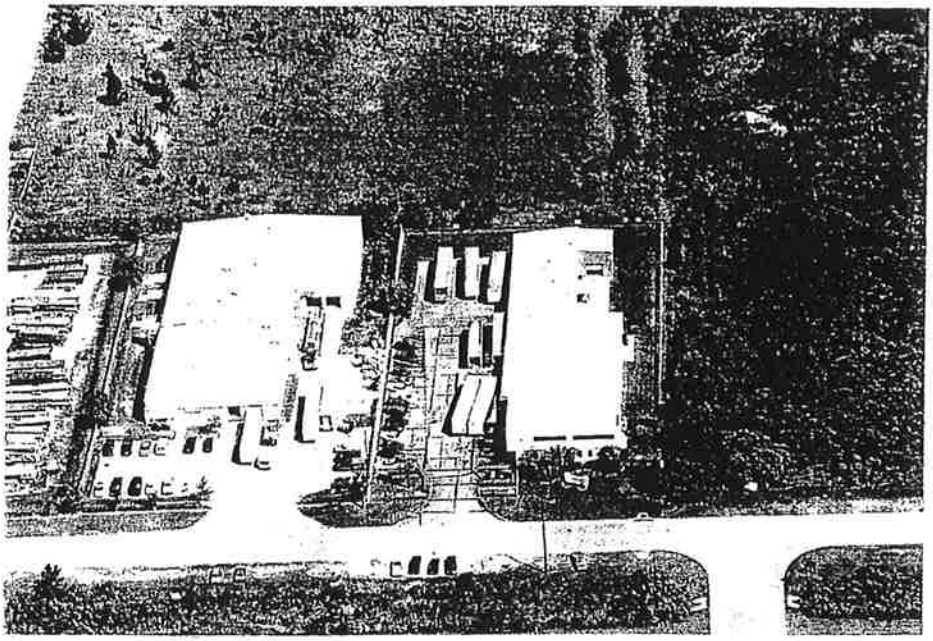


PHOTO I.B. 3-6. FACILITY AERIAL VIEW;
TAKEN FROM THE SOUTH

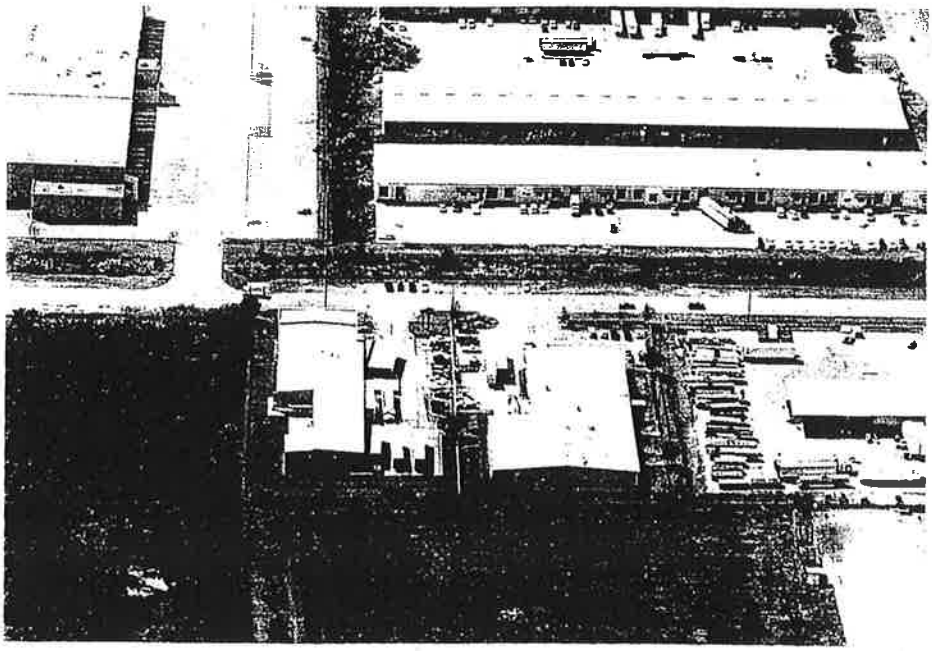


PHOTO I.B. 3-7. FACILITY AERIAL VIEW;
TAKEN FROM THE NORTH

Photo I.B. 3-8 Truck Entrance. View from Southwest.

Photo I.B. 3-9 Office Entrance. View from East.

Photo I.B. 3-10. Loading Dock. View from West.

Photo I.B. 3-11. Consolidation and Stabilization Building. View From Northwest

Photo I.B. 3-12. Stabilization and Consolidation Building. View from East.

Photo I.B. 3-13. Stabilization and Consolidation Area. View from North

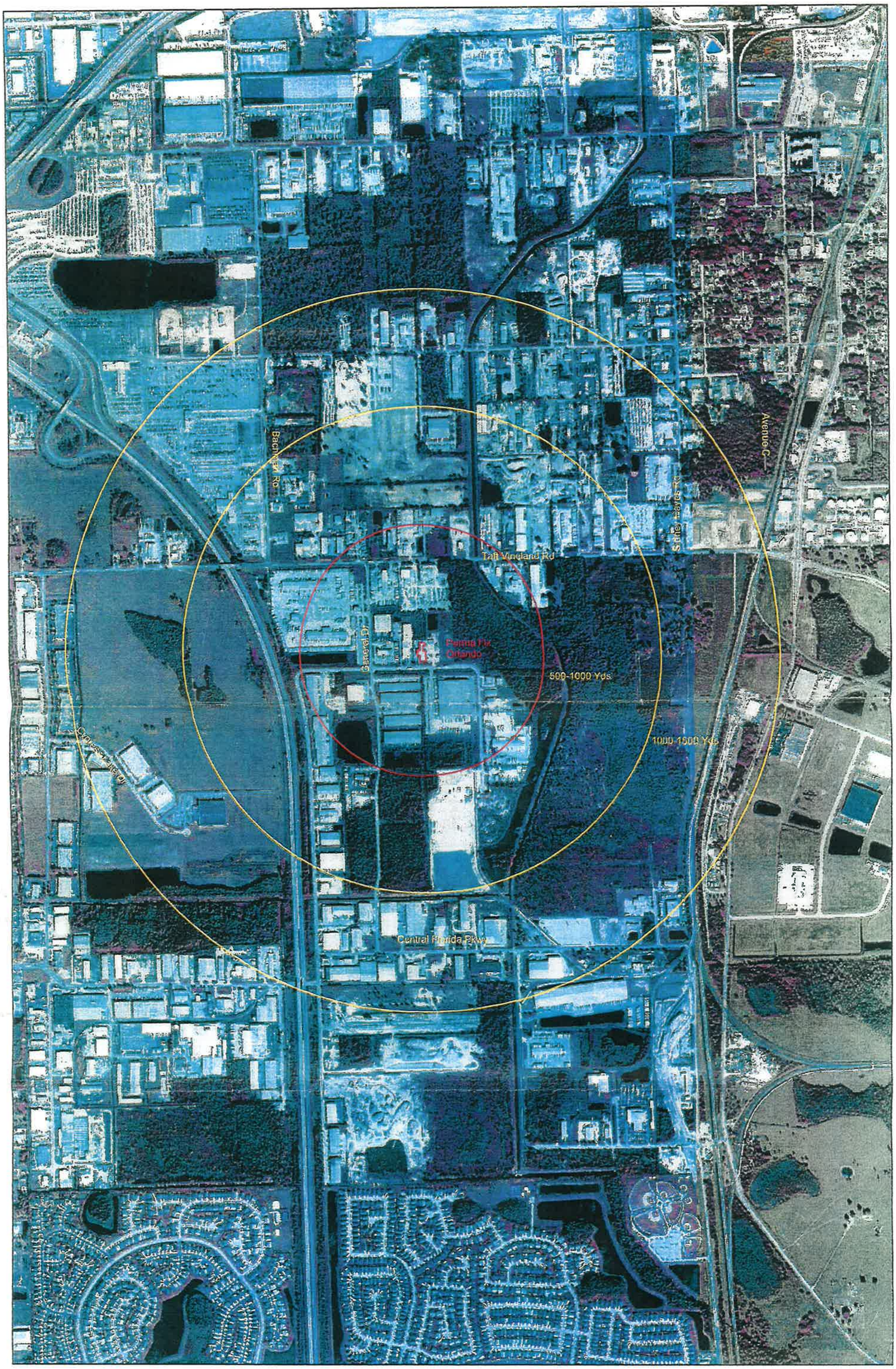
Photo 1.B 3-14 Container Storage Unit. View from Northeast

Photo I.B 3-15 Loading Dock and 10-Day Transfer Area. View From Southeast

Photo I. B. 3-16. Container Storage Unit. Northwest Area. View from South

Photo I.B. 3-17. Container Storage Area. South Area. View from North.

Photo I.B. 3-18. Container Storage Area. East Area. View from Southwest.

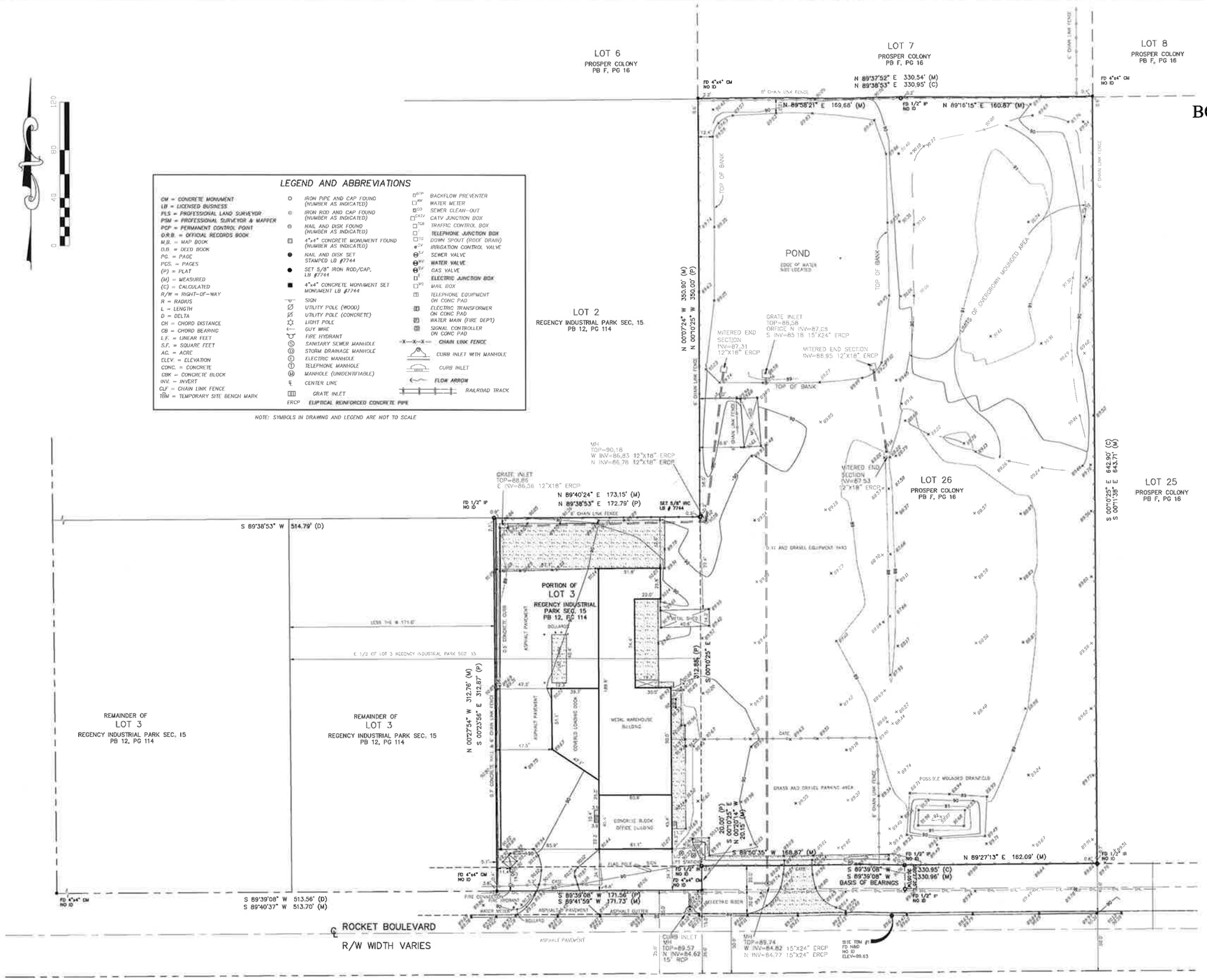



Triumvirate Environmental

# Orlando

Photo: I.B.3.-18
Revision: 0

# BOUNDARY AND TOPOGRAPHIC SURVEY




## LEGEND AND ABBREVIATIONS

CM = CONCRETE MONUMENT
LB = LICENSED BUSINESS
PLS = PROFESSIONAL LAND SURVEYOR
PSM = PROFESSIONAL SURVEYOR & MAPPER
PCP = PERMANENT CONTROL POINT
O.R.B. = OFFICIAL RECORDS BOOK
M.B. = MAP BOOK
D.B. = DEED BOOK
PG. = PAGE
PGS. = PAGES
(P) = PLAT
(M) = MEASURED
(C) = CALCULATED
R/W = RIGHT-OF-WAY
R = RADIUS
L = LENGTH
D = DELTA
CH = CHORD DISTANCE
CB = CHORD BEARING
L.F. = LINEAR FEET
S.F. = SQUARE FEET
AC. = ACRE
ELEV. = ELEVATION
CONC. = CONCRETE
CBK = CONCRETE BLOCK
INV. = INVERT
CLF = CHAIN LINK FENCE
TBM = TEMPORARY SITE BENCH MARK

IRON PIPE AND CAP FOUND (NUMBER AS INDICATED)
IRON ROD AND CAP FOUND (NUMBER AS INDICATED)
NAIL AND DISK FOUND (NUMBER AS INDICATED)
4"x4" CONCRETE MONUMENT FOUND (NUMBER AS INDICATED)
NAIL AND DISK SET STAMPED LB #7744
SET 5/8" IRON ROD/CAP, LB #7744
4"x4" CONCRETE MONUMENT SET MONUMENT LB #7744
SIGN
UTILITY POLE (WOOD)
UTILITY POLE (CONCRETE)
LIGHT POLE
GUY WIRE
FIRE HYDRANT
SANITARY SEWER MANHOLE
STORM DRAINAGE MANHOLE
ELECTRIC MANHOLE
TELEPHONE MANHOLE
MANHOLE (UNIDENTIFIABLE)
CENTER LINE
GRATE INLET
ERCP ELIPTICAL REINFORCED CONCRETE PIPE

BACKFLOW PREVENTER
WATER METER
SEWER CLEAN-OUT
CATV JUNCTION BOX
TRAFFIC CONTROL BOX
TELEPHONE JUNCTION BOX
DOWN SPOUT (ROOF DRAIN)
IRRIGATION CONTROL VALVE
SEWER VALVE
WATER VALVE
GAS VALVE
ELECTRIC JUNCTION BOX
MAIL BOX
TELEPHONE EQUIPMENT ON CONC PAD
ELECTRIC TRANSFORMER ON CONC PAD
WATER MAIN (FIRE DEPT)
SIGNAL CONTROLLER ON CONC PAD
CHAIN LINK FENCE
CURB INLET WITH MANHOLE
CURB INLET
FLOW ARROW
RAILROAD TRACK

NOTE: SYMBOLS IN DRAWING AND LEGEND ARE NOT TO SCALE

DESCRIPTION PER OFFICIAL RECORDS BOOK 10283, PAGE 4275
Parcel 1:

Lot 26, Plat of Prosper Colony, Section 11, Township 24 South, Range 29 East, (subdivision 7268), according to the plat thereof, as recorded in Plat Book "F", page 16, of the Public Records of Orange County, Florida.

Parcel 2:

The East 1/2 of Lot 3, Regency Industrial Park, Section 15; less and except the West 171.00 feet thereof, according to the plat thereof, as recorded in Plat Book 12, Page 114, of the Public Records of Orange County, Florida.

Surveyor Notes:

- Not valid without the signature and the original raised seal of a Florida licensed Surveyor and Mapper.
- This survey was prepared without the benefit of a Abstract or current Title Policy. There may exist matters of record affecting the subject property recorded in the Public Records unknown and not provided to this firm.
- Our research of the property is not an "abstract of title", nor is it a "title opinion" and does not constitute a warranty or guaranty of the property from any claims or interests . We show only the information we found within the Public Records. There may exist easements, liens or matters recorded in the Public Records not found, or provided to the Surveyor which may affect the subject property.
- Adjacent properties have not been abstracted for title matters and are subject to easements and matters of record.
- Bearings are based on the North R/W line of Rocket Boulevard as being assumed as S 89°39'08" W per Plat Book 12, Page 114.
- This is not an Alta/Acsm Land Title Survey.
- Elevations based on Orange County bench mark #L1454-026 (88 Datum) being a 3 ¼" aluminum Orange County Control disk in a curb inlet at the Southwest corner of General Blvd and Rocket Blvd. Elevation = 90.59
- No jurisdictional wetlands or environmental areas have been located as a part of this survey. There may exist wetlands or environmental areas and the Surveyor makes no determination of such.
- This Survey does not determine the "ordinary high water line" or the "mean high water line" The state of Florida may own or claim ownership of those lands lying below the "ordinary high water line" or "mean high water line" or within any wetland limits.
- The intended scale for the map/drawing shown hereon is intended to be displayed at a scale of 1"=40' on 24"x36" sized sheet.
- Total area surveyed is 6.127 acres or 266,882.82 square feet more or less.
- Based on the federal emergency management agency flood insurance rate map, the structure shown hereon does not lie within the 100 year flood hazard area. This structure lies in unshaded zone " X " in community panel No. 120179 0420 F effective date: September 25, 2009 (subject to change).

**Surveyors Certification:**

I hereby certify that this survey shown hereon was made in accordance with the "Minimum Technical Standards" for land surveying in the State of Florida; Chapter 5J-17-.050 to 0.052 Florida Administrative Code, pursuant to Chapters 177 and 472, Florida Statutes and unless it bears the signature and the original raised seal of a Florida Licensed Surveyor and Mapper, this drawing, sketch, plat or map is for informational purposes only and is not valid.

Printed Name: Ralph A. Nieto P.S. M. No. 6025 Print Date


Nieto-Whittaker Surveying LLC
502 W. Sprngtree Way, Lake Mary, Fl. 32746
PH: (407) 484-0103 Fax: (407) 302-6776
LB No. 7744

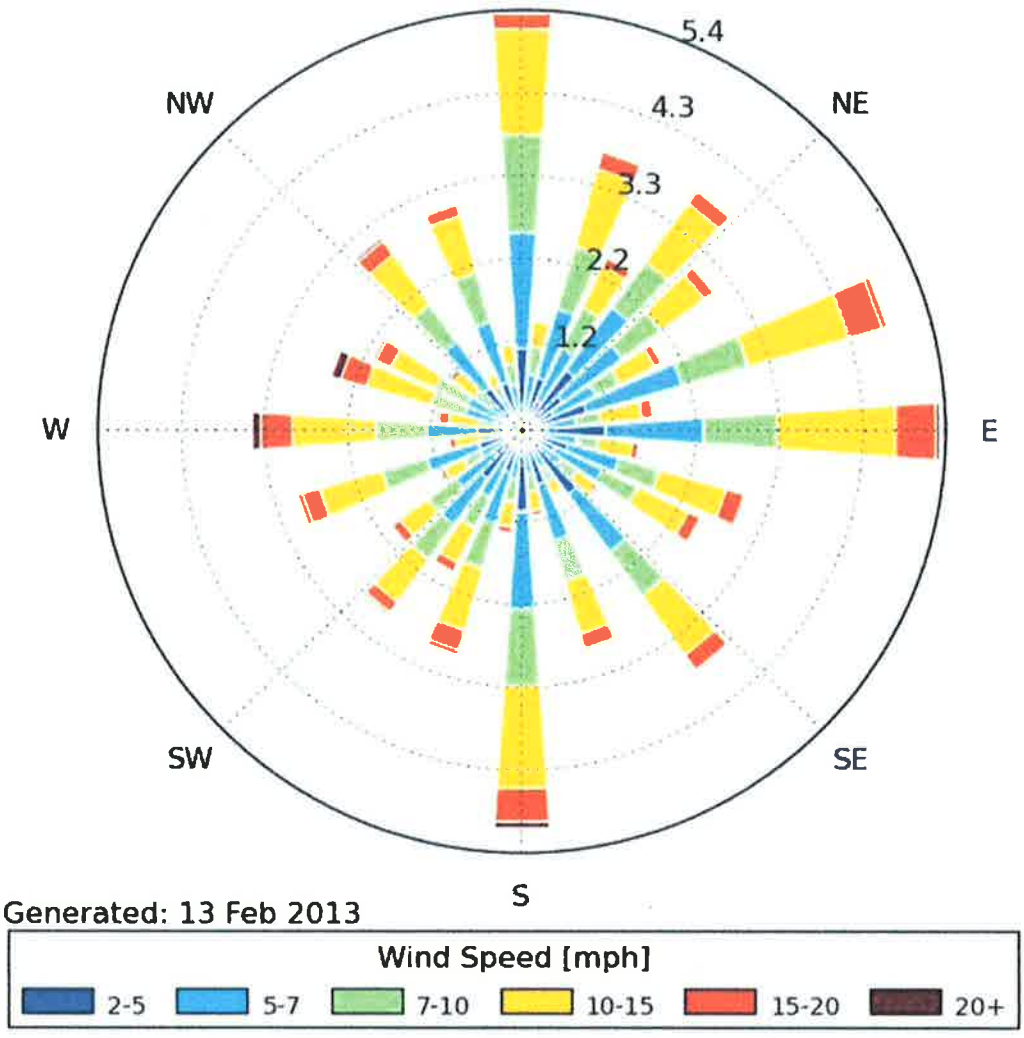

DATE: 6/14/2013
ORDER NO.: NW13-197
SHEET 1 OF 1
FIELD BY: DLW
DRAWN BY: RN
SCALE: 1"=40'

REVISIONS
NO. DATE BY

PREPARED FOR:

# FIGURE II.A.2
## TRIUMVIRATE ENVIRONMENTAL
10100 ROCKET BOULEVARD, ORLAND, FLORIDA

| Wind Rose Plot: All Year<br><br>[ORL] – Orlando/Herndon | Display: Wind Speed<br><br>Direction (blowing from) |
|---|---|




| Comments:<br><br>FIGURE II A 3<br>Revision 0<br>Date: June 5th 2013 | Data Period:<br><br>Dec 31 1947 –Feb 12 2013 | Calm Winds:<br><br>9.6% | Average Wind Speed:<br><br>8.0 MPH |
|---|---|---|---|
| Total Count:<br><br>490942 | | | Date:<br><br>6/5/2013 |

Print Form

II.A.4

DEP Form # 62-730.900(4)(k)
Form Title HW Certificate of Liability Insurance
Effective Date January 8, 1998
DEP Application No.

# STATE OF FLORIDA
# HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE
## (Primary Policy)

1. Chartis Specialty Insurance Company (Name of Insurer), (the "Insurer"),

of 175 Water Street, 12th Floor New York, NY (Address of Insurer)

**hereby certifies that it has issued liability insurance covering bodily injury and property damage to** Triumvirate Environmental (Florida), Inc. (Name of Insured), **(the "Insured"), of**

3701 SW 47th Avenue, Suite 109, Davie, FL 33314 (Address of Insured)

**in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147, as adopted by reference in Section 62-730.180, Florida Administrative Code (F.A.C.). The coverage applies at**

| EPA/DEP I.D. No. | Name | Address |
|---|---|---|
| FLD 980559728 | Triumvirate Environmental | 10100 Rocket Boulevard |
| | (Florida), Inc. | Orlando, FL 32824 |
| | | |

**for:**

X **sudden accidental occurrences**

_____ **nonsudden accidental occurrences**

_____ **sudden and nonsudden accidental occurrences**

**If coverage is for multiple facilities and the coverage is different for different facilities, indicate which facility(ies) are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both.**

**The limits of liability are $** 1,000,000 **each occurrence and $** 2,000,000 **annual aggregate, exclusive of legal defense costs. The coverage is provided under policy number** PLS1672257**, issued on** 10/14/2011 (Date)**. The effective date of said policy is** 12/31/2010 (Date).

2. **The insurer further certifies the following with respect to the insurance described in Paragraph 1:**

   (a) **Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligations under the policy.**

   (b) **The insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f), as adopted by reference in Section 62-730.180, F.A.C.**

   (c) **Whenever requested by the Secretary of the Florida Department of Environmental Protection (FDEP), the insurer agrees to furnish to the Secretary a signed duplicate original of the policy and all endorsements.**

(d) Cancellation of the insurance, whether by the insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Secretary of the FDEP.

(e) Any other termination of the insurance (e.g., expiration, non-renewal) will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Secretary of the FDEP.

I hereby certify that the wording of this instrument is substantially identical to the wording specified in 40 CFR 264.151(j), as adopted by reference in Section 62-730.180, F.A.C., as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States including Florida.

Signature of Authorized Representative of Insurer

Karl Touet

Type name

Regional Manager - Environmental

Title

**Authorized Representative of**

Chartis Specialty Insurance Company

Name of Insurer

99 High Street, 30th Floor Boston, MA 02110

Address of Representative

DEP Form # 62-730.900(4)(f)
Form Title HW Facility Standby Trust Fund
Effective Date January 5, 1995
DEP Application No.

# STATE OF FLORIDA
# HAZARDOUS WASTE FACILITY STANDBY TRUST FUND AGREEMENT
# TO DEMONSTRATE FINANCIAL ASSURANCE
# FOR

☑ Closure ☐ Postclosure ☐ Corrective Action

[Check Appropriate Box(es)]

**TRUST AGREEMENT, the "Agreement", entered into as of** September 2, 2011 (Date)

**by and between** Triumvirate Environmental (Florida), Inc. (Name of the Owner or Operator),

**a** Florida (Name of state) corporation (Insert "corporation," "partnership," "association," or "proprietorship"), **the "Grantor,"**

**and** Webster Bank, NA, 145 Bank Street, Waterbury, CT 06702

(Name and Address of Corporate Trustee)

a national bank (Insert "incorporated in the state of_____" or "a national bank"), **the "Trustee."**

**WHEREAS, the Florida Department of Environmental Protection, "FDEP", an agency of the state of Florida, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for "Required Action" of the facility,**

**WHEREAS, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,**

**WHEREAS, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,**

**NOW, THEREFORE, the Grantor and the Trustee agree as follows:**

**Section 1. Definitions. As used in this Agreement:**

**(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.**

**(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.**

**(c) The term "FDEP" means the Florida Department of Environmental Protection, an Agency of the state of Florida or any successor thereof.**

**(d) The term "Required Action," as used in this document means closure, post-closure care, or corrective action, or any combination of these, which is checked above.**

**Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A**

On Schedule A, for each facility list the EPA/DEP Identification Number, name, address, and the current "Required Action" cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement.

**Section 3. Standby Trust. This Trust shall remain dormant until funded with the proceeds from the** Surety Bond **as listed on Schedule B. The trustee shall have no duties or responsibilities beyond safekeeping this Document. Upon funding this Trust shall become active and be administered pursuant to the terms of this instrument.**

(Insert "Letter of Credit" or "Surety Bond")

Section 4. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of the FDEP. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the FDEP.

Section 5. Payment for Closure, Post-Closure Care, and Corrective Action. The Trustee shall make payments from the Fund as the FDEP Secretary shall direct, in writing, to provide for the payment of the costs of "Required Action" of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the FDEP Secretary from the Fund for "Required Action" expenditures in such amounts as the FDEP Secretary shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the FDEP Secretary specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 6. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee and shall consist solely of proceeds from the Surety Bond.
Insert "Letter of Credit" or "Surety Bond"

Section 7. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(a) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the federal or a state government; and

(c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

(d) The Trustee shall invest the fund as a single unit adding income to principal on a regular basis. All payments out of the fund shall be out of the principal balance.

Section 8. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

writing sent to the Grantor, FDEP Secretary, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 10.

Section 15. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the FDEP Secretary to the Trustee shall be in writing, signed by the FDEP Secretary, or the designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the FDEP hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the FDEP, except as provided for herein.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the FDEP Secretary, or by the Trustee and the FDEP Secretary if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the FDEP Secretary, or by the Trustee and the FDEP Secretary, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the FDEP Secretary issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the state of Florida.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is substantially identical to the wording specified in 40 CFR 264.151(a)(1), as adopted by reference in Section 62-730.180, Florida Administrative Code, as such regulations were constituted on the date first above written.

John F. McQuillan, Jr.
Signature of Grantor

John F. McQuillan, Jr./President and Sole Director
Title

Margaret T. Marcus
Signature of Witness or Notary

Seal

MARGARET T. MARCUS
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
December 29, 2017

Signature of Trustee

Robert LeBreux, Senior Vice President
Title

Signature of Witness or Notary expires 3/31/2016

Seal

## CERTIFICATION OF ACKNOWLEDGMENT FOR HAZARDOUS WASTE MANAGEMENT FACILITY TRUST FUND AGREEMENT

State of Massachusetts

BELOW ARE EXAMPLES OF THE FOUR REQUIRED ATTACHMENTS THAT MUST ACCOMPANY A TRUST FUND AGREEMENT. THEY ARE ONLY EXAMPLES OF FORMATS ACCEPTABLE TO THE DEPARTMENT. THEREFORE, VARIATIONS CONTAINING THE REQUIRED INFORMATION ARE ALSO ACCEPTABLE.

County of Middlesex

The foregoing instrument was acknowledged before me this 14th day of Sept, 20 11, by John F. McQuillan, Jr. (Name of person) as President and Sole Director (Type of authority, e.g., officer, trustee, etc.) for Triumvirate Environmental (Florida), Inc. (Name of party on behalf of whom instrument was executed), the corporation described in and which executed the above instrument.

Signature of Notary Public

MARGARET T. MARCUS
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
December 29, 2017

Print, Type, or Stamp Commissioned Name of Notary Public

Personally Known to me or Produced Identification _____

Type of Identification Produced _____

---

## SCHEDULE A

This Agreement demonstrates financial assurance for the following cost estimate(s) for the following facility(ies):

Indicate "Required Action" for each facility

EPA/DEP I.D. No.: FLD 980559728

NAME: Triumvirate Environmental (Florida), Inc.

ADDRESS: 10100 Rocket Blvd
Orlando, FL 32824

| COST ESTIMATES: | |
|---|---|
| Closure | $156,585.00 |
| Postclosure | $ |
| Corrective Action | $ |
| Total | $156,585.00 |

Section 9. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or a state government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 10. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 11. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Secretary of the FDEP a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the FDEP Secretary shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 12. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 13. Trustee Compensation. The Trustee is authorized to charge against the principal of the Trust its published Trust fee schedule in effect at the time services are rendered.

Section 14. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor Trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a

## SCHEDULE B

**The Fund is established initially as consisting of the following property:**

Lexon Insurance Company financial guarantee bond number 1024295 effective September 2, 2011 for $156,585.00

List the property used to establish the trust fund (e.g. [check #_____ in the amount of $_____].)

## EXHIBIT A

**All orders, requests and instructions by the grantor to the Trustee shall be in writing and signed by one of the following persons:**

John F. McQuillan, Jr.
Name

President and Sole Director
Title

Douglas Youngen
Name

Chief Operating Officer and Assistant Secretary
Title

Name

Title

POWER OF ATTORNEY

# Lexon Insurance Company

LX - 88865

KNOW ALL MEN BY THESE PRESENTS, that **LEXON INSURANCE COMPANY**, a Texas Corporation, with its principal office in Louisville, Kentucky, does hereby constitute and appoint: Robert E. Shaw, Nancy Castonguay, Heidi Rodzen, **********

Michael W. Harjula **********

its true and lawful Attorney(s)-In-Fact to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in nature of a bond.

This authority is made under and by the authority of a resolution which was passed by the Board of Directors of **LEXON INSURANCE COMPANY** on the 1st day of July, 2003 as follows:

Resolved, that the President of the Company is hereby authorized to appoint and empower any representative of the Company or other person or persons as Attorney-In-Fact to execute on behalf of the Company any bonds, undertakings, policies, contracts of indemnity or other writings obligatory in nature of a bond not to exceed $2,500,000.00, Two-million five hundred thousand dollars, which the Company might execute through its duly elected officers, and affix the seal of the Company thereto. Any said execution of such documents by an Attorney-In-Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company. Any Attorney-In-Fact, so appointed, may be removed for good cause and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the signature of the President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Vice President, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certificate so executed and sealed shall, with respect to any bond of undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS THEREOF, **LEXON INSURANCE COMPANY** has caused this instrument to be signed by its President, and its Corporate Seal to be affixed this 21st day of September, 2009.

LEXON INSURANCE COMPANY
A TEXAS INSURANCE COMPANY

**LEXON INSURANCE COMPANY**

BY _____
David E. Campbell
President

## ACKNOWLEDGEMENT

On this 21st day of September, 2009, before me, personally came David E. Campbell to me known, who being duly sworn, did depose and say that he is the President of **LEXON INSURANCE COMPANY**, the corporation described in and which executed the above instrument; that he executed said instrument on behalf of the corporation by authority of his office under the By-laws of said corporation.

"OFFICIAL SEAL"
MAUREEN K. AYE
Notary Public, State of Illinois
My Commission Expires 09/21/13

_____
Maureen K. Aye
Notary Public

## CERTIFICATE

I, the undersigned, Secretary of **LEXON INSURANCE COMPANY**, A Texas Insurance Company, DO HEREBY CERTIFY that the original Power of Attorney of which the foregoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and Sealed at Woodridge, Illinois this 2nd Day of September, 20 11 .

LEXON INSURANCE COMPANY
A TEXAS INSURANCE COMPANY

_____
Donald D. Buchanan
Secretary

**"WARNING: Any person who knowingly and with intent to defraud any insurance company or other person, files an application for insurance or statement of claim containing any materially false information, or conceals for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties."**

**PRINCIPAL**

Signature

John F. McQuillan, Jr. , President & Sole Director

Type Name and Title

**CORPORATE SURETY(IES)**

For each co-surety provide the following

Lexon Insurance Company

Name and address

10002 Shelbyville Rd, Suite 100, Louisville, KY 40223

Texas

State of Incorporation

Liability Limit $ 3,936,000.

Signature

Michael W. Harjula, Attorney-In-Fact

Type Name and Title

Corporate Seal

Corporate Seal

**Bond premium: $** 4,698.00

Print Form

DEP Form # 62-730.900(4)(h)
Form Title HW Facility Financial Guarantee Bond
Effective Date January 5, 1995
DEP Application No.

# STATE OF FLORIDA
# HAZARDOUS WASTE FACILITY FINANCIAL GUARANTEE BOND TO DEMONSTRATE FINANCIAL ASSURANCE
## FOR

☑ Closure ☐ Post-Closure ☐ Corrective Action
[Check Appropriate Box(es)]

**The term "Required Action," as used in this document means closure, post-closure care, or corrective action, or any combination of these, which is checked above.**

**Date bond executed:** 9-6-2011

**Effective date:** 9-2-2011

**Principal:** Triumvirate Environmental (Florida), Inc.
3701 SW 47th Avenue, Suite 109, Davie, FL 33314
Legal Name and Business Address of Owner or Operator

**Type of Organization:** ☐ Individual ☐ Joint Venture ☐ Partnership ☑ Corporation
Check One

**State of Incorporation:** Massachusetts

**Surety(ies):** Lexon Insurance Company
10002 Shelbyville Rd, Suite 100
Louisville, KY 40223
Name(s) and business address(es)

List for each facility: EPA/DEP Identification Number, name, and address. Indicate "Required Action" amounts for each facility separately.

| EPA/DEP I.D. No. | Name | Address |
|---|---|---|
| FLD 980559728 | Triumvirate Environmental | 10100 Rocket Blvd |
| | (Florida), Inc. , Orange County | Orlando, FL 32824 |
| | | |

**Total penal sum of bond:** $156,585.00

**Surety's bond number:** 1024295

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the Florida Department of Environmental Protection (hereinafter called FDEP), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Resource Conservation and Recovery Act as amended (RCRA), to have a permit in order to own or operate each hazardous waste management facility identified above, and

Whereas said Principal is required to provide financial assurance for "Required Action" as a condition of the permit(s), and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after a final order to begin closure is issued by the Secretary of the FDEP or a U.S. district court or other court of competent jurisdiction,

Or, if the Principal shall provide alternate financial assurance, as specified in Subpart H of 40 CFR Parts 264 or 265, as adopted by reference in Section 62-730.180, Florida Administrative Code (F.A.C.), as applicable, and obtain the FDEP Secretary's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the FDEP Secretary from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by FDEP Secretary that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the FDEP Secretary.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the Secretary of the FDEP, however, cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the FDEP Secretary, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the Secretary of the FDEP.

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new "Required Action" amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the FDEP Secretary.

In Witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is substantially identical to the wording specified in 40 CFR 264.151(b), as adopted by reference in Section 62-730.180, F.A.C., as such regulations were constituted on the date this bond was executed except for the references to the FDEP Secretary and the F.A.C.

# RIDER

**TO BE ATTACHED TO AND FORM PART OF**

**Obligee Specific** NO. **1024295**
*(Bond Type)* *(Bond Number)*

**IN FAVOR OF** **FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**
*(Obligee)*

**ON BEHALF OF** **TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC.**
*(Principal)*

**EFFECTIVE** **September 2, 2011**
*(Original Effective Date)*

**IT IS AGREED THAT, in consideration of the original premium charged for this bond, and any additional premium that may be properly chargeable as a result of this rider.**

**The Surety,** LEXON INSURANCE COMPANY
**hereby gives its consent to change;**

Bond/Contract Amount

**(of) the attached bond FROM:** Old Bond Amount = $156,585.00

**TO:** New Bond Amount = $158,150.85

**REASON:** Increase by $1,565.85 per customer request for total of $158,150.85

**EFFECTIVE:** May 1, 2012

**PROVIDED, however that the attached bond shall be subject to all its agreements, limitations, and conditions except as herein expressly modified, and that the liability of the Surety under the attached bond and under the attached bond as changed by this rider shall not be cumulative.**

**SIGNED, AND SEALED this** 30th **day of** April, 2012.

TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC.
*Principal*

*Accepted By*

LEXON INSURANCE COMPANY
*Surety*

Heidi Rodzen, Attorney-In-Fact

**POWER OF ATTORNEY**

# Lexon Insurance Company

LX - 108251

KNOW ALL MEN BY THESE PRESENTS, that **LEXON INSURANCE COMPANY**, a Texas Corporation, with its principal office in Louisville, Kentucky, does hereby constitute and appoint: Robert E. Shaw, Nancy Castonguay, Heidi Rodzen, **********

Michael W. Harjula, Joline L. Binette **********

its true and lawful Attorney(s)-In-Fact to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in nature of a bond.

This authority is made under and by the authority of a resolution which was passed by the Board of Directors of **LEXON INSURANCE COMPANY** on the 1st day of July, 2003 as follows:

Resolved, that the President of the Company is hereby authorized to appoint and empower any representative of the Company or other person or persons as Attorney-In-Fact to execute on behalf of the Company any bonds, undertakings, policies, contracts of indemnity or other writings obligatory in nature of a bond not to exceed $2,500,000.00, Two-million five hundred thousand dollars, which the Company might execute through its duly elected officers, and affix the seal of the Company thereto. Any said execution of such documents by an Attorney-In-Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company. Any Attorney-In-Fact, so appointed, may be removed for good cause and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the signature of the President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Assistant Secretary, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certificate so executed and sealed shall, with respect to any bond of undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS THEREOF, **LEXON INSURANCE COMPANY** has caused this instrument to be signed by its President, and its Corporate Seal to be affixed this 21st day of September, 2009.

LEXON INSURANCE COMPANY
A TEXAS INSURANCE COMPANY

**LEXON INSURANCE COMPANY**

BY _____
David E. Campbell
President

## ACKNOWLEDGEMENT

On this 21st day of September, 2009, before me, personally came David E. Campbell to me known, who being duly sworn, did depose and say that he is the President of **LEXON INSURANCE COMPANY**, the corporation described in and which executed the above instrument; that he executed said instrument on behalf of the corporation by authority of his office under the By-laws of said corporation.

"OFFICIAL SEAL"
MAUREEN K. AYE
Notary Public, State of Illinois
My Commission Expires 09/21/13

_____
Maureen K. Aye
Notary Public

## CERTIFICATE

I, the undersigned, Assistant Secretary of **LEXON INSURANCE COMPANY**, A Texas Insurance Company, DO HEREBY CERTIFY that the original Power of Attorney of which the foregoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and Sealed at Woodridge, Illinois this 30th Day of April, 2012.

LEXON INSURANCE COMPANY
A TEXAS INSURANCE COMPANY

_____
Philip G. Lauer
Assistant Secretary

**"WARNING: Any person who knowingly and with intent to defraud any insurance company or other person, files an application for insurance or statement of claim containing any materially false information, or conceals for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties."**

TRIUENV-01 LFOWLE

ACORD

# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/27/2012

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
USI Insurance Services LLC
PO Box 406
Portland, ME 04112

CONTACT NAME:
PHONE (A/C, No, Ext): (800) 723-2877 FAX (A/C, No): (877) 775-0110
E-MAIL ADDRESS:

| INSURER(S) AFFORDING COVERAGE | NAIC # |
|---|---|
| INSURER A : CHARTIS SPECIALTY INSURANCE COMPANY | 26883 |
| INSURER B : New Hampshire Insurance Company | 23841 |
| INSURER C : | |
| INSURER D : | |
| INSURER E : | |
| INSURER F : | |

INSURED
Triumvirate Environmental (Florida), Inc.
3701 SW 47th Ave Suite 106
Davie, FL 33314

**COVERAGES** **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSR | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS | |
|---|---|---|---|---|---|---|---|---|
| A | GENERAL LIABILITY<br>X COMMERCIAL GENERAL LIABILITY<br>CLAIMS-MADE X OCCUR<br>GEN'L AGGREGATE LIMIT APPLIES PER:<br>POLICY PRO-JECT LOC | | | 14647099 | 12/31/2012 | 12/31/2013 | EACH OCCURRENCE<br>DAMAGE TO RENTED PREMISES (Ea occurrence)<br>MED EXP (Any one person)<br>PERSONAL & ADV INJURY<br>GENERAL AGGREGATE<br>PRODUCTS - COMP/OP AGG | $ 1,000,000<br>$ 1,000,000<br>$ 25,000<br>$ 1,000,000<br>$ 2,000,000<br>$ 2,000,000 |
| B | AUTOMOBILE LIABILITY<br>X ANY AUTO<br>ALL OWNED AUTOS<br>HIRED AUTOS<br>SCHEDULED AUTOS<br>NON-OWNED AUTOS | | | CA0939693 - AOS | 12/31/2012 | 12/31/2013 | COMBINED SINGLE LIMIT (Ea accident)<br>BODILY INJURY (Per person)<br>BODILY INJURY (Per accident)<br>PROPERTY DAMAGE (PER ACCIDENT) | $ 1,000,000<br>$<br>$<br>$ |
| A | UMBRELLA LIAB X OCCUR<br>X EXCESS LIAB CLAIMS-MADE<br>DED X RETENTION $ | | | 14649000 | 12/31/2012 | 12/31/2013 | EACH OCCURRENCE<br>AGGREGATE | $ 15,000,000<br>$ 15,000,000 |
| B | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY<br>ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N N/A<br>If yes, describe under DESCRIPTION OF OPERATIONS below | | | WC15684000-FLORIDA | 12/31/2012 | 12/31/2013 | X WC STATU-TORY LIMITS OTH-ER<br>E.L. EACH ACCIDENT<br>E.L. DISEASE - EA EMPLOYEE<br>E.L. DISEASE - POLICY LIMIT | $ 1,000,000<br>$ 1,000,000<br>$ 1,000,000 |
| A | Contractor Pollution | | | 14647099 | 12/31/2012 | 12/31/2013 | Per Occurrence | 1,000,000 |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
RE: RCRA Hazardous Waste Permit Number 26916-HO-006

CERTIFICATE HOLDER

Florida Department of Environmental Protection
Attn: Edgar Echevarria
2600 Blair Stone Road MS 4560
Tallahassee, FL 32399-2400

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
USI Insurance Services LLC

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AGENCY CUSTOMER ID: TRIUENV-01 LFOWLE

LOC #:

# ADDITIONAL REMARKS SCHEDULE



| AGENCY | NAMED INSURED |
|---|---|
| USI Insurance Services LLC | Triumvirate Environmental (Florida), Inc.<br>3701 SW 47th Ave Suite 106<br>Davie, FL 33314 |
| POLICY NUMBER<br>SEE PAGE 1 | |
| CARRIER / NAIC CODE<br>SEE PAGE 1 / SEE P 1 | EFFECTIVE DATE: SEE PAGE 1 |

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

Remarks:

Deductibles
Environmental Package (General Liability, Contractors Pollution and Professional)

Coverage A. - Bodily Injury and Property Damage (Occurrence)
Coverage B. - Personal and Advertising Injury Liability (Occurrence)
Coverage C. - Medical Payments
Coverage D. - Professional Liability (Claims Made) (Retroactive Date 10/20/92)

Deductibles: Property Damage and Bodily Injury Liability Combined Per Occurrence
Coverage A and B (Except Pollution Claims) $100,000
Coverage A Pollution Claims: $100,000
Coverage D: $100,000

Workers Compensation:

Workers Compensation and Employers Liability under State Law- Insured States
$150,000 Retained Limit for Each Accident or Each Person for Disease

Workers Compensation and Employers Liability under Federal Law- Insured States
$150,000 Retained Limit for Each Accident or Each Person for Disease

Employers Liability- Monopolistic States
$150,000 Retained Limit for Each Accident or Each Person for Disease

Automobile:
Owned and Hired/Leased Comprehensive/ Collision
$5,000/$5,000



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OP ID: FF

# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 10/06/11

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

| | |
|---|---|
| PRODUCER<br>TD Insurance, Inc. (ME)<br>PO Box 406<br>Portland, ME 04112-0406<br>TD Insurance, Inc.<br>207-239-3500<br>207-775-0339 | CONTACT NAME: Caitlin Fowler<br>PHONE (A/C, No, Ext): 207-239-3500 FAX (A/C, No): 207-775-0339<br>E-MAIL ADDRESS: caitlin.fowler@tdinsure.com<br>PRODUCER CUSTOMER ID #: TRIUM-3 |
| INSURED<br>Triumvirate Environmental (Florida), Inc<br>3701 SW 47th Ave. Suite 109<br>Davie, FL 33314 | INSURER(S) AFFORDING COVERAGE — NAIC #<br>INSURER A: Chartis Specialty Ins. Co. — 26883<br>INSURER B:<br>INSURER C:<br>INSURER D:<br>INSURER E:<br>INSURER F: |

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

| INSR LTR | TYPE OF INSURANCE | ADDL INSR | SUBR WVD | POLICY NUMBER | POLICY EFF (MM/DD/YYYY) | POLICY EXP (MM/DD/YYYY) | LIMITS | |
|---|---|---|---|---|---|---|---|---|
| | GENERAL LIABILITY | | | | | | EACH OCCURRENCE | $ |
| | ☐ COMMERCIAL GENERAL LIABILITY | | | | | | DAMAGE TO RENTED PREMISES (Ea occurrence) | $ |
| | ☐ CLAIMS-MADE ☐ OCCUR | | | | | | MED EXP (Any one person) | $ |
| | | | | | | | PERSONAL & ADV INJURY | $ |
| | GEN'L AGGREGATE LIMIT APPLIES PER: | | | | | | GENERAL AGGREGATE | $ |
| | ☐ POLICY ☐ PRO-JECT ☐ LOC | | | | | | PRODUCTS - COMP/OP AGG | $ |
| | | | | | | | | $ |
| | AUTOMOBILE LIABILITY | | | | | | COMBINED SINGLE LIMIT (Ea accident) | $ |
| | ☐ ANY AUTO | | | | | | BODILY INJURY (Per person) | $ |
| | ☐ ALL OWNED AUTOS | | | | | | BODILY INJURY (Per accident) | $ |
| | ☐ SCHEDULED AUTOS | | | | | | PROPERTY DAMAGE (Per accident) | $ |
| | ☐ HIRED AUTOS | | | | | | | $ |
| | ☐ NON-OWNED AUTOS | | | | | | | $ |
| | ☐ UMBRELLA LIAB ☐ OCCUR | | | | | | EACH OCCURRENCE | $ |
| | ☐ EXCESS LIAB ☐ CLAIMS-MADE | | | | | | AGGREGATE | $ |
| | ☐ DEDUCTIBLE | | | | | | | $ |
| | ☐ RETENTION $ | | | | | | | $ |
| | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N | | | | | | ☐ WC STATU-TORY LIMITS ☐ OTH-ER | |
| | ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ (Mandatory in NH) | N/A | | | | | E.L. EACH ACCIDENT | $ |
| | If yes, describe under DESCRIPTION OF OPERATIONS below | | | | | | E.L. DISEASE - EA EMPLOYEE | $ |
| | | | | | | | E.L. DISEASE - POLICY LIMIT | $ |
| A | Pollution Legal | | | PLS1672257 | 12/31/10 | 12/31/13 | Ea Incdnt | 15,000,000 |
| | | | | | | | Agg | 15,000,000 |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

RE: RCRA Hazardous Waste Permit Number 26916-HO-006

Coverage is effective 10/14/11.

CERTIFICATE HOLDER

FLORI10

Florida Department of
Environmental Protection
Attn: Edgar Echevarria
2600 Blair Stone Road MS 4560
Tallahassee, FL 32399

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
TD Insurance, Inc.

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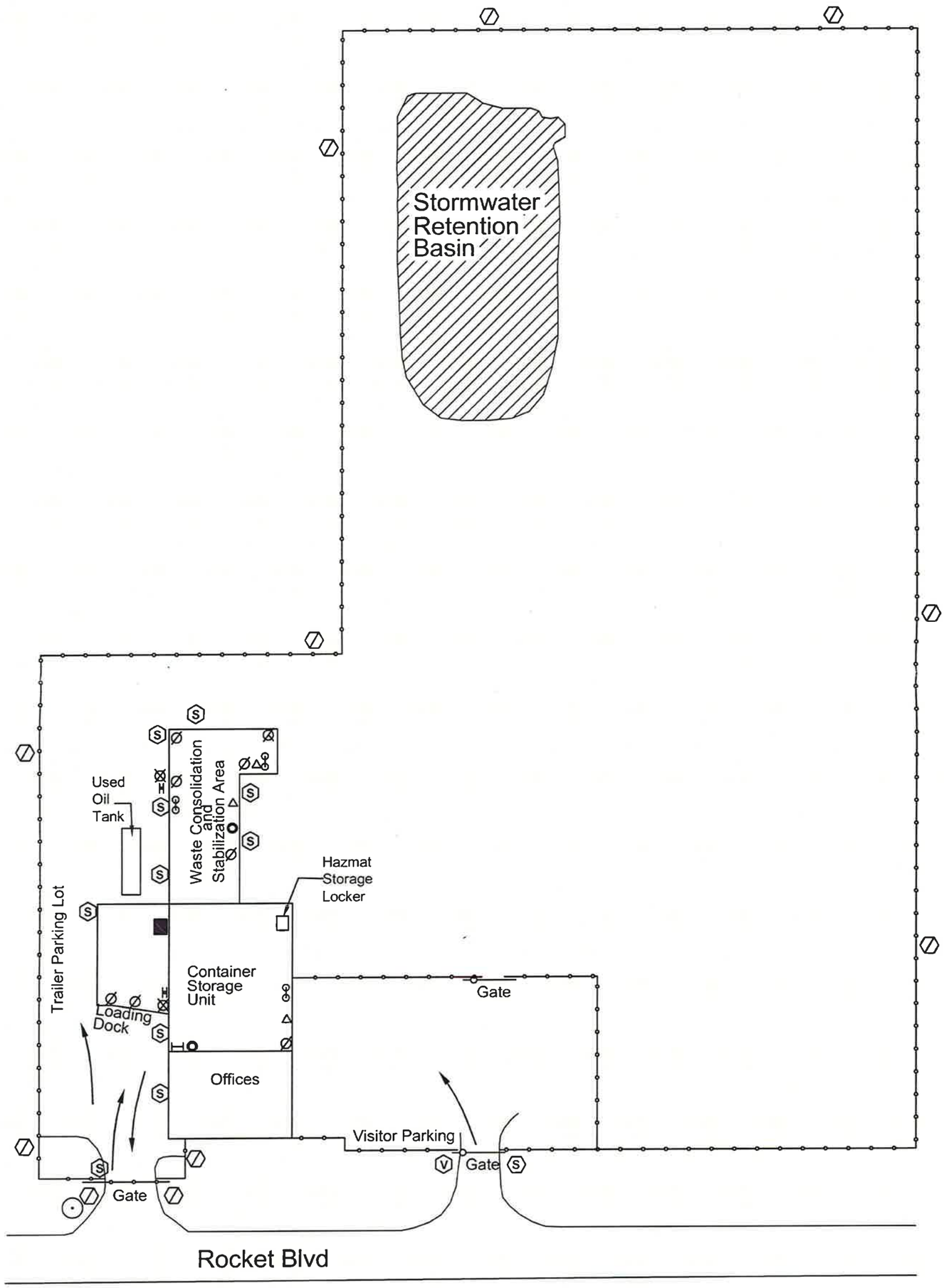



**LEGEND**

- Security Fence with Barbed Wire
- Danger Authorized Personnel Only
- All Visitors Check In at the Office
- No Smoking
- Stop Sign
- Fire Extinguisher, 5 lbs
- Fire Extinguisher, 20 lbs
- Fire Extinguisher, 150 lbs
- Safety Shower
- Eye Wash
- Spill Control Station
- Stretcher
- Emergency and Personnel Safety Equipment Cabinet
- Fire Alarm Operator
- Fire Hydrant

N

0 SCALE 60 ft

**TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC**

10100 Rocket Blvd.
Orlando, Florida 32824

- Facility Layout
- Facility Traffic Pattern
- Facility Warning Signs
- Emergency Equipment Locations

PROJECT NO.: 317

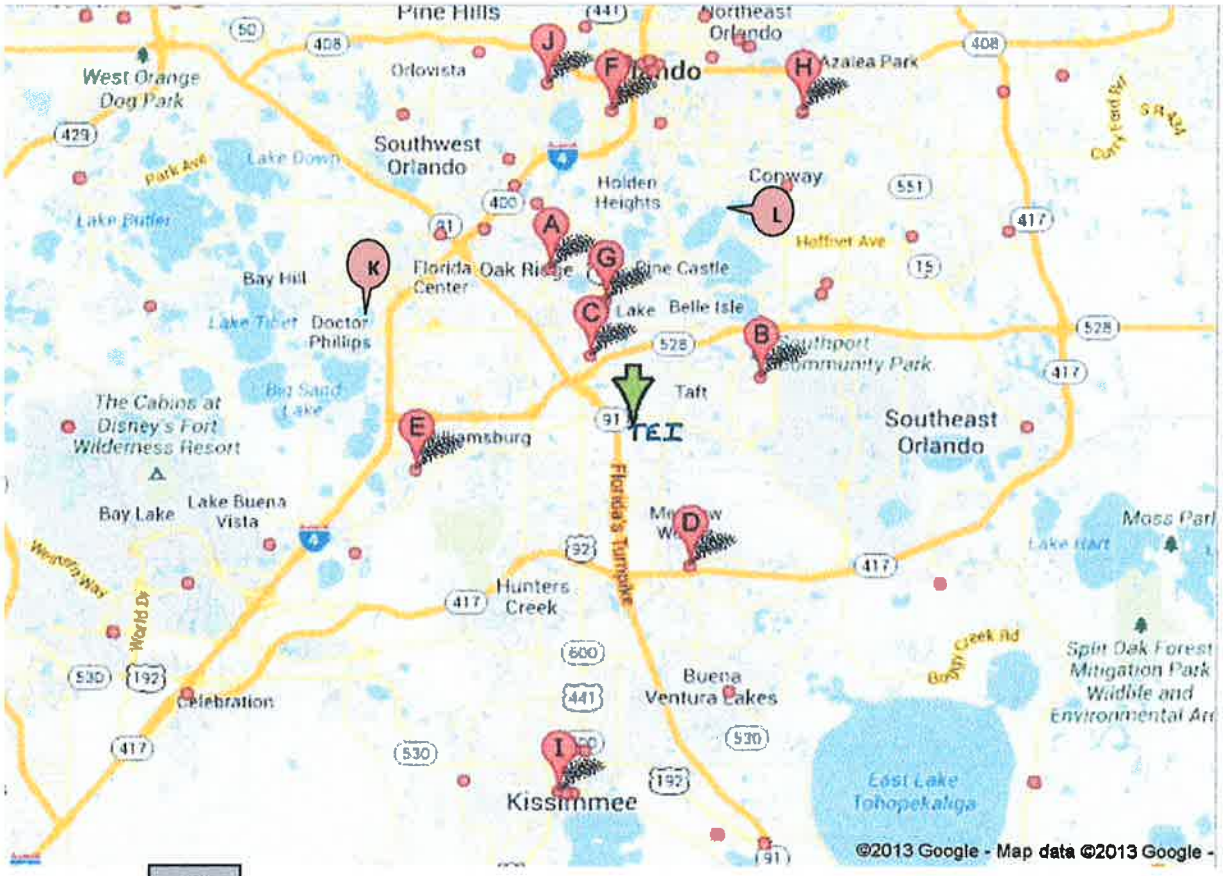
DATE: June 11, 2013

FIGURE II A 5

FLORIDA ENVIRONMENTAL COMPLIANCE CORPORATION
3652 Old Winter Garden Road
Orlando, Florida 32805

# EMERGENCY SERVICE ORGANIZATION

FIGURE IIA-7




LEGEND:

N

I----------I 2 M

| | |
|---|---|
| GREEN ARROW | TRIUMVIRATE ENVIRONMENTAL (TEI) |
| A | FIRE STATION #51 |
| C | FIRE STATION #53 |
| J | FIRE STATION #54 |
| B | FIRE STATION #73 |
| L | HAZARDOUS MATERIAL RESPONSE TEAM #50 |
| H | ORLANDO REGIONAL HOSPITAL |
| K | DR. P PHILLIPS HOSPITAL |

'ease print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

| UNIFORM HAZARDOUS WASTE MANIFEST | 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number 003297637 JJK |
|---|---|---|---|---|

5. Generator's Name and Mailing Address — Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name — U.S. EPA ID Number

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Facility's Phone:

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| | 1. | | | | | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name — Signature — Month Day Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month Day Year

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

| 1. | 2. | 3. | 4. |
|---|---|---|---|
| | | | |

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

II.A7.1

TRIUMVIRATE
ENVIRONMENTAL

Page ____ of ____

# Land Disposal Restriction Notification Form 1

Continuation Page ❑

Generator Name _____ EPA ID Number_____

Manifest Number _____ Is Waste Analysis Available? Yes _____ No _____ On file at facility_____

| (a) Manifest Line Item # (Pg # and line item) | (b) Non-Regulated Check if not regulated by RCRA | (c) Profile # | (d) RCRA Waste Codes List all that apply | (e) Subcategory List number from Table I | (f) Treatability Group Circle One NWW: >1% TOC & > 1% TSS | (g) F001-F005 Regulated Constituents List numbers from Table II | (h) Underlying Hazardous Constituents (UHCs) See Table III |
|---|---|---|---|---|---|---|---|
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |
| | | | | | WW NWW | | |

**If RCRA Regulated, how must the waste streams above be managed? (Please check one box below.)**

❑ The wastes identified above must be treated to meet the applicable treatment standards in 40 CFR 268.40 in accordance with 40 CFR 268.7(a)(2). I certify under penalty of law that the above information is accurate and true.

❑ The waste identified above is hazardous waste contaminated soil. I certify under penalty of law that I personally have examined this contaminated soil and it does/does not *(circle one)* contain listed hazardous waste and does/does not *(circle one)* exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by 40 CFR 268.49(c).

❑ This hazardous debris identified above must be treated to the alternative treatment standards in 40 CFR 268.45.

**Signature** _____ **Print Name** _____ **Date** _____

## Table I (for column e)

| Code | Number | Subcategory |
|---|---|---|
| D001 | 1 | High TOC (>10% total organic carbon) ignitable characteristic liquids |
| | 2* | Ignitable characteristic wastes |
| D003 | 3 | Reactive sulfides |
| | 4* | Other Reactives |
| | 5* | Water Reactives |
| | 6 | Reactive Cyanides |
| D006 | 7* | Characteristic for Cadmium based on TCLP |
| | 8 | Cadmium containing batteries |
| D008 | 9 | Characteristic for Lead based on TCLP |
| | 10 | Lead acid batteries |
| D009 | 11* | Low Mercury (<260 ppm mercury) |
| | 12 | High Mercury- containing organics (>260 ppm mercury) |
| | 13 | High mercury – containing only inorganics (>260 ppm mercury) |
| | 14* | All D009 Wastewaters |
| F003/F005 | 15 | Wastes that contain only one or more of the following: carbon disulfide, cyclohexanone and/or methanol |
| F005 | 16 | Contains only 2-Nitropropane |
| | 17 | Contains only Ethylene Glycol monoethyl ether (2-Ethoxyethanol) |
| U151 | 18 | Nonwastewaters that contain >260 mg/kg total mercury |
| | 19 | All U151 (mercury) wastewaters |
| P047 | 20 | 4,6 – Dinitro-o-cresol |
| | 21 | 4,6 – Dinitro-o-cresol salts |
| P092 | 22 | Nonwastewaters, not incinerator or RMERC residues |
| | 23 | All P092 wastewaters |
| U240 | 24 | 2,4-Dicholorphenoxyacetic acid |
| | 25 | 2,4-Dicholorphenoxyacetic acid salts and esters |
| | * | Indicates that UHC's are required to be identified for these categories as well as D002, D004,D005, D007, D010-D043 |

## Table II (for column g)

| | | | |
|---|---|---|---|
| 1 | Acetone | 27 | Xylene (Total) |
| 2 | Benzene | 28 | 1,1,2-Trichloro-1,2,2-Trifluoroethane |
| 3 | N-Butyl Alcohol | | |
| 4 | Carbon Disulfide | | |
| 5 | Carbon Tetrachloride | | |
| 6 | Chlorobenzene | | |
| 7 | Cresols (o,m or p isomers) | | |
| 8 | Cresylic Acid | | |
| 9 | Cyclohexanone | | |
| 10 | 1,2-Dichlorobenzene | | |
| 11 | Ethyl Acetate | | |
| 12 | Ethyl Benzene | | |
| 13 | Ethyl Ether | | |
| 14 | Isobutanol | | |
| 15 | Methanol | | |
| 16 | Methylene Chloride | | |
| 17 | Methyl Ethyl Ketone | | |
| 18 | Methyl Isobutyl Ketone | | |
| 19 | Nitrobenzene | | |
| 20 | Pyridine | | |
| 21 | Tetrachloroethylene | | |
| 22 | Toluene | | |
| 23 | 1,1,1 Trichloroethane | | |
| 24 | 1,1,2 Trichloroethane | | |
| 25 | Trichloroethylene | | |
| 26 | Trichlorofluoromethane | | |

Table II.A.4.b.-1
EMERGENCY SERVICE ORGANIZATIONS PHONE NUMBERS

| Emergency Contact List | | |
|---|---|---|
| **Facility Information:**<br>Triumvirate Environmental<br>10100 Rocket Boulevard, Orlando, Florida 32824<br>407-859-4441 | | |
| **Emergency Coordinators:** | | |
| Primary – | Thomas Montgomery (Primary)<br>524 Bamboo Harbour Court<br>Orlando, FL 32825 | Cell: (407) 495-8483 |
| Secondary - | David Chambers<br>3339 Bracken Fern Drive<br>Harmony, FL 34773 | Cell: (407) 756-2272<br>Alt#: (321)514-9234 |
| Alternate - | Eden Tuccillo<br>742 Battery Pointe Drive<br>Orlando, Florida 32828 | Cell: (407)415-3950<br>Alt #: (407) 923-3409 |
| **The National Incident Management System (NIMS) will be followed. Additional information can be found:** http://www.fema.gov/national-incident-management-system | | |
| **Designated Person Accountable for Discharge Prevention:** | | |
| Facility Manger – Charles (Kip) Buckley | | Cell: 321-246-5197 |
| **National Response Center (NRC):** | | 1-800-424-8802 |
| **Cleanup Contractor(s):** | | |
| Eagle SWS Emergency Response | | 1-800-852-8878 |
| Clean Harbors of Florida, LLC | | 1-800-645-8265 |
| **State Oil Pollution Control Agency** – FDEP 24-Hour State Warning Point (Depart. of Community Affairs' Division of Emergency Management) | | 1-800-320-0519 |
| **Local Emergency Response Planning Committee:** | | |
| East Central Florida Regional Planning Council<br>309 Cranes Roost Boulevard, Suite 2000<br>Altamonte Springs 32701 | | 407-262-7772 ext. 335 |
| **Other Federal/State/Local Agencies:** | | |
| EPA – Regional IV – 24-Hour Spill Reporting | | 1-800-424-8802 |
| FDEP – Central District | | 407-897-4100 |
| Orange County Emergency Management | | **911*** or 407-836-9140 (local) |
| **Local Fire Department** – Orange County Fire Department | | **911*** or 407-836-9000 (local) |
| **Local Police Department** – Orange County Police Department | | **911*** or 407-836-6500 (local) |
| **Hospital** – Orange County Regional Medical Center | | **911*** or 407-841-5111 (local) |
| **Other Contact References:** | | |
| Boggy Creek (east-northeast) – South Florida WMD | | 800-432-2045 |
| Neighboring Facility (west) – Cook Composites & Polymers | | 407-859-3030 |
| Neighboring Facility (north) – Oldcastle Precast, Inc. | | 407-855-7580 |
| Neighboring Facility (south) – L&S Logistics Services Orlando | | 407-582-0900 |

***Note: In the event of emergency, dial 911.**

IIB1-1

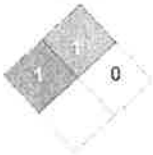
BEHR

STAINS•VARNISHES•PAINTS

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

| | |
|---|---|
| Product Name: | **1-Part Epoxy Concrete & Garage Floor Paint Slate Gray No. 902** |
| Product Code: | 902 |
| MSDS Manufacturer Number: | 902 |
| Manufacturer Name: | BEHR Process Corporation |
| Address: | 3400 W. Segerstrom Avenue<br>Santa Ana, CA 92704 |
| General Phone Number: | (714) 545-7101 |
| General Fax Number: | (714) 241-1002 |
| Customer Service Phone Number: | (800) 854-0133 ext. 2 |
| CHEMTREC: | For emergencies in the US, call CHEMTREC: 800-424-9300 |
| Canutec: | In Canada, call CANUTEC: (613) 996-6666 (call collect) |
| MSDS Creation Date: | June 26, 2006 |
| MSDS Revision Date: | August 31, 2012 |
| MSDS Format: | |

NFPA




HMIS

| | |
|---|---|
| Health Hazard | 1 |
| Fire Hazard | 1 |
| Reactivity | 0 |
| Personal Protection | |

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS# | Ingredient Percent |
|---|---|---|
| Water | 7732-18-5 | 10 - 30 by weight |
| Nepheline Syenite | 37244-96-5 | 10 - 30 by weight |
| Non Hazardous | No Data | 1 - 5 by weight |
| Titanium dioxide | 13463-67-7 | 1 - 5 by weight |
| Acylic Emulsion | No Data | 30 - 60 by weight |

## SECTION 3 - HAZARDS IDENTIFICATION

| | |
|---|---|
| Emergency Overview: | Irritant. |
| Potential Health Effects: | |
| Eye: | May cause irritation. |
| Skin: | May cause irritation. |
| Inhalation: | Prolonged or excessive inhalation may cause respiratory tract irritation. |
| Ingestion: | May be harmful if swallowed. May cause vomiting. |
| Chronic Health Effects: | Prolonged or repeated contact may cause skin irritation. |
| Signs/Symptoms: | Overexposure may cause headaches and dizziness. |
| Target Organs: | Eyes. Skin. Respiratory system. Digestive system. |
| Aggravation of Pre-Existing Conditions: | None generally recognized. |

## SECTION 4 - FIRST AID MEASURES

| | |
|---|---|
| Eye Contact: | Immediately flush eyes with plenty of water for 15 to 20 minutes. Get medical attention, if irritation or symptoms of overexposure persists. |
| Skin Contact: | Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists. |
| Inhalation: | If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention. |
| Ingestion: | If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. |
| Other First Aid: | Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration. |

## SECTION 5 - FIRE FIGHTING MEASURES

| | |
|---|---|
| Flash Point: | No Data |
| Lower Flammable/Explosive Limit: | Not applicable. |
| Upper Flammable/Explosive Limit: | Not applicable. |
| Extinguishing Media: | Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material. |
| Protective Equipment: | As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear. |

NFPA Ratings:

| | |
|---|---|
| NFPA Health: | 1 |
| NFPA Flammability: | 1 |
| NFPA Reactivity: | 0 |

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| Personnel Precautions: | Use proper personal protective equipment as listed in section 8. |
| Environmental Precautions: | Avoid runoff into storm sewers, ditches, and waterways. |
| Spill Cleanup Measures: | Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. |

## SECTION 7 - HANDLING and STORAGE

| | |
|---|---|
| Handling: | Use with adequate ventilation. Avoid breathing vapor and contact with eyes, skin and clothing. |
| Storage: | Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, and incompatible substances. Keep container tightly closed when not in use. |
| Hygiene Practices: | Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist. |

## SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

| | |
|---|---|
| Engineering Controls: | Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment. |
| Eye/Face Protection: | Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166. |
| Skin Protection Description: | Chemical-resistant gloves and chemical goggles, face-shield and synthetic apron or coveralls should be used to prevent contact with eyes, skin or clothing. |
| Respiratory Protection: | A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. |
| Other Protective: | Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. |

EXPOSURE GUIDELINES

Titanium dioxide :

| | |
|---|---|
| Guideline ACGIH: | TLV-TWA: 10 mg/m3 |
| Guideline OSHA: | OSHA-TWA: 15 mg/m3 |

## SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

| | |
|---|---|
| Physical State Appearance: | Liquid. |
| Color: | Gray |
| Boiling Point: | No Data |

| | |
|---|---|
| Melting Point: | No Data |
| Density: | 8 - 10 Lbs./gal. |
| Vapor Density: | Greater than 1 (Air = 1). |
| pH: | 8.5 to 9.5 |
| Molecular Formula: | Mixture |
| Molecular Weight: | Mixture |
| Flash Point: | No Data |
| VOC Content: | Material VOC: 16 gm/l (Includes Water)<br>Coating VOC.: 47 gm/l (Excludes Water)<br>The addition of colorant may add VOCs. |

## SECTION 10 - STABILITY and REACTIVITY

| | |
|---|---|
| Chemical Stability: | Stable under normal temperatures and pressures. |
| Hazardous Polymerization: | Not reported. |
| Conditions to Avoid: | Heat, flames, incompatible materials, and freezing or temperatures below 32 deg. F. |
| Incompatible Materials: | Oxidizing agents. Strong acids and alkalis. |

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Nepheline Syenite :**

| | |
|---|---|
| RTECS Number: | QP9365000 |

**Titanium dioxide :**

| | |
|---|---|
| RTECS Number: | XR2275000 |
| Skin: | Administration onto the skin - Human Standard Draize test.: 300 ug/3D (Intermittent) (RTECS) |
| Carcinogenicity: | IARC: Group 2B: Possibly carcinogenic to humans. |

## SECTION 12 - ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity: | No ecotoxicity data was found for the product. |
| Environmental Fate: | No environmental information found for this product. |

## SECTION 13 - DISPOSAL CONSIDERATIONS

| | |
|---|---|
| Waste Disposal: | Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines. |

## SECTION 14 - TRANSPORT INFORMATION

| | |
|---|---|
| DOT UN Number: | No Data |
| DOT Hazard Class: | No Data |

## SECTION 15 - REGULATORY INFORMATION

| | |
|---|---|
| California PROP 65: | WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm. |

**Nepheline Syenite :**

| | |
|---|---|
| TSCA Inventory Status: | Not listed |
| Canada DSL: | Listed |

**Titanium dioxide :**

| | |
|---|---|
| TSCA Inventory Status: | Listed |
| State Regulations: | Listed in the New Jersey State Right to Know List.<br>Listed in the Pennsylvania State Hazardous Substances List. |
| Canada DSL: | Listed |

## SECTION 16 - ADDITIONAL INFORMATION

| | |
|---|---|
| HMIS Health Hazard: | 1 |
| HMIS Fire Hazard: | 1 |
| HMIS Reactivity: | 0 |
| HMIS Other: | x |
| MSDS Creation Date: | June 26, 2006 |
| MSDS Revision Date: | August 31, 2012 |
| MSDS Revision Notes: | Quarterly formula update |
| MSDS Author: | Actio Corporation |
| Disclaimer: | This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet. |
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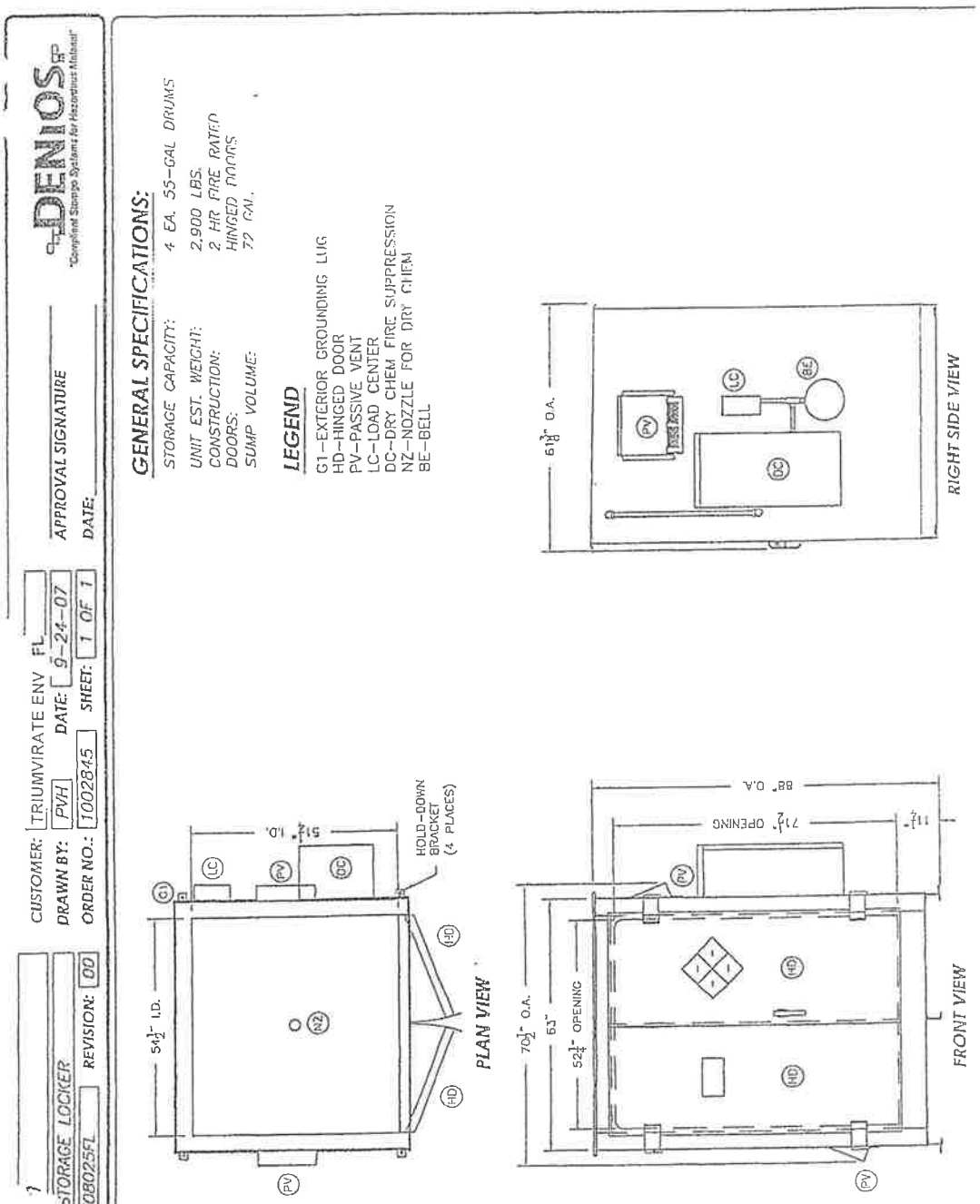
## Exhibit II.B.1.2: HAZMAT STORAGE LOCKER SKETCH



## Table II.A.4.b.-3

## Waste Permitted to be Stored at TRIUMVIRATE ENVIRONMENTAL (FLORIDA), INC., Inc.

| Waste Description | Hazardous Waste Code | CAS Registry Number | DOT Hazard Class |
|---|---|---|---|
| Ignitable Liquid | D001 | N/A | Varies |
| Corrosive (Acid, Caustic) | D002 | N/A | Varies |
| Reactive Liquids & Solids | D003 | N/A | Varies |
| Arsenic | D004 | 7440-38-2 | 6.1 |
| Barium | D005 | 7440-39-3 | 4.3 |
| Cadmium | D006 | 7440-43-9 | 6.1 |
| Chromium (Haz. Substance) | D007 | 7440-47-3 | 9 |
| Lead | D008 | 7439-92-1 | 6.1 |
| Mercury | D009 | 7439-97-6 | 8 |
| Selenium (Powder) | D010 | 7782-49-2 | 6.1 |
| Silver (Haz. Substance) | D011 | 7440-22-4 | 9 |
| Endrin (Haz. Substance) | D012 | 72-20-8 | 9 |
| Lindane (Haz. Substance) | D013 | 58-89-9 | 9 |
| Methoxychlor (Haz. Substance) | D014 | 72-43-5 | 9 |
| Toxaphene (Haz. Substance) | D015 | 8001-35-2 | 9 |
| 2,4-D (Acid – Haz. Substance) | D016 | 94-75-7 | 9 |
| 2,4,5-TP (Silvex) (Haz. Substance) | D017 | 93-72-1 | 9 |
| Benzene | D018 | 71-43-2 | 3 |
| Carbon Tetrachloride | D019 | 56-23-5 | 6.1 |
| Chlordane (Haz. Substance) | D020 | 57-74-9 | 9 |
| Chlorobenzene | D021 | 108-90-7 | 3 |
| Chloroform | D022 | 67-66-3 | 6.1 |
| o-Cresol | D023 | 95-48-7 | 6.1 |
| M-Cresol | D024 | 108-39-4 | 6.1 |
| P-Cresol | D025 | 106-44-5 | 6.1 |
| Cresol | D026 | 1319-77-3 | 6.1 |
| 1,4-Dichlorobenzene | D027 | 106-46-7 | 6.1 |
| 1,2-Dichloroethane (Ethylene Dichloride) | D028 | 107-06-2 | 3 |
| 1,1-Dichloroethylene (Vinylidene Chloride) | D029 | 75-35-4 | 3 |
| 2,4-Dinitrotoluene | D030 | 121-14-2 | 6.1 |
| Heptachlor (Haz. Substance) | D031 | 76-44-8 | 9 |
| Hexachlorobenzene | D032 | 118-74-1 | 6.1 |
| Hexachlorobutadiene | D033 | 87-68-3 | 6.1 |
| Hexachloroethane (Haz. Substance) | D034 | 67-72-1 | 9 |
| Methyl Ethyl Ketone (Ethyl Methyl Ketone) | D035 | 78-93-3 | 3 |
| Nitrobenzene | D036 | 98-95-3 | 6.1 |
| Pentachlorophenol (Haz. Substance) | D037 | 87-86-5 | 9 |
| Pyridine | D038 | 110-86-1 | 3 |
| Tetrachloroethylene | D039 | 127-18-4 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Trichloroethylene | D040 | 79-01-6 | 6.1 |
| 2,4,5-Trichlorophenol (Haz. Substance) | D041 | 95-95-4 | 9 |
| 2,4,6-Trichlorophenol (Haz. Substance) | D042 | 88-06-2 | 9 |
| Vinyl Chloride | D043 | 75-01-4 | 2.1 |
| Spent Halogenated Solvents (Haz. Substance) | F001 | N/A | 9 |
| Spent Halogenated Solvents (Haz. Substance) | F002 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F003 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F004 | N/A | 9 |
| Spent Non-Halogenated Solvents (Haz. Substance) | F005 | N/A | 9 |
| Electroplating Sludges (Haz. Substance) | F006 | N/A | 9 |
| Spent Cyanide Plating Solutions (Haz. Substance) | F007 | N/A | 9 |
| Plating Bath Residues (Haz. Substance) | F008 | N/A | 9 |
| Spent Stripping Solutions (Haz. Substance) | F009 | N/A | 9 |
| Quenching Bath Residues (Haz. Substance) | F010 | N/A | 9 |
| Spent Cyanide Solution (Haz. Substance) | F011 | N/A | 9 |
| Quench Wastewater Sludge (Haz. Substance) | F012 | N/A | 9 |
| Wastewater Treatment Sludge (Haz. Substance) | F019 | N/A | 9 |
| Discarded Unused Formulations of Chlorophenols | F027 | N/A | 6.1 |
| Chlorophenolic Residuals (Haz. Substance) | F032 | N/A | 9 |
| Creosote Residuals (Haz. Substance) | F034 | N/A | 9 |
| Arsenic/Chromium Residuals (Haz. Substance) | F035 | N/A | 9 |
| Petroleum Refinery Primary Sludge (Haz. Substance) | F037 | N/A | 9 |
| Petroleum Refinery Secondary Sludge (Haz. Subs.) | F038 | N/A | 9 |
| Leachate from Wastes (Haz. Substance) | F039 | N/A | 9 |
| Bottom Sediment Sludge | K001 | NA | 4.1, 9 |
| Dissolved Air Float (Haz. Substance) | K048 | N/A | 9 |
| Slop Oil Emulsion Solids (Haz. Substance) | K049 | N/A | 9 |
| Heat Exchanger Sludge (Haz. Substance) | K050 | N/A | 9 |
| API Separator Sludge (Haz. Substance) | K051 | N/A | 9 |
| Petroleum Tank Bottoms (Haz. Substance) | K052 | N/A | 9 |
| Emission Control Dust/Sludge (Haz. Substance) | K061 | N/A | 9 |
| Spent Pickle Liquor (Haz. Substance) | K062 | N/A | 9 |
| Solvent Washes & Sludge (Haz. Substance) | K086 | N/A | 9 |
| Organic Wastes | K156 | N/A | 9 |
| Wastewaters | K157 | N/A | 9 |
| Baghouse Dusts & Filter Separator Solids | K158 | N/A | 9 |
| Organics from Treatment of Thiocarbamate Wastes | K159 | N/A | 9 |
| Purification Solids | K161 | N/A | 9 |
| Warfarin & Salts when >.3% (Haz. Substance) | P001 | 81-81-2 | 9 |
| Acetamide, N-(Aminothioximethyl) (Haz. Substance) | P002 | 591-08-2 | 9 |
| Acrolein | P003 | 107-02-8 | 6.1 |
| Aldrin | P004 | 309-00-2 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Allyl Alcohol | P005 | 107-18-6 | 6.1 |
| Aluminum Phosphide | P006 | 20859-73-8 | 4.3, 6.1 |
| 5-(Aminomethyl)-3-Isoxazolol (Haz. Substance) | P007 | 2763-96-4 | 9 |
| 4-Aminopyridine | P008 | 504-24-5 | 6.1 |
| Ammonium picrate | P009 | 131-74-8 | 4.1 |
| Arsenic Acid ($H_3AsO_4$) | P010 | 778-39-4 | 6.1 |
| Arsenic Oxide ($As_2O_5$) | P011 | 1303-28-2 | 6.1 |
| Arsenic Oxide ($As_2O_3$) | P012 | 1327-53-3 | 6.1 |
| Barium Cyanide | P013 | 542-62-1 | 6.1 |
| Benzenethiol (Phenyl Mercaptan) | P014 | 108-98-5 | 6.1 |
| Beryllium (Powder) | P015 | 7440-41-7 | 6.1 |
| Dichloromethylether ((Haz. Substance) | P016 | 542-88-1 | 9 |
| Bromoacetone | P017 | 598-31-2 | 6.1 |
| Brucine | P018 | 357-57-3 | 6.1 |
| Dinoseb | P020 | 88-85-7 | 9 |
| Calcium Cyanide | P021 | 592-01-8 | 6.1 |
| Carbon Disulfide | P022 | 75-15-0 | 3, 6.1 |
| Acetaldehyde, Chloro- (Haz. Substance) | P023 | 107-20-0 | 9 |
| Benzenamine, 4-Chloro- (Haz. Substance) | P024 | 106-47-8 | 9 |
| 1-(o-Chlorophenyl)thiourea (Haz. Substance) | P026 | 5344-82-1 | 9 |
| 3-Chloropropionitrile (Haz. Substance) | P027 | 542-76-7 | 9 |
| Benzene, Chloromethyl (Benzyl Chloride) | P028 | 100-44-7 | 6.1 |
| Copper Cyanide | P029 | 544-92-3 | 6.1 |
| Cyanides (Solutions & Inorganics) | P030 | 57-12-5 | 6.1 |
| Cyanogen | P031 | 460-19-5 | 6.1 |
| Cyanogen Chloride | P033 | 506-77-4 | 6.1 |
| 2-Cyclohexyl-4,6-dinitrophenol (Haz. Substance) | P034 | 131-89-5 | 9 |
| Arsonous Dichloride, Phenyl (Haz. Substance) | P036 | 696-28-6 | 9 |
| Dieldrin | P037 | 60-57-1 | 6.1 |
| Arsine, Diethyl- (Haz. Substance) | P038 | 692-42-2 | 9 |
| Disulfoton (Haz. Substance) | P039 | 298-04-4 | 9 |
| O,O-Diethyl O-pyrazinyl Phosphorothioate (Haz. Subs.) | P040 | 297-97-2 | 9 |
| Diethyl-p-nitrophenyl Phosphate (Haz. Substance) | P041 | 311-45-5 | 9 |
| Epinephrine | P042 | 51-43-4 | 6.1 |
| Diisopropylfluorophosphate (Haz. Substance) | P043 | 55-91-4 | 9 |
| Dimethoate (Haz. Substance) | P044 | 60-51-5 | 9 |
| Thiofanox (Haz. Substance) | P045 | 39196-18-4 | 9 |
| Benzeneethanamine, alpha, alpha-dimethyl (Haz. Subs.) | P046 | 122-09-8 | 9 |
| 4,6-Dinitro-o-cresol & Salts (Solid or Solutions) | P047 | 1 534-52-1 | 6.1 |
| 2,4-Dinitrophenol (Haz. Substance) | P048 | 51-28-5 | 9 |
| Dithiobiuret (Haz. Substance) | P049 | 541-53-7 | 9 |
| Endosulfan (Haz. Substance) | P050 | 115-29-7 | 9 |
| Endrin (Haz. Substance) | P051 | 1 72-20-8 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Aziridine (Ethyleneimine) | P054 | 151-56-4 | 6.1 |
| Fluorine | P056 | 7782-41-4 | 6.1 |
| Acetamide, 2-Fluoro- (Haz. Substance) | P057 | 640-19-7 | 9 |
| Acetic Acid, Fluoro-, Sodium Salt (Haz. Substance) | P058 | 62-74-8 | 9 |
| Heptachlor (Haz. Substance) | P059 | 76-44-8 | 9 |
| Isodrin (Haz. Substance) | P060 | 465-73-6 | 9 |
| Hexaethyl Tetraphosphate | P062 | 757-58-4 | 6.1 |
| Hydrogen Cyanide | P063 | 74-90-8 | 6.1, 3 |
| Methyl Isocyanate | P064 | 624-83-9 | 6.1 |
| Fulminc Acid,, mercury (2+), salt | P065 | 628-86-4 | 6.1 |
| Methomyl (Haz. Substance) | P066 | 16752-77-5 | 9 |
| Aziridine, 2-methyl | P067 | 75-55-8 | 3 |
| Methyl Hydrazine (Haz. Substance) | P068 | 60-34-4 | 9 |
| 2-Methyllactonitrile | P069 | 75-86-5 | 6.1 |
| Aldicarb (Haz. Substance) | P070 | 116-06-3 | 9 |
| Methyl Parathion | P071 | 298-00-0 | 6.1 |
| alpha-Naphthylthiourea | P072 | 86-88-4 | 6.1 |
| Nickel Carbonyl | P073 | 13463-39-3 | 6.1, 3 |
| Nickel Cyanide | P074 | 557-19-7 | 6.1 |
| Nicotine & Salts | P075 | 1 54-11-5 | 6.1 |
| Benzenamine, 4-Nitro- (p-Nitroaniline) | P077 | 100-01-6 | 6.1 |
| Nitrogen oxide NO | P078 | 10102-44-0 | 6.1 |
| Nitroglycerine | P081 | 55-63-0 | 3, 4.1 |
| N-Nitrosodimethylamine (Haz. Substance) | P082 | 62-75-9 | 9 |
| N-Nitrosomethylvinylamine (Haz. Substance) | P084 | 4549-40-0 | 9 |
| Octamethylpryophosphoramide (Haz. Substance) | P085 | 152-16-9 | 9 |
| Osmium Tetroxide | P087 | 20816-12-0 | 6.1 |
| Endothall (Haz. Substance) | P088 | 145-73-3 | 9 |
| Parathion | P089 | 56-38-2 | 6.1 |
| Phenylmercury Acetate | P092 | 62-38-4 | 6.1 |
| Phenylthiourea (Haz. Substance) | P093 | 103-85-5 | 9 |
| Phorate (Haz. Substance) | P094 | 298-02-2 | 9 |
| Carbonic dichloride | P095 | 75-44-5 | 9 |
| Hydrogen Phosphide | P096 | 7803-51-2 | 9 |
| Famphur (Haz. Substance) | P097 | 52-85-7 | 9 |
| Potassium Cyanide | P098 | 151-50-8 | 6.1 |
| Potassium Silver Cyanide (Haz. Substance) | P099 | 506-61-6 | 9 |
| Ethyl Cyanide (Haz. Substance) | P101 | 107-12-0 | 9 |
| Propargyl Alcohol | P012 | 107-19-7 | 3 |
| Selenourea (Haz. Substance) | P103 | 630-10-4 | 9 |
| Silver Cyanide | P104 | 506-64-9 | 6.1 |
| Sodium Azide | P105 | 26628-22-8 | 6.1 |
| Sodium Cyanide | P106 | 143-33-9 | 6.1 |
| Strychnine & Salts | P108 | 1 157-24-9 | 6.1 |
| Tetraethyldithiopryophosphate | P109 | 3689-24-5 | 6.1 |
| Tetraethyl Lead (Liquid) | P110 | 78-00-2 | 6.1 |
| Tetraethyl Pryophosphate (Liquid & Solid) | P111 | 107-49-3 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Thallic Oxide (Haz. Substance) | P113 | 1314-32-5 | 9 |
| Selenious Acid, dithallium (1+) Salt | P114 | 12039-52-0 | 6.1 |
| Sulfuric acid, dithallium(1+) salt | P115 | 7446-18-6 | 6.1 |
| Thiosemicarbazide (Haz. Substance) | P116 | 79-19-6 | 9 |
| Perchloromethanethiol | P118 | 75-70-7 | 6.1 |
| Ammonium Vanadate (Ammonium Metavanadate) | P119 | 7803-55-6 | 6.1 |
| Vanadium Pentoxide (Nonfused Form) | P120 | 1314-62-1 | 6.1 |
| Zinc Cyanide | P121 | 557-21-1 | 6.1 |
| Zinc Phosphide when present at concentrations above 10% | P122 | 1314-84-7 | 4.3, 6.1 |
| Toxaphene (Haz. Substance) | P123 | 8001-35-2 | 9 |
| Carbofuran | P127 | 1563-66-2 | 6.1 |
| Mexacarbate | P128 | 315-18-4 | 6.1 |
| Tirpate | P185 | 26419-73-8 | 6.1 |
| Physostigmine Salicylate | P188 | 57-64-7 | 6.1 |
| Carbosulfan | P189 | 55285-14-8 | 9 |
| Metolcarb | P190 | 1129-41-5 | 6.1 |
| Dimetilan | P191 | 644-64-4 | 6.1 |
| Isolan | P192 | 119-38-0 | 6.1 |
| Oxamyl | P194 | 23135-22-0 | 6.1 |
| Manganese Dimethyldithiocarbamate | P196 | 15339-36-3 | 6.1 |
| Formparanate | P197 | 17702-57-7 | 6.1 |
| Formetanate Hydrochloride | P198 | 23422-53-9 | 6.1 |
| Methiocarb | P199 | 2032-65-7 | 6.1 |
| Promecarb | P201 | 2631-37-0 | 6.1 |
| m-Cumenyl Methylcarbamate | P202 | 64-00-6 | 6.1 |
| Aldicarb Sulfone | P203 | 1646-88-4 | 6.1 |
| Physostigmine | P204 | 57-47-6 | 6.1 |
| Ziram | P205 | 137-30-4 | 6.1 |
| Acetaldehyde | U001 | 75-07-0 | 3 |
| Acetone | U002 | 67-64-1 | 3 |
| Acetonitrile (Methyl Cyanide) | U003 | 75-05-8 | 3 |
| Acetophenone (Haz. Substance) | U004 | 98-86-2 | 9 |
| 2-Acetylaminofluorene (Haz. Substance) | U005 | 53-96-3 | 9 |
| Acetyl Chloride | U006 | 75-36-5 | 3, 8 |
| Acrylamide | U007 | 79-06-1 | 6.1 |
| Acrylic Acid | U008 | 79-10-7 | 8 |
| Acrylonitrile | U009 | 107-13-1 | 3 |
| Mitomycin C (Haz. Substance) | U010 | 50-07-7 | 9 |
| Amitrole (Haz. Substance) | U011 | 61-82-5 | 9 |
| Aniline | U012 | 62-53-3 | 6.1 |
| Auramine (Haz. Substance) | U014 | 492-80-8 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Azaserine (Haz. Substance) | U015 | 115-02-6 | 9 |
| Benz[c]acridine (Haz. Substance) | U016 | 225-51-4 | 9 |
| Benzal Chloride (Haz. Substance) | U017 | 98-87-3 | 9 |
| Benz[a]anthracene (Haz. Substance) | U018 | 56-55-3 | 9 |
| Benzene | U019 | 71-43-2 | 3 |
| Benzenesulfonyl chloride | U020 | 98-09-9 | 8 |
| Benzidine | U021 | 92-87-5 | 6.1 |
| Benzo[a]pyrene (Haz. Substance) | U022 | 50-32-8 | 9 |
| Benzotrichloride | U023 | 98-07-7 | 8 |
| Dichloromethyoxy Ethane (Haz. Substance) | U024 | 111-91-1 | 9 |
| Dichloroethyl Ether (Haz. Substance) | U025 | 111-44-4 | 9 |
| Chlornaphazine (Haz. Substance) | U026 | 494-03-1 | 9 |
| Dichloroisopropyl Ether | U027 | 108-60-1 | 6.1 |
| Diethylhexyl Phthalate (Haz. Substance) | U028 | 117-81-7 | 9 |
| Methyl Bromide | U029 | 74-83-9 | 2.3 |
| 4-Bromophenyl Phenyl Ether (Haz. Substance) | U030 | 101-55-3 | 9 |
| n-Butyl Alcohol (Butanols) | U031 | 71-36-3 | 3 |
| Calcium Chromate (Haz. Substance) | U032 | 13765-19-0 | 9 |
| Carbonic difluoride | U033 | 353-50-4 | NA |
| Chloral (anhydrous) | U034 | 75-87-6 | 6.1 |
| Chlorambucil (Haz. Substance) | U035 | 305-03-3 | 9 |
| Chlordane, Alpha & Gamma Isomers (Haz. Substance) | U036 | 57-74-9 | 9 |
| Chlorobenzene | U037 | 108-90-7 | 3 |
| Chlorobenzilate (Haz. Substance) | U038 | 510-15-6 | 9 |
| p-Chloro-m-cresol | U039 | 59-50-7 | 6.1 |
| Epichlorohydrin | U041 | 106-89-8 | 6.1 |
| 2-Chloroethyl Vinyl Ether (Haz. Substance) | U042 | 110-75-8 | 9 |
| Vinyl Chloride | U043 | 75-01-4 | 2.1 |
| Chloroform | U044 | 67-66-3 | 6.1 |
| Methyl Chloride | U045 | 74-87-3 | 2.1 |
| Chloromethyl Methyl Ether | U046 | 107-30-2 | 3 |
| beta-Chloronaphthalene (Haz. Substance) | U047 | 91-58-7 | 9 |
| o-Chlorophenol | U048 | 95-57-8 | 6.1 |
| 4-Chloro-o-toluidine, Hydrochloride | U049 | 3165-93-3 | 6.1 |
| Chrysene (Haz. Substance) | U050 | 218-01-9 | 9 |
| Creosote (Haz. Substance) | U051 | 8001-58-9 | 9 |
| Cresol | U052 | 1319-77-3 | 6.1 |
| Crotonaldehyde (Stabilized) | U053 | 4170-30-3 | 3 |
| Cumene (Haz. Substance) | U055 | 98-82-8 | 9 |
| Cyclohexane | U056 | 110-82-7 | 3 |
| Cyclohexanone | U057 | 108-94-1 | 3 |
| Cyclophosphamide (Haz. Substance) | U058 | 50-18-0 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Daunomycin (Haz. Substance) | U059 | 20830-81-3 | 9 |
| DDD (Haz. Substance) | U060 | 72-54-8 | 9 |
| DDT (Haz. Substance) | U061 | 50-29-3 | 9 |
| Diallate (Haz. Substance) | U062 | 2303-16-4 | 9 |
| Diben(a, h)anthracene (Haz. Substance) | U063 | 53-70-3 | 9 |
| Dibenzo(a, i)pyrene (Haz. Substance) | U064 | 189-55-9 | 9 |
| 1,2-Dibromomo-3-chloropropane | U066 | 96-12-8 | 6.1 |
| Ethane, 1,2-dibromo- (Ethylene Dibromide) | U067 | 106-93-4 | 6.1 |
| Methylene Bromide (Dibromomethane) | U068 | 74-95-3 | 6.1 |
| Dibutyl Phthalate (Haz. Substance) | U069 | 84-74-2 | 9 |
| o-Dichlorobenzene | U070 | 95-50-1 | 6.1 |
| m-Dichlorobenzene (Haz. Substance) | U071 | 541-73-1 | 9 |
| p-Dichlorobenzene | U072 | 106-46-7 | 6.1 |
| 3,3-Dichlorobenzidine (Haz. Substance) | U073 | 91-94-1 | 9 |
| 1,4-Dichloro-2-butene (Haz. Substance) | U074 | 764-41-0 | 9 |
| Dichlorodifluoromethane | U075 | 75-71-8 | 2.2, 6.1 |
| Ethane, 1,1-Dichloro- (1,1-Dichloroethane) | U076 | 75-34-3 | 3 |
| Ethane, 1,2-Dichloro- (Ethylene Dichloride) | U077 | 107-06-2 | 3 |
| 1,1-Dichloroethylene (Haz. Substance) | U078 | 75-35-4 | 9 |
| 1,2-Dichloroethylene (Haz. Substance) | U079 | 156-60-5 | 9 |
| Methylene Chloride (Dichloromethane) | U080 | 75-09-2 | 6.1 |
| 2,4-Dichlorophenol (Haz. Substance) | U081 | 120-83-2 | 9 |
| 2,6-Dichlorophenol (Haz. Substance) | U082 | 87-65-0 | 9 |
| Propylene Dichloride | U083 | 78-87-5 | 3 |
| 1,3-Dichloropropene (Dichloropropene) | U084 | 542-75-6 | 3 |
| 1,2:3,4-Diepoxybutane (Haz. Substance) | U085 | 1464-53-5 | 9 |
| N,N'-Diethyhydrazine (Haz. Substance) | U086 | 1615-80-1 | 9 |
| O,O-Diethyl S-methyl Dithiophosphate (Haz. Subs.) | U087 | 3288-58-2 | 9 |
| Diethyl Phthalate (Haz. Substance) | U088 | 84-66-2 | 9 |
| Diethystilbesterol (Haz. Substance) | U089 | 56-53-1 | 9 |
| Dihydrosafrole (Haz. Substance) | U090 | 94-58-6 | 9 |
| 3,3'-Dimethoxybenzidine (Haz. Substance) | U091 | 119-90-4 | 9 |
| Dimethylamine (Anhydrous, Solution) | U092 | 124-40-3 | 2.1, 3 |
| p-Dimethylaminoazobenzene (Haz. Substance) | U093 | 60-11-7 | 9 |
| 7,12-Dimethylbenz (a) anthracene (Haz. Substance) | U094 | 57-97-6 | 9 |
| 3,3'-Dimethylbenzidine (Haz. Substance) | U095 | 119-93-7 | 9 |
| alpha,alpha-Dimethylbenzylhydroperoxide | U096 | 80-15-9 | 9 |
| Dimethylcarbamoyl Chloride | U097 | 79-44-7 | 8 |
| Hydrazine, 1,1-dimethyl- | U098 | 57-14-7 | 3, 6.1 |
| 1,2-Dimethylhydrazine | U099 | 540-73-8 | 3, 6.1 |
| 2,4-Dimethylphenol (Haz. Substance) | U101 | 105-67-9 | 9 |
| Dimethyl Phthalate (Haz. Substance) | U102 | 131-11-3 | 9 |
| Dimethyl Sulfate | U103 | 77-78-1 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| 2,4-Dinitrotoluene | U105 | 121-14-2 | 6.1 |
| 2,6-Dinitrotoluene | U106 | 606-20-2 | 6.1 |
| Di-n-Octyl Phthalate (Haz. Substance) | U107 | 117-84-0 | 9 |
| 1,4-Dioxane | U108 | 123-91-1 | 3 |
| 1,2-Diphenylhydrazine (Haz. Substance) | U109 | 122-66-7 | 9 |
| Dipropylamine | U110 | 142-84-7 | 3 |
| Di-n-propylnitrosoamine (Haz. Substance) | U111 | 621-64-7 | 9 |
| Ethyl Acetate | U112 | 141-78-6 | 3 |
| Ethyl Acrylate | U113 | 140-88-5 | 3 |
| Ethylenebisdithiocarbamic Acid, Salts & Esters (Haz. Substance) | U114 | 111-54-6 | 9 |
| Ethylene Oxide | U115 | 75-21-8 | 2.3 |
| Ethylenthiourea (Haz. Substance) | U116 | 96-45-7 | 9 |
| Ethyl Ether (Diethyl Ether) | U117 | 60-29-7 | 3 |
| Ethyl Methacrylate | U118 | 97-63-2 | 3 |
| Ethylmethanesulfonate (Haz. Substance) | U119 | 62-50-0 | 9 |
| Fluoranthene (Haz. Substance) | U120 | 206-44-0 | 9 |
| Trichloromonofluoromethane (Haz. Substance) | U121 | 75-69-4 | 9 |
| Formaldehyde (Solutions-Flammable, Non-Flammable) | U122 | 50-0-0 | 3, 9 |
| Formic Acid | U123 | 64-18-6 | 8 |
| Furan | U124 | 110-00-9 | 3 |
| Furfural | U125 | 98-01-1 | 3 |
| Glycidylaldehyde | U126 | 765-34-4 | 3 |
| Hexachlorobenzene | U127 | 118-74-1 | 6.1 |
| Hexachlorobutadiene | U128 | 87-68-3 | 6.1 |
| Lindane (Haz. Substance) | U129 | 58-89-9 | 9 |
| Hexachlorocyclopentadiene | U130 | 77-47-4 | 6.1 |
| Hexachloroethane (Haz. Substance) | U131 | 67-72-1 | 9 |
| Hexachlorophene | U132 | 70-30-4 | 6.1 |
| Hydrazine | U133 | 302-01-2 | 3, 6.1, 8 |
| Hydrofluoric Acid | U134 | 7664-39-3 | 8 |
| Hydrogen Sulfide | U135 | 7783-06-4 | 2.3, 2.1 |
| Cacodylic Acid | U136 | 75-60-5 | 6.1 |
| Ideno [1,2,3-cd] pyrene (Haz. Substance) | U137 | 193-39-9 | 9 |
| Methyl Iodide | U138 | 74-88-4 | 6.1 |
| Isobutyl Alcohol (Isobutanol) | U140 | 78-83-1 | 3 |
| Isosafrole (Haz. Substance) | U141 | 120-58-1 | 9 |
| Kepone (Haz. Substance) | U142 | 143-50-0 | 9 |
| Lasiocarpine (Haz. Substance) | U143 | 303-34-4 | 9 |
| Lead Acetate | U144 | 301-04-2 | 6.1 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Lead Phosphate (Haz. Substance) | U145 | 7446-27-7 | 9 |
| Lead Subacetate (Haz. Substance) | U146 | 1335-32-6 | 9 |
| Maleic Anhydride | U147 | 108-31-6 | 8 |
| Maleic Hydrazide (Haz. Substance) | U148 | 123-33-1 | 9 |
| Malononitrile | U149 | 109-77-3 | 6.1 |
| Melphalan (Haz. Substance) | U150 | 148-82-3 | 9 |
| Mercury | U151 | 7439-97-6 | 8 |
| Methacrylonitrile | U152 | 126-98-7 | 3 |
| Methanethiol | U153 | 74-93-1 | 2.3, 2.1 |
| Methanol | U154 | 67-56-1 | 3 |
| Methapyrilene (Haz. Substance) | U155 | 91-80-5 | 9 |
| Methyl Chlorocarbonate (Methyl Chloroformate) | U156 | 79-22-1 | 6.1 |
| 3-Methylcholanthrene (Haz. Substance) | U157 | 56-49-5 | 9 |
| 4,4'-Methylenebis(2-Chloraniline) (Haz. Substance) | U158 | 101-14-4 | 9 |
| Methyl Ethyl Ketone (Ethyl Methyl Ketone) | U159 | 78-93-3 | 3 |
| Methyl Ethyl Ketone Peroxide | U160 | 1338-23-4 | 5.2 |
| Methyl Isobutyl Ketone | U161 | 108-10-1 | 3 |
| Methyl Methacrylate (Monomer) | U162 | 80-62-6 | 3 |
| N-Methyl-N'-Nitro-N-Nitrosognanidine | U163 | 70-25-7 | 4.1 |
| Methylthiouracil (Haz. Substance) | U164 | 56-04-2 | 9 |
| Naphthalene (Crude or Refined) | U165 | 91-20-3 | 4.1 |
| 1,4-Naphthalenedione (Haz. Substance) | U166 | 130-15-4 | 9 |
| alpha-Naphthylamine | U167 | 134-32-7 | 6.1 |
| beta-Naphthylamine | U168 | 91-59-8 | 6.1 |
| Nitrobenzene | U169 | 98-95-3 | 6.1 |
| p-Nitrophenol | U170 | 100-02-7 | 6.1 |
| Nitropropane | U171 | 79-46-9 | 3 |
| N-Nitrosodi-n-butylamine (Haz. Substance) | U172 | 924-16-3 | 9 |
| N-Nitrosodiethanolamine (Haz. Substance) | U173 | 1116-54-7 | 9 |
| N-Nitrododiethylamine (Haz. Substance) | U174 | 55-18-5 | 9 |
| N-Nitroso-N-ethylurea (Haz. Substance) | U176 | 759-73-9 | 9 |
| N-Nitroso-N-Methylurea (Haz. Substance) | U177 | 684-93-5 | 9 |
| N-Nitroso-N-Methylurethane (Haz. Substance) | U178 | 615-53-2 | 9 |
| N-Nitrosopiperidine (Haz. Substance) | U179 | 100-75-4 | 9 |
| N-Nitrosopyrrolidine (Haz. Substance) | U180 | 930-55-2 | 9 |
| 5-Nitro-o-toluidine (mono) | U181 | 99-55-8 | 6.1 |
| Paraldehyde | U182 | 123-63-7 | 3 |
| Pentachlorobenzene (Haz. Substance) | U183 | 608-93-5 | 9 |
| Pentachloroethane | U184 | 76-01-7 | 6.1 |
| Pentachloronitrobenzene (Haz. Substance) | U185 | 82-68-8 | 9 |
| 1,3-Pentadiene (Haz. Substance) | U186 | 504-60-9 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Phenacetin (Haz. Substance) | U187 | 62-44-2 | 9 |
| Phenol (molten, solid, solutions) | U188 | 108-95-2 | 6.1 |
| Phosphorus Sulfide | U189 | 1314-80-3 | 4.3, 4.1 |
| Phthalic Anhydride | U190 | 85-44-9 | 8 |
| 2-Picoline | U191 | 109-06-8 | 3 |
| Pronamide (Haz. Substance) | U192 | 23950-58-5 | 9 |
| 1,3-Propane Sultone (Haz. Substance) | U193 | 1120-71-4 | 9 |
| n-Propylamine | U194 | 107-10-8 | 3 |
| Pyridine | U196 | 110-86-1 | 3 |
| p-Benzoquinone | U197 | 106-51-4 | 6.1 |
| Reserpine (Haz. Substance) | U200 | 50-55-5 | 9 |
| Resorcinol | U201 | 108-46-3 | 6.1 |
| Safrole (Haz. Substance) | U203 | 94-59-7 | 9 |
| Selenium Dioxide | U204 | 7783-00-8 | 6.1 |
| Selenium Sulfide | U205 | 7488-56-4 | 6.1 |
| Streptozotocin (Haz. Substance) | U206 | 18883-66-4 | 9 |
| 1,2,4,5-Tetrachlorobenzene (Haz. Substance) | U207 | 95-94-3 | 9 |
| 1,1,1,2-Tetrachloroethane (Haz. Substance) | U208 | 630-20-6 | 9 |
| 1,1,2,2-Tetrachloroehtane (Haz. Substance) | U209 | 79-34-5 | 9 |
| Tetrachloroethylene | U210 | 127-18-4 | 6.1 |
| Carbon Tetrachloride | U211 | 56-23-5 | 6.1 |
| Tetrahydrofuran | U213 | 109-99-9 | 3 |
| Thallium (I) Acetate (Thallium Compound) | U214 | 563-68-8 | 6.1 |
| Thallium (I) Carbonate (Thallium Compound) | U215 | 6533-73-9 | 6.1 |
| Thallium (I) Chloride (Thallium Compound) | U216 | 7791-12-0 | 6.1 |
| Thallium (I) Nitrate (Thallium Compound)) | U217 | 10102-45-1 | 6.1, 5.1 |
| Thioacetamide (Haz. Substance) | U218 | 62-55-5 | 9 |
| Thiourea (Haz. Substance) | U219 | 62-56-6 | 9 |
| Toluene | U220 | 108-88-3 | 3 |
| Toluenediamine (Haz. Substance) | U221 | 25376-45-8 | 9 |
| o-Toluidine Hydrochloride (Haz. Substance) | U222 | 636-21-5 | 9 |
| Toluene Diisocyanate | U223 | 26471-62-5 | 6.1 |
| Bromoform | U225 | 75-25-2 | 6.1 |
| Methyl Chloroform (1,1,1-Trichloroethane) | U226 | 71-55-6 | 6.1 |
| 1,1,2-Trichloroethane (Haz. Substance) | U227 | 79-00-5 | 9 |
| Trichloroethylene | U228 | 79-01-6 | 6.1 |
| Benzene, 1,3,5-trinitro- | U234 | 99-35-4 | 4.1 |
| Tris(2,3-dibromopropyl)phosphate (Haz. Substance) | U235 | 126-72-7 | 9 |
| Trypan Blue (Haz. Substance) | U236 | 72-57-1 | 9 |
| Uracil Mustard (Haz. Substance) | U237 | 66-75-1 | 9 |
| Ethyl Carbamate (Urethane) (Haz. Substance) | U238 | 51-79-6 | 9 |

| Waste Description | Hazardous Waste Code | CAS Registry Number | Hazard Class |
|---|---|---|---|
| Xylene | U239 | 1330-20-7 | 3 |
| 2,4-D, Salts & Esters (Haz. Substance) | U240 | 1 94-75-7 | 9 |
| 1-Propene 1,1,2,3,3,3-hexachloro (Haz. Substance) | U243 | 1888-71-7 | 9 |
| Thiram (Haz. Substance) | U244 | 137-26-8 | 9 |
| Cyanogen Bromide | U246 | 506-68-3 | 6.1 |
| Methoxychlor (Haz. Substance) | U247 | 72-43-5 | 9 |
| Warfarin & Salts (<0.3%) (Haz. Substance) | U248 | 1 81-81-2 | 9 |
| Zinc Phosphide | U249 | 1314-84-7 | 4.3, 6.1 |
| Benoyml | U271 | 17804-35-2 | 9 |
| Sulfallate | U277 | 95-06-7 | 9 |
| Bendiocarb | U278 | 22781-23-3 | 6.1 |
| Carbaryl | U279 | 63-25-2 | 9 |
| Barban | U280 | 101-27-9 | 9 |
| o-Toluidine | U328 | 95-53-4 | 6.1 |
| p-Toluidine | U353 | 106-49-0 | 6.1 |
| Ethylene Glycol Monoethyl Ether | U359 | 110-80-5 | 3 |
| Bendiocarb Phenol | U364 | 22961-82-6 | 6.1 |
| Carbofuran Phenol | U367 | 1563-38-8 | 6.1 |
| Carbendazin | U372 | 10605-21-7 | 9 |
| Propham | U373 | 122-42-9 | 9 |
| Prosulfocarb | U387 | 52888-80-9 | 9 |
| Triallate | U389 | 2303-17-5 | 9 |
| A2213 | U394 | 30558-43-1 | 9 |
| Diethylene Glycol, Dicarbamate | U395 | 5952-26-1 | 6.1 |
| Triethylamine | U404 | 121-44-8 | 3 |
| Ethyl Ziram | U407 | 14324-55-1 | 9 |
| Thiophanate-Methyl | U409 | 23564-05-8 | 9 |
| Thiodicarb | U410 | 59669-26-0 | 9 |
| Propoxur | U411 | 114-26-1 | 6.1 |

N/A: Not Applicable, None Found

## Table II.A.5/6-Ia
## HIGHLY HAZARDOUS CHEMICALS

Table II.A.5/6.-1a is a set of eleven charts containing chemicals selected because of their highly hazardous characteristics. This table intends to address material types different from commonly prohibited materials, such as radioactive and bio-hazardous waste, DOT-classified explosives, and not permitted waste codes. More chemicals will be included in this table as more information is obtained about other materials having highly hazardous characteristics.

The Ten charts in the set may be divided into five groups. Chart 1 displays the name of the chemicals that are not accepted at the facility. Chart 2 lists the chemicals whose acceptability is restricted based on their concentration, physical state, or use. This listing also indicates the largest container size and type in which the chemical may be accepted, as well as whether it can be opened and consolidated at the facility. Charts 3 through 9 segregate other chemicals by DOT hazard class. They also specify the largest size and type of inbound shipping containers, and controls on container opening and consolidation. Chart 10 is a listing of chemicals that present an inhalation hazard.. A setup summary for these charts is shown below.

- Chart 1: Chemicals not accepted at the facility
- Chart 2: Chemicals with restrictions on acceptance
- Charts 2a — 9: Chemicals with Restrictions
- Chart 10: Chemicals having an inhalation hazard

A table explaining abbreviations used in the charts is presented below.

| | |
|---|---|
| Chemical: Chemical name | • A peroxide test entry requires to run such a test prior to approval |
| Haz Class: DOT Hazard | • Comb: Combustible |
| DNA: Do Not Accept | • **%**: Applies if chemical is in this percent solution<br>• **Cyl**: Applies if chemical is a gas<br>• **Dry**: Applies if chemical is devoid of moisture<br>• **Pure:** Applies if chemical is by itself<br>• **Solid:** Applies if chemical is in solid state<br>• **Used**: Applies if chemical is used or contaminated<br>• **X**: Applies to this chemical |
| Size: Inbound container size | • **SQ**: 5 gallons or less<br>• **VSQ**: 1 gallon or less<br>• **VVSQ**: 1 pint or less |
| **DNO:** Do Not Open | • **X**: Container should not be opened |
| **DNC**: Do Not Consolidate | • **X**: Container should not be consolidated |
| Sol'n: Chemical in solution | • **%**: Acceptable chemical percent solution<br>• **Used:** Acceptable when used<br>• **X**: Acceptable only in solution |
| **LP/B/E:** Inbound packing type | • **LP:** Labpack<br>• **B:** Bulk — 5 gallons or more<br>• **E**: Labpack or bulk |

## Table II.A.5/6.-Ia
## Chart 1: Chemicals Not Accepted

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Acetyl Acetone Peroxide | | X | | | | | |
| Acetyl Benzoyl Peroxide | | X | | | | | |
| Acetylcyclohexane Sulfonyl Peroxide | | X | | | | | |
| Acetyl Peroxide | | X | | | | | |
| Ammonium Chlorate | | X | | | | | |
| p-Nitrobenzoyl Azide | | X | | | | | |
| 4-Nitrobenzoyl Azide | | X | | | | | |
| Aluminum Picrate | | X | | | | | |
| Ammonium Perchlorate | | X | | | | | |
| Ammonium Picrate | | X | | | | | |
| Barium Azide | | X | | | | | |
| Carbon Oxyfluoride | | X | | | | | |
| Carbonyl Fluoride | | X | | | | | |
| Cellulose Nitrate | | X | | | | | |
| Cumyl Peroxyneodecanoate | | X | | | | | |
| Cumyl Peroxyneoheptanoate | | X | | | | | |
| Cumyl Peroxypivalate | | X | | | | | |
| Cuprous Acetylide | | X | | | | | |
| Cyanogen | | X | | | | | |
| Cyanogen Chloride | | X | | | | | |
| Di(Ethylhexyl) Peroxydicarbonate | | X | | | | | |
| Di(Methylbenzoyl) Peroxide | | X | | | | | |
| Di (Neodecanoylperoxyisopropyl) Benzene | | X | | | | | |
| Di9Succinic Acid) Peroxide | | X | | | | | |
| Di(t-Butyl Cyclohexyl) Peroxydicarbonate | | X | | | | | |
| Di(Trimethyldioxolanyl) Peroxide | | X | | | | | |
| Di(Trimethylhexanoyl) Peroxide | | X | | | | | |
| D i-2,4-D ichlorobenzoyl Peroxide | | X | | | | | |
| Di-n-Butyl Peroxydicarbonate | | X | | | | | |
| Di-n-Propyl Peroxydicarbonate | | X | | | | | |
| Di-Nonanoyl Peroxide | | X | | | | | |
| Di-Octanoyl Peroxide | | X | | | | | |
| Di-Sec-Butyl Peroxydicarbonate | | X | | | | | |
| Diacetone Alcohol Peroxide | | X | | | | | |
| Diacetylene | | X | | | | | |
| Diazodinitrophenol | | X | | | | | |
| Diazomethane | | X | | | | | |
| Dibenzyl Peroxydicarbonate | | X | | | | | |
| Dibromoacetylene | | X | | | | | |
| Dicetyl Peroxydicarbonate | | X | | | | | |
| Dichlorodiethyl Sulfide | | X | | | | | |
| Dichlorodifluoromethane | | X | | | | | |
| Dicyclohexyl Peroxydicarbonate | | X | | | | | |
| Didecanoyl Peroxide | | X | | | | | |
| Diethylene Glycol Dinitrate | | X | | | | | |
| Dihydroperoxypropane | | X | | | | | |

**Table II.A.5/6.-Ia**
**Chart 1: Chemicals Not Accepted (continued)**

| Chemical | Haz | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Diisobutyryl Peroxide | | X | | | | | |
| Diisopropyl Peroxydicarbonate | | X | | | | | |
| Diisotridecyl Peroxydicarbonate | | X | | | | | |
| Dimethyl Hydroxybutyl Peroxyneoheptanoate | | X | | | | | |
| Dimethyl-Di(ethylhexanoylperoxy) Hexane | | X | | | | | |
| Dimyristyl Peroxydicarbonate | | X | | | | | |
| Dinitrosoresorcinol | | X | | | | | |
| Diperoxy Azelaic Acid | | X | | | | | |
| Dipicryl Sulfide | | X | | | | | |
| Dipicrylamine | | X | | | | | |
| Dipropionyl Peroxide | | X | | | | | |
| Ethyl Nitrite | | X | | | | | |
| Fluorine | | X | | | | | |
| Fluorine Nitrate | | X | | | | | |
| Hydrazine Nitrate | | X | | | | | |
| Hydrazine Perchlorate | | X | | | | | |
| Hydrazoic Acid | | X | | | | | |
| Hydroylamine | | X | | | | | |
| Isoamyl Nitrite | | X | | | | | |
| Isocyanic Acid | | X | | | | | |
| Isopropyl Percarbonate | | X | | | | | |
| Lead Azide | | X | | | | | |
| Lead Trinitroresorcinate | | X | | | | | |
| Lithium Azide | | X | | | | | |
| Mercuric Oxycyanide | | X | | | | | |
| Mercurous Acetylide | | X | | | | | |
| Mercury Fulminate | | X | | | | | |
| Methyl Hydrazine | | X | | | | | |
| Methyl Nitrate | | X | | | | | |
| Methyl Nitrite | | X | | | | | |
| Methyl cyclohexanone Peroxide | | X | | | | | |
| Nitric Oxide | | X | | | | | |
| Nitrogen Dioxide | | X | | | | | |
| Nitrogen Oxide | | X | | | | | |
| Nitroglycerine (not desensitized liquid; Hazard Class I-ID) | | X | | | | | |
| Nitrosoguanidine | | X | | | | | |
| p-Nitrobenzoyl Azide | | X | | | | | |
| P-Nitrosophenol | | X | | | | | |
| Phosgene | | X | | | | | |
| Phosphine | | X | | | | | |
| Picramic Acid | | X | | | | | |
| Picramide | | X | | | | | |
| Picryl Achloride | | X | | | | | |
| Pyroxyline | | X | | | | | |
| Silver Acetylide | | X | | | | | |
| Silver Perchlorate | | X | | | | | |
| Sodium Thiopental | | X | | | | | |

**Table II.A.5/6.-Ia (continued)**
**Chart 1: Chemicals Not Accepted**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| t-Amyl peroxydeconoate | | X | | | | | |
| t-Amyl peroxyethylhexanoate | | X | | | | | |
| t-Amyl Peroxypivalate | | X | | | | | |
| t-Amyl Peroxytrimethylhexanoate | | X | | | | | |
| t-Butyl Hypochlorite | | X | | | | | |
| t-Butyl Peroxylacetate | | X | | | | | |
| t-Butyl Peroxydiethylacetate | | X | | | | | |
| t-Butyl Peroxyethylhexanoate | | X | | | | | |
| t-Butyl Peroxyisobutyrate | | X | | | | | |
| t-Butyl Peroxyneodecanoate | | X | | | | | |
| t-Butyl Peroxyneoheptanoate | | X | | | | | |
| t-Butly Peroxyphthalate | | X | | | | | |
| t-Butyl Peroxypivalate | | X | | | | | |
| Tabun | | X | | | | | |
| Tetramethylbutylperoxy Ethylhexanoate | | X | | | | | |
| Tetranitroaniline | | X | | | | | |
| Tetranitromethane | | X | | | | | |
| Tetryl | | X | | | | | |
| Trimethylpentyl Peroxyneodecanoate | | X | | | | | |
| Trimethylpentyl Peroxyphenoxyacetate | | X | | | | | |
| Trinitroaniline | | X | | | | | |
| Trinitroanisole | | X | | | | | |
| Trinitrobenzene | | X | | | | | |
| Trin itromethane | | X | | | | | |
| Trinitrotoluene | | X | | | | | |

**Table II.A.5/6.-Ia (continued)**
**Chart 2: Chemicals with Restrictions on Acceptance**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| t-Butyl Peroxytrimethylhexanoate | 5.2 | <32% | SQ | X | | >32% | E |
| Diperoxyl Dodecanediacid | 5.2 | >13% | SQ | X | | <13% | E |
| Benzoyl Peroxide | 5.2 | >51% | SQ | X | | <51% | E |
| Di-4-Chlorobenzoyl Peroxide | 5.2 | >52% | SQ | X | | <52% | E |
| Hexamethyl Tetraoxacyclonoane | 5.2 | >52% | SQ | X | | <52% | E |
| t-Butyl Peroxymaleate | 5.2 | >5.2% | SQ | X | | <52% | e |
| 3-Chloroperoxybenzoic Acid | 5.2 | >57% | SQ | X | | <57% | E |
| Perchloric Acid | 5.2 | >72% | SQ | | | <72% | E |
| Di(t-Butyl Peroxy) Cyclohexane | 5.2 | '>80% | SQ | X | | <80% | E |
| Dimethyl-Di(Benzoylperoxy) Hexane | 5.2 | >82% | SQ | X | | <82% | E |
| Di(Phenoxyethyl) Peroxydicarbonate | 5.2 | >85% | SQ | X | | <85% | E |
| Di(t-Butylperoxy) Trimethylcyclohexane | 5.2 | >90% | SQ | X | | <90% | E |
| Dinitrophenylhydrazine | 4.1 | Dry | SQ | | X | X | E |
| Nitrocellulose | 4.1 | Dry | SQ | | X | <25% | E |
| Nitrostarch | 4.1 | Dry | VVSQ | | X | <25% | LP |
| Picric Acid | 4.1 | Dry | SQ | | X | Wet | E |
| Sodium Dinitro-o-cresolate | 4.1 | Dry | VSQ | X | | X | LP |
| Sodium Picramate | 4.1 | Dry | VSQ | | X | <25% | LP |
| Trinitrobenzoic Acid | 4.1 | Dry | VSQ | X | | <25% | LP |
| Urea Nitrate | 4.1 | Dry | VSQ | X | | X | LP |
| Mercuric Perchlorate | 5.1 | Dry | VSQ | X | | <50% | LP |
| Mercury Perchlorate | 5.1 | Dry | VSQ | X | | <50% | LP |
| Dinitro-o-Cresol | 6.1 | Dry | SQ | X | | X | E |
| Dinitrobenzene | 6.1 | Dry | VSQ | | X | X | LP |
| p-Nitrophenylhydrazine | 9 | Dry | VVSQ | X | | X | LP |
| Cumene Hydroperoxide | 5.2 | Pure | VSQ | X | | <90% | LP |
| Bromopicrin | 6.1 | Pure | VSQ | | X | X | LP |
| Chloropicrin | 6.1 HZ B | Pure | VSQ | | X | X | LP |
| Dinitrophenol | 5.1 | Used | SQ | | X | X | E |

**Table II.A.5/6.-Ia (continued)**
**Chart 2a: Chemicals with Restrictions on Acceptance (Hazard Class 2)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Vinyl Chloride | 2.1 | | SQ | | | | |
| Hydrogen Sulfide | 2.3 HZ B | | SQ | | | | |
| Methanethiol | 2.3 | | SQ | | | | |
| Thiomethanol | 2.3 | | SQ | | | | |

**Table II.A.5/6.-Ia (continued)**
**Chart 3: Chemicals with Restrictions on Acceptance (Hazard Class 3)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| ((l-Ethoxycyclopropyl)oxy)trimethyl | 3 | | VSQ | X | | | LP |
| (Iodomethyl)trimethyl Silane | 3 | | SQ | X | | | E |
| (Trimethylsilyl) Methanol | 3 | | | | X | | E |
| 1,2-Epoxybutane | 3 | | SQ | | X | | E |
| 1,2-Propyleneimine | 3 | | VSQ | X | | | LP |
| 1,3,3-Trimethoxypropene | 3 | | | Peroxide Test | | | B |
| 1-(Trimethylsilyloxy)cyclopentene | 3 | | VSQ | X | | | LP |
| 1-Butanethiol | 3 | | | X | | | B |
| 1-Methoxybutane | 3 | | | Peroxide Test | | | B |
| 1-Pentanethiol | 3 | | | X | | | B |
| 1-Propanethiol | 3 | | | X | | | B |
| 2,2-Dimethoxypropane | 3 | | | Peroxide Test | | | B |
| 2-Butanethiol | 3 | | | X | | | B |
| 2-Chloroethoxytrimethyl silane | 3 | | VSQ | X | | | LP |
| 2-Methyl-I -Propanethiol | 3 | | | X | | | B |
| 2-Methyl-2-Propanethiol | 3 | | | X | | | B |
| 2-Methylaziridine | 3 | | VSQ | X | | | LP |
| 2-Propanethiol | 3 | | | X | | | B |
| 3-(Trimethoxysilyl)propanethiol | 3 | | SQ | X | | | E |
| 3-Chloro-I-Propanethiol | 3 | | | X | | | B |
| 3-Chloropropyl Mercaptan | 3 | | | X | | | B |
| 3-Chloropropyldimethylchlorosilane | 3 | | SQ | | X | | E |
| 3-Methyl- I -Trimethylsiyl-2-Butene | 3 | | SQ | | X | | E |
| Acetyl Nitrate | 3 | | SQ | X | | | E |
| Acrylonitrile | 3 | | | | X | | E |
| Allyl Bromide | 3 | | SQ | X | | | E |
| Allyl Chloride | 3 | | SQ | X | | | E |
| Allyl Mercaptan | 3 | | | X | | | B |
| Allyl Methacrylate | 3 | | SQ | | X | | E |
| Allyl Sulfide | 3 | | | X | | | B |
| Allyloxytrimethylsilane | 3 | | VSQ | X | | | LP |
| Allylthiol | 3 | | | X | | | B |
| Allyltriethoxysilane | 3 | | SQ | X | | | E |
| Allyltrimethylsilane | 3 | | SQ | | X | | E |
| Benzenethiol | 3 | | | X | | | B |
| Benzyl Azide | 3 | | SQ | | X | | E |
| Bicyclo [2.2. 1 ]hepta-2,5-diene | 3 | | | Peroxide Test | | | B |
| bis(Trimethylsilyl) Acetylene | 3 | | VSQ | X | | | LP |
| bis(Trimethylsiy1) Methane | 3 | | | | X | | E |
| Butanediol Dimethacrylate | 3 | | SQ | X | | | E |
| Butyl Ether | 3 | | SQ | Peroxide Test | | | E |
| Butyl Methyl Ether | 3 | | | Peroxide Test | | | B |
| Carbon Disulfide | 3 | | | X | | | E |
| Chloro(Chloromethyl)dimethyl Silane | 3 | | SQ | | X | | E |
| Chlorodimethylsilane | 3 | | VSQ | | X | | LP |
| Chloromethylvinylsilane | 3 | | VSQ | X | | | LP |

**Table II.A.5/6.-Ia (continued)**
**(Chart 3 continued): Chemicals with Restrictions on Acceptance (Hazard Class 3)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Chloromethyl Methyl Ether | 3 | | SQ | X | | | B |
| cis-2,3-Epoxybutane | 3 | | SQ | | X | | E |
| Collodion | 3 | | VSQ | | X | | LP |
| Cyanotrimethylsilane | 3 | | VSQ | X | | | LP |
| Cyclohexyl Methacrylate | 3 | | SQ | | X | | E |
| Diethoxymethane | 3 | | SQ | Peroxide Test | | | B |
| Dimethoxydimethylsilane | 3 | | SQ | X | | | E |
| Dimethyl Sulfide | 3 | | | X | | | B |
| Dimethyldichlorosilane | 3 | | VSQ | X | | | LP |
| Dimethylisopropylsilane | 3 | | VSQ | X | | | LP |
| Dimethylphenylsilane | 3 | | VSQ | X | | | LP |
| Ethanedithiol | 3 | | | X | | | B |
| Ethanethiol | 3 | | | X | | | B |
| Ethyl Acrylate | 3 | | SQ | X | | | E |
| Ethyl chlorosulfonate | 3 | | | X | | | B |
| Ethyl Dizaoacetate | 3 | | SQ | | X | | E |
| Ethyl mercaptan | 3 | | | X | | | B |
| Ethyl Methyl Sulfide | 3 | | | X | | | B |
| Ethyl Nitrate | 3 | | VVSQ | X | | | LP |
| Ethyl Nitrite | 3 | | VVSQ | X | | | LP |
| Ethyltrichlorosilane | 3 | | VSQ | X | | | LP |
| Ethynyltrimethylsilane | 3 | | VVSQ | X | | | LP |
| Glyoxal | 3 | | | X | | | E |
| Hexanethiol | 3 | | | X | | | B |
| Hydrazine | 3 | | | X | X | >64% | E |
| Isobutyl Isocyanate | 3 | | SQ | | X | | E |
| Isobutyl Mercaptan | 3 | | | X | | | B |
| Isobutyl Methacrylate | 3 | | | | X | | E |
| Isobutyl Nitrate | 3 | | VVSQ | X | | | LP |
| Isobutyl Nitrile | 3 | | VVSQ | X | | | L[ |
| Isopropyl Chloroformate | 3 | | VVSQ | X | | | LP |
| Isopropyl Ether - | 3 | | SQ | Peroxide Test | | | |
| Isopropyl Isocyanate | 3 | | SQ | | X | | E |
| Isopropyl Mercaptan | 3 | | | X | | | B |
| Isopropyl Nitrate | 3 | | VVSQ | X | | | LP |
| Isopropyl Nitrate | 3 | | VVSQ | X | | | LP |
| Methacrylonitrile | 3 | | SQ | X | | | E |
| Methaminodimethyl Acetal | 3 | | | X | | | E |
| Methyl Acrylate | 3 | | VSQ | X | | | LP |
| Methyl Chloromethyl Ether | 3 | | SQ | | X | | E |
| Methyl Methacrylate | 3 | | SQ | Peroxide Test | | | B |
| Methylaminoacetaldehyde Dimethyl | 3 | | | X | | | E |
| Methyltrichlorosilane | 3 | | VSQ | X | | | LP |
| Methylvinyldiethoxysilane | 3 | | SQ | | X | | E |
| N, N-Diethyl-1,1,1-trimethylsilanamine | 3 | | SQ | | X | | E |
| n-Amyl Mercaptan | 3 | | | X | | | B |
| n-Amyl Nitrate | 3 | | SQ | | X | | E |

## Table H.A.5/6.-Ia (continued)
## Chart 3 (continued): Chemicals with Restrictions on Acceptance (Hazard Class 3)

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| n-Amyl Nitrite | 3 | | VSQ | X | | | LP |
| n-Butyl Acrylate | 3 | | SQ | X | | | E |
| n-Butyl Isocyanate | 3 | | SQ | | X | | E |
| n-Butyl Mercaptan | 3 | | | X | | | B |
| n-Butyl Methacrylate | 3 | | | | X | | E |
| n-Butyl Nitrate | 3 | | VVSQ | X | | | LP |
| n-Butyl Nitrite | 3 | | VVSQ | X | | | LP |
| n-Butyl Sulfide | 3 | | | X | | | B |
| Nitroglycerine | 3 | | SQ | X | | | LP |
| n-Propyl Mercaptan | 3 | | | X | | | B |
| n-Propyl Nitrate | 3 | | VVSQ | X | | | LP |
| Nitromethane | 3 | | VSQ | | X | | LP |
| Octamethyltrisiloxane | 3 | | | | X | | E |
| Pentanethiol | 3 | | | X | | | B |
| Phenyl Mercaptan | 3 | | | X | | | E |
| Propanethiol | 3 | | | X | | | B |
| Propargyl Bromide | 3 | | SQ | | X | | E |
| Propylene Oxide | 3 | | SQ | X | | | E |
| Propylene Sulfide | 3 | | | X | | | B |
| Propyleneimine | 3 | | | X | | | E |
| sec-Butyl Mercaptan | 3 | | | X | | | B |
| t-Butyl Disulfide | 3 | | | X | | | B |
| t-Butyl Mercaptan | 3 | | | X | | | B |
| t-Butyl Nitrite | 3 | | VSQ | X | | | LP |
| t-Butyldimethyl Silane | 3 | | SQ | | X | | E |
| Tetraethylsilane | 3 | | SQ | | X | | E |
| Tetramethyl Lead | 3 | | VSQ | X | | | LP |
| Thioanisole | 3 | | | X | | | B |
| Thiophene | 3 | | | X | | | LP |
| Triethoxyphenylsilane | 3 | | | | X | | E |
| Triethoxyvinylsilane | 3 | | SQ | | X | | E |
| Triethyl Phosphite | 3 | | | | X | | E |
| Triethylsilane | 3 | | SQ | | X | | E |
| Trimethyl Phosphite | 3 | | SQ | X | | | E |
| Trimethyl(Phenylthiomethyl) Silane | 3 | | SQ | X | | | E |
| Trimethyl-2-Thienylsilane | 3 | | SQ | | X | | E |
| Trimethylchlorosilane | 3 | | VSQ | X | | | LP |
| Trimethylvinylsilane | 3 | | VSQ | X | | | LP |

**Table II.A.5/6.-Ia (continued)**
**Chart 4: Chemicals with Restrictions on Acceptance (Hazard Class 4)**

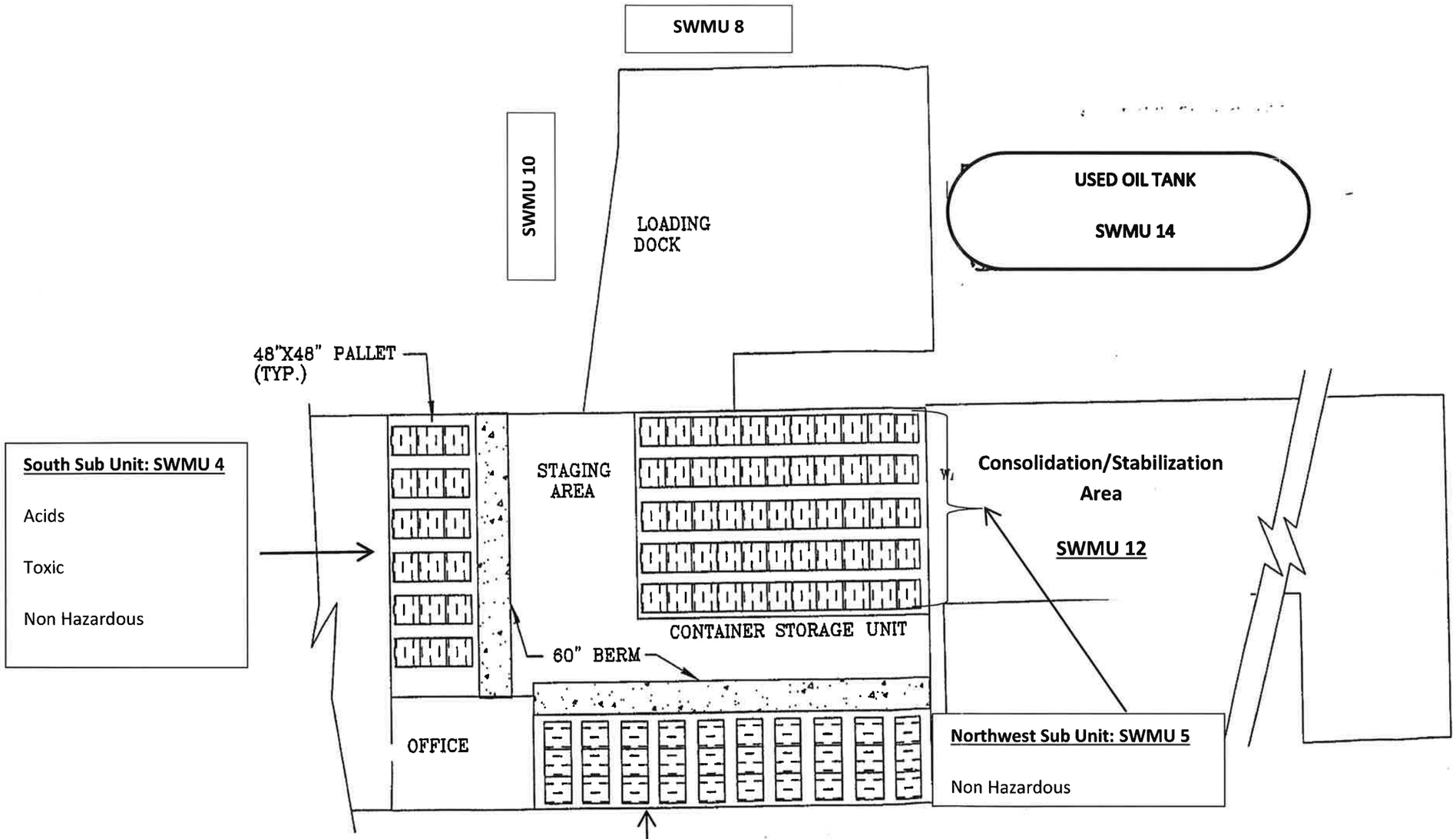
| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| 2-Diazo-l-Naphthone-5-Sulfonyl | 4.1 | | SQ | X | | | E |
| Cobalt Resinate | 4.1 | | SQ | | | | B |
| Decaborane | 4.1 | | SQ | | | | B |
| Dinitrobenzoyl Chloride | 4.1 | | VSQ | X | | | LP |
| Dinitrobenzoyl Chloride | 4.1 | | SQ | | X | | E |
| Dinitrotoluene | 4.1 | | VSQ | X | | <25% | LP |
| Lithium Diethylamide | 4.1 | | VSQ | X | | | LP |
| Lithium Hexamethyldisilazide | 4.1 | | VSQ | X | | | LP |
| MNNG | 4.1 | | VSQ | X | | | LP |
| Nitroglycerine | 4.1 | | SQ | X | | | LP |
| N-Methyl-N'-Nitro-N-Nitrosoguaridine | 4.1 | | VSQ | X | | | LP |
| Oxazine Perchlorate | 4.1 | | SQ | | X | | E |
| Phosphorus Sesquisulfide | 4.1 | | SQ | X | | | E |
| Phosphorus Trisulfide | 4.1 | | SQ | X | | | E |
| Potassium Amide | 4.1 | | VSQ | X | | | LP |
| Titanium Subhydride | 4.1 | | VSQ | X | | | LP |
| Calcium Sulfide | 4.2 | | SQ | | X | | E |
| Cyclopentadienyliron Dicarbonyl | 4.2 | | VSQ | X | | | LP |
| Diethyl Magnesium | 4.2 | | VSQ | X | | | LP |
| Diethyl Zinc | 4.2 | | VSQ | X | | | LP |
| Diethylaluminum Chloride | 4.2 | | VVSQ | X | | | LP |
| Diethylarsine | 4.2 | | VSQ | X | | | LP |
| Diisobutylaluminum Hydride | 4.2 | | VSQ | X | | | LP |
| Dimethyl Magnesium | 4.2 | | VVSQ | X | | | LP |
| Dimethyl Zinc | 4.2 | | VSQ | X | | | LP |
| Dimethylarsenic | 4.2 | | VSQ | X | | | LP |
| Magnesium Diamide | 4.2 | | SQ | X | | | E |
| Magnesium Diphenyl | 4.2 | | VSQ | X | | | LP |
| Pentaborane | 4.2 | | SQ | X | | | E |
| Phenylmagnesium Chloride | 4.2 | | VVSQ | X | | Solid | LP |
| Phenylmagnesium Chloride | 4.2 | | VSQ | X | | X | LP |
| Phosphorus | 4.2 | | VSQ | X | | | LP |
| Potassium Sulfide | 4.2 | | VSQ | X | | | LP |
| Titanium Boride | 4.2 | | VSQ | X | | | LP |
| Titanous Chloride | 4.2 | | SQ | X | | | E |
| Triethylaluminum | 4.2 | | VSQ | X | | | LP |
| Triethylborane | 4.2 | | VSQ | X | | | LP |
| Triisobutylaluminum | 4.2 | | VSQ | X | | | LP |
| Trimethylaluminum | 4.2 | | VSQ | X | | | LP |
| Trimethylaminealuminum Hydride | 4.2 | | VSQ | X | | | LP |
| Aluminum Carbide | 4.3 | | SQ | X | | | E |
| Aluminum Hydride | 4.3 | | SQ | X | | | E |
| Aluminum Hypophosphite | 4.3 | | | | X | | E |
| Aluminum Phosphide | 4.3 | | SQ | X | | | E |
| Boron Trifluoride Dimethyl Etherate | 4.3 | | SQ | X | | | E |
| Calcium Carbide | 4.3 | | SQ | | | | B |
| Calcium Cyanamide | 4.3 | | SQ | | X | | B |

**Table II.A.5/6.-Ia (continued)**
**Chart 4: Chemicals with Restrictions on Acceptance (Hazard Class 4)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Calcium Phosphide | 4.3 | | VSQ | X | | | LP |
| Dimethylisopropylsilane | 4.3 | | VSQ | X | | | LP |
| Ethyldichlorosilane | 4.3 | | VSQ | X | | | LP |
| Gallium Phosphide | 4.3 | | VSQ | X | | | LP |
| Magnesium Aluminum Phosphide | 4.3 | | VSQ | X | | | LP |
| Magnesium Hydride | 4.3 | | SQ | X | | | E |
| Magnesium Phosphide | 4.3 | | VSQ | X | | | LP |
| Manganese Hypophosphite | 4.3 | | VSQ | X | | | LP |
| Phosphorus Sulfide | 4.3 | | SQ | X | | | E |
| Sodium Aluminum Hydride | 4.3 | | VSQ | X | | | LP |
| Sodium Phosphide | 4.3 | | VSQ | X | | | LP |
| Stannic Phosphide | 4.3 | | VSQ | X | | | LP |
| Strontium Phosphide | 4.3 | | VSQ | X | | | LP |
| Tin Phosphide | 4.3 | | SQ | X | | | E |
| Zinc Phosphide | 4.3 | | VSQ | X | | | LP |

**Table II.A.5/6.-Ia (continued)**
**Chart 5: Chemicals with Restrictions on Acceptance (Hazard Class 5.1, 5.2)**

| Chemical | Haz Class | DNA | Size | DNO | DNC | Sol'n | LP/B/E |
|---|---|---|---|---|---|---|---|
| Aminoquanidine Nitrate | 5.1 | | VVSQ | X | | | LP |
| Barium Peroxide | 5.1 | | SQ | X | | | E |
| bis(Triphenylphosphoranylidene) Ammon Nitrate | 5.1 | | VVSQ | X | | | LP |
| Cupric Perchlorate | 5.1 | | VSQ | X | | | LP |
| Erbium Nitrate | 5.1 | | VSQ | X | | | LP |
| Guanidine Nitrate | 5.1 | | VSQ | | | | LP |
| Iodine Pentafluoride | 5.1 | | VSQ | X | | | LP |
| Lithium Hypochlorite | 5.1 | | SQ | X | | | E |
| Lithium Nitrate | 5.1 | | VSQ | | | | LP |
| Lithium Peroxide | 5.1 | | SQ | X | | | E |
| Neodymium Nitrate | 5.1 | | VSQ | | X | | LP |
| Nitronium Perchlorate | 5.1 | | VSQ | X | | | LP |
| Potassium Dichloroisocyanurate | 5.1 | | SQ | | X | | E |
| Potassium Peroxide | 5.1 | | VSQ | X | | | LP |
| Pyridinium Dichromate | 5.1 | | VSQ | | X | | LP |
| Silver Chlorate | 5.1 | | VSQ | X | | | LP |
| Silver Perchlorate | 5.1 | | VSQ | X | | | LP |
| Silver Permanganate | 5.1 | | VSQ | X | | | LP |
| Sodium Dichloroisocyanurate | 5.1 | | SQ | | X | | E |
| Tetramethylammonium Nitrate | 5.1 | | VSQ | X | | | LP |
| Chlorobenzoyl Peroxide | 5.2 | | SQ | | | | E |
| Di-t-Butyl Peroxide | 5.2 | | SQ | | X | | E |
| Lauroyl Peroxide | 5.2 | | SQ | X | X | | E |
| Methyl Ethyl Ketone Peroxide | 5.2 | | VSQ | X | | <45% | LP |
| Myristoyl Peroxide | 5.2 | | SQ | | | | E |
| Performic Acid | 5.2 | | SQ | | X | | E |
| Peroxybenzoyl Nitrate | 5.2 | | SQ | X | | | E |
| Propionyl Peroxide | 5.2 | | SQ | X | X | | E |



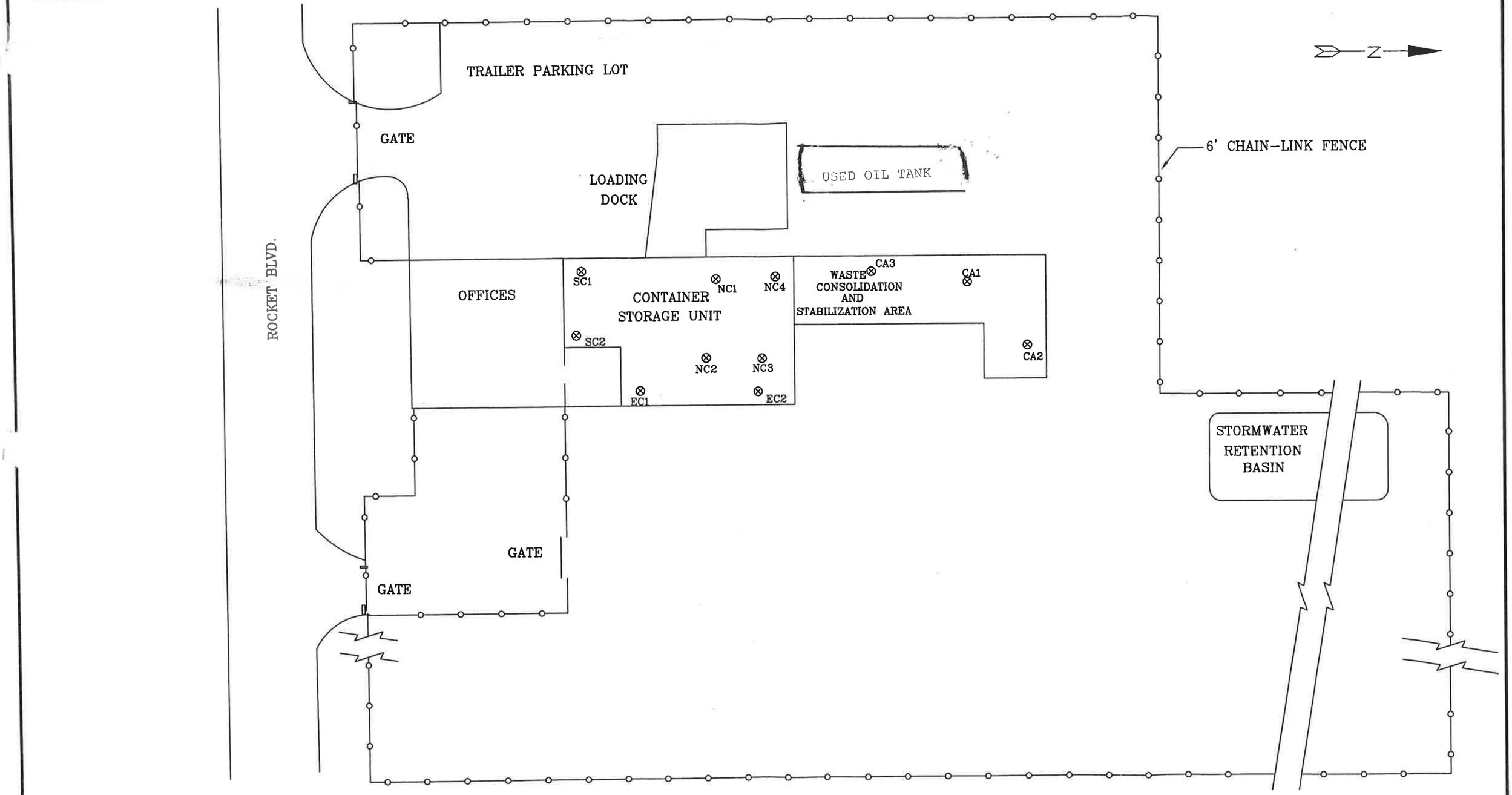

Triumvirate Environmental (Florida), Inc.
Facility Storage & SWMU Locations

FIGURE I D 1

SCALE: NOT TO SCALE

| CHECKED BY: | DRAWN BY: | DATE DRAWN: | PROJECT #: | REVISION: |
|---|---|---|---|---|
| GBG | BAH | 08-14-08 | PF10R080009 | 0 |

SCHREIBER & YONLEY ASSOCIATES
ENVIRONMENTAL ENGINEERS




| | | | | | |
|---|---|---|---|---|---|
| Triumvirate Environmental ORLANDO, INC. | | | | FIGURE II K 1 | SCHREIBER & YONLEY ASSOCIATES |
| FACILITY CLOSURE SAMPLING LOCATIONS | | | | I___I 100 Ft | |
| CHECKED BY: | DRAWN BY: | DATE DRAWN: | PROJECT #: | REVISION: | ENVIRONMENTAL ENGINEERS |

Exhitibit IIA.7-4: Example Manifest Discrepancy Notification Form

# TRIUMVIRATE
## ENVIRONMENTAL

## Load/Manifest Discrepancy Notification

| | |
|---|---|
| Generators Name: | EPA ID#: |
| Generators Address: | |
| Manifest # | Date: |

| Manifest Line # | Waste Description | # of drums | Method of treatment, or disposal | A brief explanation of why the waste was un-manifested |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

This document is being sent as notification of a Manifest/Profile Discrepancy for materials that are being delivered/received at Triumvirate Environmental (FL), Inc.... Triumvirate Environmental (FL), Inc.MUST receive acknowledgement of receipt of this document and authorization by signature (or other means) to remedy above discrepancy within 24 hours or this material is subject to rejection or additional charges.

Generator Acknowledgement_____Date_____

Triumvirate Environmental Inc Representative_____

Title_____Date_____

Please fax back this signed form as described, within 24 hours of receipt. If you wish to email it, please give us a call and we would be happy to provide an email address to ensure it is received and handled promptly.

Triumvirate Environmental (Florida), Inc is located at 10100 Rocket Blvd, Orlando Florida 32824.
Our contact information is: Phone: 407-859-4441Fax: 407-218-6703.

Exhibit II.A7.5 : EXAMPLE DRUM I.D. LABEL

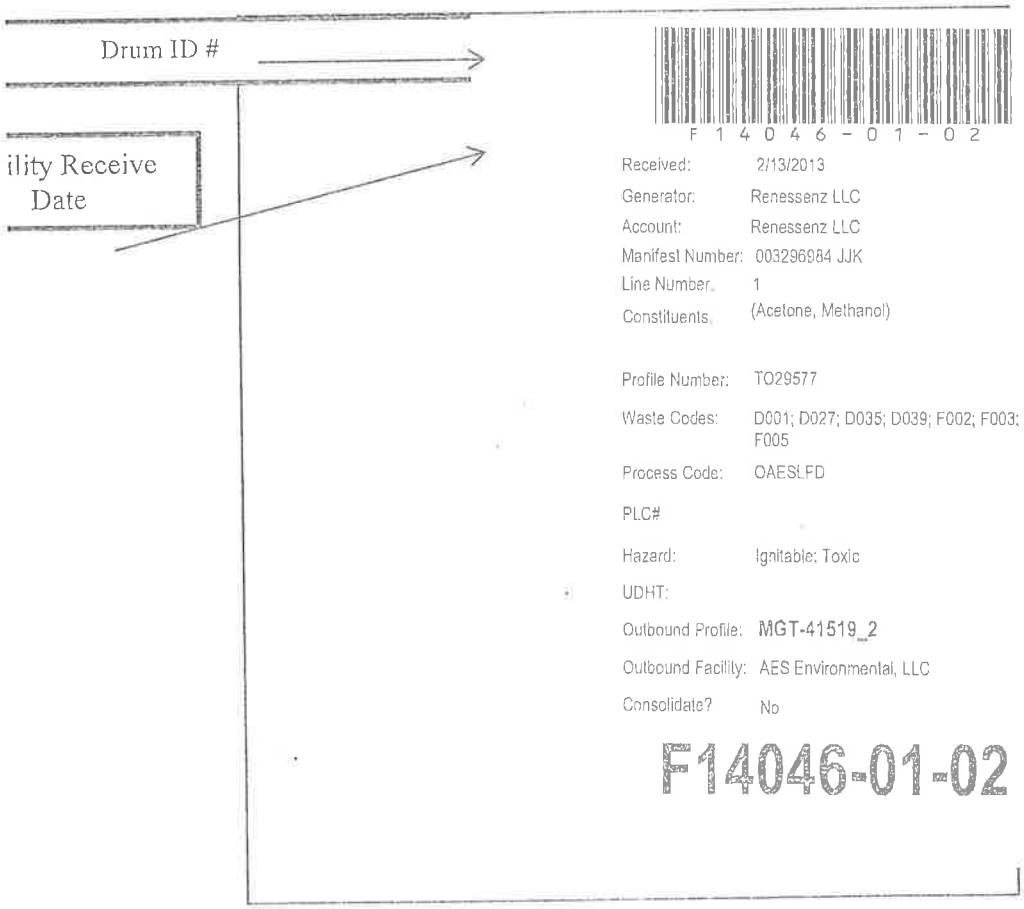


Exhibit II.A.7.-6: SHIPMENT PREVIEW REPORT



## Transfer Station A

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 003297580 JJK | AES Environmental, LLC | UN1090, Waste Acetone 3, II (RQ: D001) | 1 | 1 | 55 | 55 | G | DM | D001; F003 | MGT-42300 |
| 003297582 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, II (Toluene, Xylene) | 1 | 1 | 55 | 55 | G | DM | D001; D035; F003; F005 | MGT-35827 |
| 003297583 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, II (RQ: D001 D007,D008,F003,F005) (RQ: Lead, Xylene) | 1 | 4 | 55 | 832 | L | DM | D001; D007; D008; D035; F003; F005 | MGT-45880 |
| 003297584 JJK | Tiru Waste Environmental (Orlando), Inc. | UN1791, Waste Hypochlorite solutions 8, II (RQ: D002) | 1 | 1 | 55 | 208 | L | DM | D002 | P 32004 |
| 003297585 JJK | AES Environmental, LLC | | 1 | 0 | | 0 | | | | PENDING |
| 003297585 JJK | AES Environmental, LLC | UN1993, Waste Flammable liquids, n.o.s. 3, II (ISOPROPYL ALCOHOL, DIMETHYL BENZYL AMMONIUM CHLORIDE) (RQ: D001) | 2 | 1 | Cubic Yard Box | 586 | K | CF | D001; D005; D035; F003; F005 | PENDING |
| 003297586 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, II (Toluene, Xylene) (RQ: D001) (RQ: Xylene) | 1 | 3 | 55 | 165 | G | DM | D001; D035; F003; F005 | MGT-42323 |
| 003297593 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, II (Toluene, Xylene) (RQ: D001) (RQ: Xylene) | 1 | 3 | 55 | 165 | G | DM | D001; D035; F003; F005 | MGT-35878 |
| 003036264 JJK | AES Environmental, LLC | UN1263, Waste Paint related material 3, III (RQ: D001) | 1 | 1 | 55 | 55 | G | DM | D001; D035; F003; F005 | MGT-45326 |

## Exhibit IIA.7-7: Facility Tracking REport



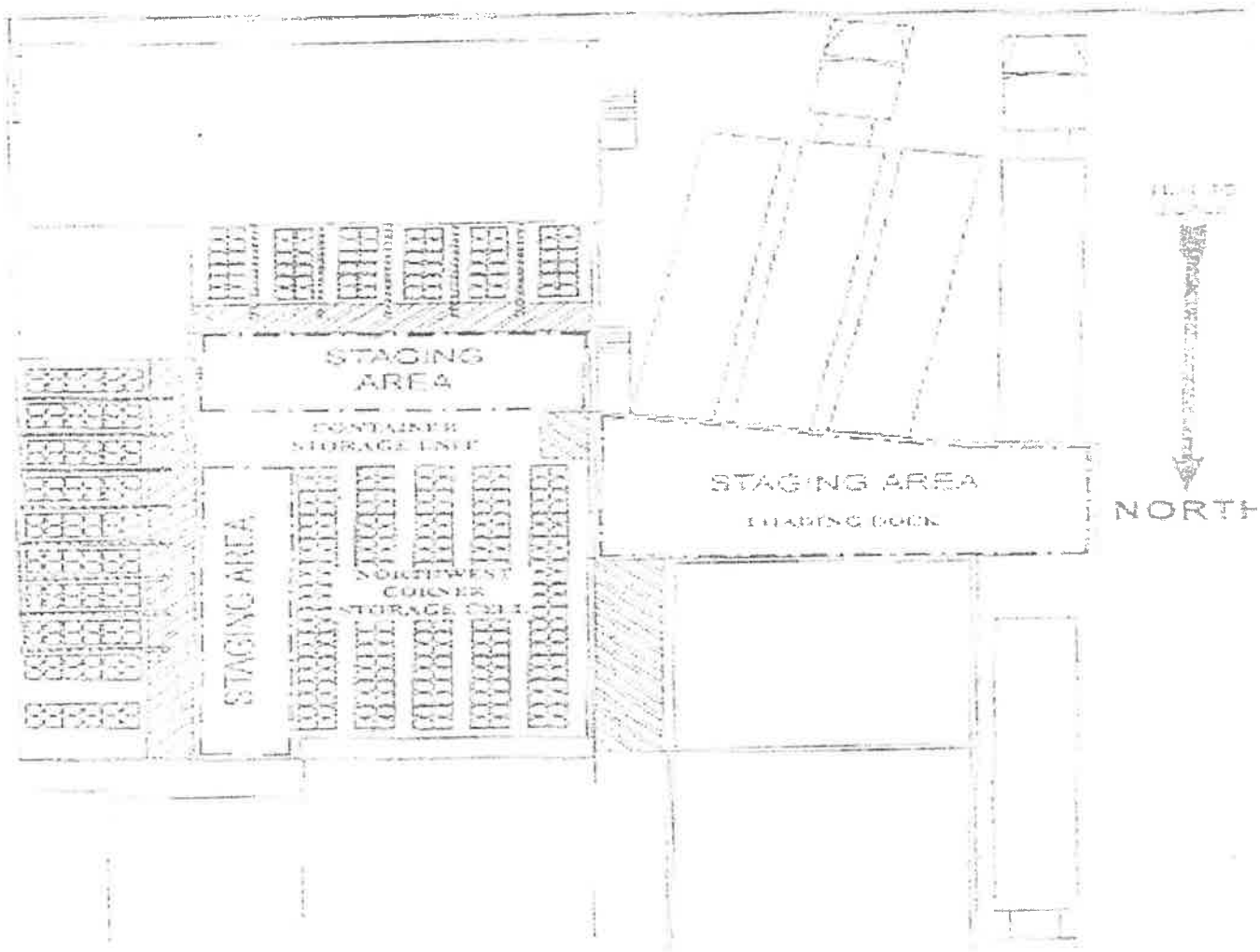
Triumvirate Environmental (Orlando) Inc. (FLD980559728) | 10100 Rocket Boulevard | Orlando, FL 32824

Facility Tracking Report For: Associated Chemists, Inc. (FLCESQG00077)

NHWM058208 Transporter:Triumvirate Environmental (Florida), Inc (FLD981019773) | 3670 SW 47th Avenue | Davie FL 33314

| Line | Profile | Waste Codes | Hazard Class | Qty | Size | Type | Treatment Method | Receipt/processing Information | Tracking Code | Outbound Manifest | Certified Final Disposal | Disposal Method | Empty Cntr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 3 | TO27127 | | | 1 | 55 | DF | | Charles "Kip" Buckle | F1315-03-01 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-01 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-02 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-03 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-04 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-05 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-06 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-07 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-08 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |
| 1 - 4 | TO27127 | | | 9 | 55 | CF | | Charles "Kip" Buckle | F1315-04-09 | 005175875 FLE | AES Environmental, LLC | H132 | N/A |

Exhibit
bit II.A.7-8: Staging Area for Transfer




STAGING AREAS FOR TRANSFER FACILITY CONTAINERS

Exhibit IIA.7-9 Rejected Waste Log

TRIUMVIRATE
ENVIRONMENTAL

Discrepancy Notice/Resolution

Date:

Generator:

Manifest#:

Line Item:

Profile/Container #:

Reason for Discrepancy:

Resolution:

Please note: Resolution must be faxed or emailed within 24 hours of receipt of this notice or rejection may occur.

Printed Name

Signature

Company Name

Date