May 1, 2023

Florida DEP
Hazardous Waste Permitting Section
2600 Blair Stone Road, Mail Station 4550
Tallahassee, FL 32399-2400

RE: F.A.C Chapter 62-730 Permit Renewal Application for Triumvirate Environmental Services, Inc.
EPA ID#: FLD980559728
Current Permit #: 26916-009-HO

To Whom it May Concern,

Triumvirate Environmental Services, Inc. (Triumvirate) operates a hazardous waste storage facility located at 10100 Rocket Blvd, Orlando, FL 32824 in Orange County. The current operating permit, Permit No. 26916-009-HO, was issued on October 17, 2018, and expires on November 6, 2023. A permit renewal application is required to be submitted by May 10, 2023, at least 180 days before the expiration date.

An initial pre-application meeting occurred on January 26, 2023, via a conference call with representatives from the Florida Department of Environmental Protection (FDEP) and Triumvirate. A second pre-application meeting occurred on April 17, 2023, via a conference call with FDEP and Triumvirate.

Triumvirate is proposing modifications to the current operations. The proposed modifications have been incorporated into the applicable permit application sections. A list of the proposed modifications is provided below:

1. Triumvirate proposes the installation of three self-contained, pre-fabricated, flammable storage units on the exterior of the existing container storage unit area. Each unit will have its own secondary containment. The units would not be connected to the main building but would be free-standing and placed on new, poured concrete with additional secondary containment for the area. The units would be used to store and consolidate flammable materials, since this is currently approved in the permit but restricted inside our facility due to fire department limitations. This area is shown in **Figure II.A.5-1 "Modified Facility Site Plan"** and in **Figure I.D.1-1 "Flammable Container Storage Layout"**. The overall site limit of 824, 55-gallon containers would not be increased.

2. Triumvirate proposes to also be able to consolidate flammable solids in the area created for the new flammable storage units mentioned in Item #1. Flammable solids would be stored inside the new flammable material storage units. Smaller containers of flammable solids would be consolidated into larger containers just outside of the flammable storage units to allow for forklift usage. The area will be new, poured concrete and will have secondary containment. This area is shown in **Figure II.A.5-1 "Modified Facility Site Plan"** and in **Figure I.D.1-1 "Flammable Container Storage Layout"**. The overall site limit of 824, 55-gallon containers would not be increased.

3. Triumvirate requests the ability to pump containers of flammable liquids into tanker trucks. Vacuum tanker trucks would arrive at the site and "sting" drums using a wand and vacuum hose. This activity would only be located in an area that has secondary containment.

4. Triumvirate requests the ability to pump containers of corrosive liquids into tanker trucks. Vacuum tanker trucks would arrive at the site and "sting" drums using a wand and vacuum hose. This activity would only be located in an area that has secondary containment.

5. Triumvirate requests a modification to the existing permit language that will allow hazardous waste and non-hazardous waste to be stored in the Northwest sub-unit within the Container Storage Area. The current permit language denotes this area as non-hazardous waste only. The area is currently bermed for secondary containment and the floor is sealed. The overall site limit of 824, 55-gallon containers would not be increased.

6. Triumvirate proposes having the option to store hazardous waste in the Waste Stabilization and Consolidation Area if the material meets compatibility requirements. The area already provides secondary containment and is bermed and sealed. The overall site limit of 824, 55-gallon containers would not be increased.

7. Triumvirate proposes storing non-hazardous waste in the northern section of the Waste Stabilization and Consolidation warehouse. A new berm would be installed to separate this area from the hazardous waste side of the Waste Stabilization and Consolidation warehouse. This area is shown in **Figure II.A.5-1 "Modified Facility Site Plan"**. The existing, separate, non-hazardous solid waste permit (#0288830-006-SO) would be updated accordingly.

8. Triumvirate proposes a modification to the existing permit language so non-hazardous waste does not count against our hazardous waste limit. The language in the existing hazardous waste permit requires us to store non-hazardous solid waste inside the permitted hazardous waste storage areas. It also requires us to count the non-hazardous material as part of the permitted capacity listed in the hazardous waste permit (824, 55-gallon equivalents). We have an existing, separate, non-hazardous solid waste permit (#0288830-006-SO) that addresses how non-hazardous solid waste should be handled.

9. Triumvirate proposes to pour new asphalt and concrete at the site to create an impervious surface designed with secondary containment. This will allow us to park trailers that contain hazardous, non-hazardous, and oily waste that is pending receipt or waiting to be shipped. This area is shown in **Figure II.A.5-1 "Modified Facility Site Plan"**.

10. The hazardous waste permit currently allows us to unpack containers from labpacks and repackage them into an outer container for outbound shipment. However, it limits us to only doing this for labpack containers. We propose modification of the permit language so we can repackage labpack and non-labpack containers into an outer container for outbound shipment. The outer container definition would include drums, yard boxes, and roll-offs. Chemical compatibility and DOT packaging requirements would be met.

The permit application is organized based on the Florida Department of Environmental Protection (FDEP) *Hazardous Waste Facility Permit Application Instructions (5/15/1996).* All sections of the permit renewal application are marked with a revision number and revision date; the revision number of the initial submittal is "0". The permit renewal application included with this cover letter includes attachments, figures, and exhibits as outlined below. The permit application was submitted to FDEP via electronic submittal through email to FDEP representatives on May 1, 2023.

If you have any questions or require additional information regarding this permit renewal application, please do not hesitate to contact me at the information shown in the signature block below.

Sincerely,

Richard Barry
Vice President, Environmental, Health & Safety | Triumvirate Environmental, Inc.
200 Inner Belt Road, Somerville, MA 02143
Office: 617-715-8919 | Mobile: 617-799-2511
rbarry@triumvirate.com | www.triumvirate.com

CC: Michell Smith, FDEP
Robert Cook, FDEP
Michael Eckoff, FDEP
Daniel Hall, FDEP
Dane Peterson, FDEP Office of General Counsel
Kevin Coulon, Triumvirate General Manager Southeast Region
Tim Mooney, Triumvirate Chief Operating Officer

Permit Renewal Application Contents

1. Permit Renewal Fee (Check for $10,000)

Original check mailed to Florida DEP, Hazardous Waste Permitting Section, 2600 Blair Stone Road, Mail Station 4550, Tallahassee, FL 32399-2400. Copy of check and associated cover letter have been provided as part of this permit application.

2. Permit Renewal Certifications – DEP Form 62-730.900(2)(d)

3. Attachment I.1: Application for a Hazardous Waste Permit, Part I – General (DEP Form 62-730.900(2)(a))

4. Part I – General Facility Information

The "Part I – General Facility Information" section is organized based on the Florida Department of Environmental Protection (FDEP) *Hazardous Waste Facility Permit Application Instructions (5/15/1996)*.

A. General Information
   1. List of permits held by site (Exhibit I.A.1)

B. Site Information
   1. Facility Photographs (Attachment I.B)
   2. Scale Drawing of Facility (Figure II.A.2 and Figure II.A.5)
   3. Topographic Map (1 mile boundary and 1 inch to 2,000 feet scale) (Figure I.B.3)

C. Land Use Information

D. Operating Information
   1. List of Hazardous Waste Codes and Process Codes

5. Part II – Specific Facility Information

All sections listed below are discussed in "Part II – Specific Facility Information" of the permit application.

A. General (Part II, Section II.A)
   1. Topographic Map (1,000 feet boundary and 1 inch to 200 feet scale) (Figure II.A.1.a(11))
      - Traffic Information
   2. Financial Responsibility Information (DEP Form 62-730.900(4)(k))
   3. Flood Map (Figure I.B.4, Figure I.B.5, and Figure II.A.3)
   4. Facility Security Information
      - Security Procedures
      - Contingency Plan (Attachment II.A.1)

- Prevention Plan (Attachment II.A.2)
- Training Program (Attachment II.A.3)

5. Chemical and Physical Analyses Reports (Attachment II.A.4)
6. Waste Analysis Plan (Attachment II.A.4)
7. Manifest, Recordkeeping, and Reporting Procedures (Attachment II.A.7)

B. Containers (Attachment II.B)
   1. Containment System Details
   2. Special Requirements for Ignitable or Reactive Wastes
   3. Requirements for Incompatible Wastes
   4. Inspection Procedures

C. Tank Systems (*Not Applicable*)

D. Surface Impoundments (*Not Applicable*)

E. Waste Piles (*Not Applicable*)

F. Land Treatment (*Not Applicable*)

G. Landfills (*Not Applicable*)

H. Incinerators (*Not Applicable*)

I. Miscellaneous Units (Attachment II.I)

J. Containment Buildings (*Not Applicable*)

K. Closure (Attachment II.K)
   1. Closure and Post-Closure Cost Estimate (Table II.K.3 through II.K.10)

L. Compliance Schedule (*Not Applicable*)

M. Ground Water Protection (*Not Applicable*)

N. Research, Development, and Demonstration (*Not Applicable*)

O. Exposure Information (*Not Applicable*)

P. Information Regarding Potential Releases from Solid Waste Management Units (Attachment II.P)
   1. DEP Form 62-730.900(2)(c) (Attachment II.P.1)

Q. Information Requirements for Solid Waste Management Units (SWMUs) (Attachment II.P)

R. Process Vents (*Not Applicable*)

S. Requirements for Equipment
   1. Subpart BB Compliance

T. Boilers and Industrial Furnaces (*Not Applicable*)

U. Requirements for Drip Pads (*Not Applicable*)

X. Equivalency Demonstrations (*Not Applicable*)

Supporting Attachments

The supporting attachments are organized in the permit application in the order shown below. The supporting documents have been grouped under the corresponding heading shown in bold underline.

6. General Information

Site Permit List	Exhibit I.A.1
Siting Evaluation	Attachment I.A
Site Photographs	Attachment I.B

7. Operational Plans

Contingency Plan	Attachment II.A.1
Preparedness and Prevention Plan	Attachment II.A.2
Training Plan	Attachment II.A.3
Waste Analysis Plan	Attachment II.A.4
Waste Compatibility Test Manual	Attachment II.A.4.a
Recordkeeping and Reporting	Attachment II.A.7
Container Management	Attachment II.B
Miscellaneous Units	Attachment II.I
Closure Plans	Attachment II.K
Solid Waste Management Units (SWMUs)	Attachment II.P
DEP Form 62-730.900(2)(c)	Attachment II.P.1
Waste Minimization Program	Attachment III

8. Land Use/Flood Maps

FEMA Flood Plain Map	Figure II.A.3
FIRM Flood Insurance Rate Map 1” = 1000’	Figure I.B.4
FIRM Flood Insurance Rate Map 1” = 1000’ (Detailed)	Figure I.B.5
Land Use within 1,000 ft of Site	Figure II.A.1.a(11)
NPDES 0.25 Mile Radius Map (2023 Update)	Figure II.A.1
NPDES 0.25 Mile Radius Map (High Resolution of 2023 Update)	Figure II.A.1a
NPDES 0.25 Mile Radius Map (2018 Application Version for Reference)	Figure II.A.1b

9. Facility Maps

Boundary and Topographic Survey	Figure II.A.2
Existing Facility Site Plan	Figure II.A.5
Modified Facility Site Plan	Figure II.A.5-1
Facility Topographic with 1-mile radius	Figure I.B.3
Existing Container Storage Layout	Figure I.D.1
Container Storage Unit	Figure I.D.1.a
Flammable Container Storage Layout	Figure I.D.1-1
Closure Sampling Location Map with SWMUs	Figure II.K.1
Evacuation Routes	Figure II.A.9
Wind Rose	Figure II.A.3-1

10. Financial Assurance

Surety Bond	Exhibit II.A.2.a-1
Liability Insurance (DEP Form 62-730.900(4)(k))	Exhibit II.A.4

11. Container Management Information

Floor Coating Sika Sikafloor SDS	Exhibit II.B-2

12. Facility Inspection Forms

Weekly Inspection Log	Attachment II.B.4
Emergency Equipment and Personnel Safety Cabinet	Attachment II.B.5

List of All Attachments, Figures, and Exhibits

Facility Information:	
General Facility Information	Part I
Specific Facility Information	Part II
Site Permit List	Exhibit I.A.1
Siting Evaluation	Attachment I.A
Operational Plans:	
Contingency Plan	Attachment II.A.1
Preparedness and Prevention Plan	Attachment II.A.2
Training Plan	Attachment II.A.3
Waste Analysis Plan	Attachment II.A.4
Waste Compatibility Test Manual	Attachment II.A.4.a
Recordkeeping and Reporting	Attachment II.A.7
Container Management	Attachment II.B
Miscellaneous Units	Attachment II.I
Closure Plans	Attachment II.K
Solid Waste Management Units (SWMUs)	Attachment II.P
List of Permitted Wastes:	
Waste Code Processing	Table I.D.3 (at end of Part I)
Permitted Waste	Table II.A.4-2 (in WAP)
Land Use/Flood Maps:	
FEMA Flood Plain Map	Figure II.A.3
FIRM Flood Insurance Rate Map 1" = 1000'	Figure I.B.4
FIRM Flood Insurance Rate Map 1" = 1000' (Detailed)	Figure I.B.5
Land Use within 1,000 ft of Site	Figure II.A.1.a(11)
NPDES 0.25 Mile Radius Map (2023 Update)	Figure II.A.1
NPDES 0.25 Mile Radius Map (High Resolution of 2023 Update)	Figure II.A.1a
NPDES 0.25 Mile Radius Map (2018 Application Version for Reference)	Figure II.A.1b
Facility Maps:	
Boundary and Topographic Survey	Figure II.A.2
Existing Facility Site Plan	Figure II.A.5
Modified Facility Site Plan	Figure II.A.5-1
Facility Topographic with 1-mile radius	Figure I.B.3
Existing Container Storage Layout	Figure I.D.1
Container Storage Unit (informal purposes, not to scale)	Figure I.D.1.a
Closure Sampling Location Map with SWMUs	Figure II.K.1
Evacuation Routes	Figure II.A.9
Wind Rose	Figure II.A.3-1

Photographs:

View from Rocket Boulevard	Figure I.B.3-3
Facility Aerial View – West	Figure I.B.3-4
Facility Arial View – East	Figure I.B.3-5
Facility Aerial View – South	Figure I.B.3-6
Facility Aerial View – North	Figure I.B.3-7
Truck Entrance – View from Southwest	Figure I.B.3-8
Office Entrance – View from East	Figure I.B.3-9
Loading Dock – View from West	Figure I.B.3-10
Consolidation and Stabilization Building – View from Northwest	Figure I.B.3-11
Stabilization and Consolidation Building – View from East	Figure I.B.3-12
Stabilization and Consolidation Area – View from North	Figure I.B.3-13
Container Storage Unit - View from Northeast	Figure I.B.3-14
Loading Dock and 10-Day Transfer Area – View from Southeast	Figure I.B.3-15
Container Storage Unit – Looking North	Figure I.B.3-16
Container Storage Area – Looking South	Figure I.B.3-17
Container Storage Area – Looking Northeast	Figure I.B.3-18

Financial Assurance:

Surety Bond	Exhibit II.A.2.a-1
Liability Insurance (62-730.900(4)(k))	Exhibit II.A.4
Closure Cost Calculations	Table II.K.3-10 (in II.K “Closure”)

Emergency Services:

Emergency Response Contact List	Table II.A.1-1 (in Contingency Plan)
Emergency Services Organizations	Figure II.A.1-7 (in Contingency Plan)

Hazmat Storage Units/Emergency Equipment:

Flammable Storage Unit Specification Sheet	Exhibit II.B-1
Emergency Equipment and Personnel Safety Equipment	Table II.A.1-3 (in Contingency Plan)

Segregation Table:

Segregation Table for Hazardous Materials	Table II.A.1-2 (Contingency Plan)

Waste Analysis Methods:

Methods used to sample wastes	Table II.A.4-3 (in II.A.4 “WAP”)
Sample Analysis Methods	Table II.A.4-4 (in II.A.4 “WAP”)
Soil Treatment Standards	Table II.A.4-5 (in II.A.4 “WAP”)

Shipment/Approval Documents:

Waste Material Profile Form	Exhibit II.A.4-1 (in II.A.4 “WAP”)
Compliance Review Form	Exhibit II.A.4-2 (in II.A.4 “WAP”)

Notice of Approval Letter	Exhibit II.A.4-3 (in II.A.4 “WAP”)
Labpack/Drum Inventory Form	Exhibit II.A.4-4 (in II.A.4 “WAP”)
Waste Compatibility Test Log	Exhibit II.A.4.a (in Test Manual)

Floor Coating:

Sika Sikafloor SDS	Exhibit II.B-2

Facility Inspection Forms:

Weekly Inspection Log	Attachment II.B.4
Emergency Equipment and Personnel Safety Cabinet	Attachment II.B.5

Permit Renewal Fee

Check for $10,000

April 24, 2023

Florida DEP
Hazardous Waste Permitting Section
2600 Blair Stone Road, Mail Station 4550
Tallahassee, FL 32399-2400

RE: F.A.C Chapter 62-730 Permit Renewal Application for Triumvirate Environmental Services, Inc.
Application Fee Payment of $10,000
EPA ID#: FLD980559728
Current Permit #: 26916-009-HO

To Whom it May Concern,

Triumvirate Environmental Services, Inc. (Triumvirate) operates a hazardous waste storage facility located at 10100 Rocket Blvd, Orlando, FL 32824 in Orange County. The current operating permit, Permit No. 26916-009-HO, was issued on October 17, 2018, and expires on November 6, 2023. A permit renewal application is required to be submitted by May 10, 2023, at least 180 days before the expiration date. A permit renewal application fee of $10,000 is being paid by check number 030629 and is provided with this letter.

If you have any questions or require additional information regarding this permit renewal application fee payment, please do not hesitate to contact me at the information shown in the signature block below.

Sincerely,

Richard Barry
Vice President, Environmental, Health & Safety | Triumvirate Environmental, Inc.
200 Inner Belt Road, Somerville, MA 02143
Office: 617-715-8919 | Mobile: 617-799-2511
rbarry@triumvirate.com | www.triumvirate.com

CC: Michell Smith, FDEP Hazardous Waste Program & Permitting
Robert Cook, FDEP Hazardous Waste Program & Permitting
Michael Eckoff, FDEP Hazardous Waste Program & Permitting
Dane Peterson, FDEP Office of General Counsel
Kevin Coulon, Triumvirate General Manager Southeast Region
Tim Mooney, Triumvirate Chief Operating Officer

Hartshorn, Justin T

From: UPS <pkginfo@ups.com>
Sent: Tuesday, April 25, 2023 2:06 PM
To: Hartshorn, Justin T
Subject: In Transit Notification, Tracking Number 1Z75R82RNT97888819

This message was sent to you at the request of TRIUMVIRATE ENVIRONMENTAL to notify you that the following shipment is in transit.

Important Delivery Information

Scheduled Delivery:	04/26/2023
Tracking Number:	1Z75R82RNT97888819

Shipment Details

Ship To:	Hazardous Waste Permitting Sec Florida Department of Environmental 2600 Blair Stone Road Mail Station 4550 TALLAHASSEE FL 323996516 US
Number of Packages:	1
UPS Service:	UPS NEXT DAY AIR
Weight:	1.0 LBS
Reference Number 1:	99-100-6550

Proof of Delivery

Dear Customer,

This notice serves as proof of delivery for the shipment listed below.

Tracking Number
1Z75R82RNT97888819

Weight
1.00 LBS

Service

UPS Next Day Air®

Shipped / Billed On
04/24/2023

Delivered On

04/26/2023 10:04 A.M.

Delivered To
TALLAHASSEE, FL, US

Received By

YOUNG

Please print for your records as photo and details are only available for a limited time.

Sincerely,

UPS

Tracking results provided by UPS: 04/26/2023 10:14 A.M. EST

Permit Renewal Certifications

DEP Form 62-730.900(2)(d)

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

Signature and Certification

Facility Name Triumvirate Environmental Services, Inc.

EPA/DEP I.D. No. FLD980559728

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

1. Facility Operator

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

John McQuillan

Signature of the Operator or Authorized Representative*

John McQuillan, CEO

Name and Title (Please type or print)

Date 4/11/2023 E-mail address jmcquillan@triumvirate.com

Telephone (617) 628-8098

*** Attach a letter of authorization**

2. Facility Owner

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

Signature of the Facility Owner or Authorized Representative*

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

Date 4/11/2023 E-mail address jmcquillan@triumvirate.com

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, postclosure or corrective actions of a hazardous waste management facility on the property as described. For hazardous waste facilities that close with waste in place, I further understand that I am responsible for providing the notice in the deed to the property required by 40 CFR 264.119 and 265.119, as adopted by reference in Chapter 62-730, F.A.C.

Signature of the Land Owner or Authorized Representative*

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

Date 4/11/2023 E-mail address jmcquillan@triumvirate.com

Telephone (617) 628-8098

*** Attach a letter of authorization**

4. Professional Engineer Registered in Florida

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

This is to certify that the 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 5896 Azalea Street
Street or P.O. Box

Port Orange FL 32127
City State Zip

Date 04-13-23 E-mail address vsanagustin@mdenv.com

Telephone (813) 842-5520

(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(10), F.A.C.

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

Signature

James Golden, P.G.
Name (please type)

Florida Registration Number 0945

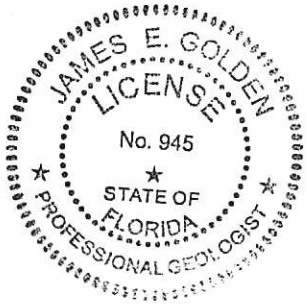
Mailing Address 6140 Edgewater Drive, Suite F
Street or P.O. Box

Orlando (City) Florida (State) 32810 (Zip)

Date 4-24-23 E-mail address jimgolden@grovescientific.com

Telephone (407) 298-2282

(PLEASE AFFIX SEAL)



DEP Form 62-730.900(2)(d), incorporated in Rule 62-730.220(2)(a), F.A.C., Effective Date: 12/2019

Attachment I.1:
Application for a Hazardous Waste Permit
Part I – General

DEP Form 62-730.900(2)(a)

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

Please Type or Print

A. General Information [40 CFR Part 270.13 (a)]

1. Type of Facility in accordance with Part 270.13(a)
   - ☒ TREATMENT
     - ☐ Tanks ☐ Piles ☐ Surface Impoundment
     - ☐ Incineration ☐ Containment Building
     - ☐ Boiler / Industrial Furnace Type of Unit _____
     - ☐ Miscellaneous Unit Type of Unit _____
   - ☒ STORAGE
     - ☒ Containers ☐ Tanks ☐ Piles
     - ☐ Surface Impoundment ☐ Containment Building
     - ☐ Miscellaneous Unit Type of Unit _____
   - ☐ DISPOSAL
     - ☐ Landfill ☐ Land Treatment ☐ Surface Impoundment
     - ☐ Miscellaneous Units Type of Unit _____

2. Type of application [40 CFR Part 270.13 (a)]:
   - ☐ Construction Permit
   - ☒ Operation Permit
   - ☐ Construction & Operation Permit
   - ☐ Research, Development & Demonstration (RD&D) Permit
   - ☐ Postclosure Permit
   - ☐ Clean Closure Plan
   - ☐ Subpart H Remedial Action Plan
   - ☐ Corrective Action

3. Revision Number: 0

4. Date Current Operation Began, or is expected to begin: 01 / 01 / 1985

5. Facility Name [40 CFR Part 270.13 (b)] Triumvirate Environmental Services, Inc.

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

7. Facility Location or Street Address [40 CFR Part 270.13 (b)] 10100 Rocket Blvd, Orlando, FL 32824

8. Facility Mailing Address 10100 Rocket Blvd
   Street or P.O. Box
   Orlando FL 32824
   City State Zip

9. Contact Person Kevin Coulon Telephone (407) 859-4441

   Title General Manager - Southeast Region

   Mailing Address 10100 Rocket Blvd
   Street or P.O. Box
   Orlando FL 32824
   City State Zip

Contact E-mail kcoulon@triumvirate.com

10. Operator Name [40 CFR Part 270.13 (d)] Triumvirate Environmental Services, Inc.

Telephone (407) 859-4441

Mailing Address 10100 Rocket Blvd
Street or P.O. Box

Orlando FL 32824
City State Zip

Operator E-mail jmcquillan@triumvirate.com

11. Facility owner's name [40 CFR Part 270.13 (e)] Triumvirate Environmental Services, Inc.

Telephone (407) 859-4441

Mailing address 10100 Rocket Blvd
Street or P.O. Box

Orlando FL 32824
City State Zip

E-mail address jmcquillan@triumvirate.com

12. Legal structure [40 CFR Part 270.13 (d)]

☒ 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 X To be purchased To be leased _ years

Presently leased; the expiration date of the lease is ___/____/_____.

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

Address 200 Inner Belt Road (Street or P.O. Box) Somerville (City) MA (State) 02143 (Zip)

E-mail address jmcquillan@triumvirate.com

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

Address 5896 Azalea Street (Street or P.O. Box) Port Orange (City) FL (State) 32127 (Zip)

Associated with: M&D Industrial Services, Inc.

18. Is the facility located on Tribal land [40 CFR Part 270.13 (f)]? ☐ Yes ☒ No

19. Existing or pending environmental permits (attach a separate sheet, if necessary): [40 CFR Part 270.13 (k)]

NAME OF PERMIT	AGENCY	PERMIT NUMBER	DATE ISSUED	EXPIRATION DATE
See Exhibit I.A.1 "Site Permit List" in Supporting Attachments				

B. Site Information [40 CFR Part 270.13 (b)]

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. Include photographs and the locations of all Solid Waste Management Units and Areas of Concern. Also, show the hazardous wastes traffic pattern including estimated volume and control [40 CFR Part 270.13 (h)].

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

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

6. The facility complies with the wellhead protection requirements of Chapter 62-521, F.A.C.

☒ Yes ☐ No

C. Land Use Information

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

2. If a zoning change is needed, what should the new zoning be? Not applicable.

D. Operating Information

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

2. List the NAICS codes (5 to 6 digits) [40 CFR Part 270.13 (c)] 562211 562112

3. Use the codes and units provided in the instructions to complete the following table. Specify [40 CFR Part 270.13 (i and j)]:

   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 attached Table I.D.3 in Part I - General Information			

4. A brief description of the facility [40 CFR Part 270.13 (m)]:

   See Part I - General Facility Information .

5. For hazardous debris, a description of the debris category(ies) and contaminant category(ies) to be treated, stored or disposed of at the facility [40 CFR Part 270.13 (n)]:

   See Part I - General Facility Information and Part II - Specific Facility Information.

Part I – General
Facility Information

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Part I: General Facility Information

Triumvirate Environmental Services, Inc. (TESI)
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

Figure and Attachments Referenced Throughout Section:

- Attachment I.1 “DEP Form 62-730.900(2)(a)”
- Attachment I.B “Site Photographs”
- Figure II.A.5 “Existing Facility Site Plan”
- Figure I.B.3 “Topographic Map with 1 mile Radius”
- Figure II.A.3 “FEMA Floodplain Map”
- Figure II.A.1 “NPDES Stormwater 0.25-Mile Radius Map”
- Figure II.A.1.a(11) “Land Use Within 1,000 ft”
- Figure II.A.2 “Boundary and Topographic Survey”
- Attachment II.A.4 “Waste Analysis Plan”
- Attachment II.A.7 “Recordkeeping & Reporting”
- Attachment II.B “Container Management”
- Attachment II.A.4.a “Waste Compatibility Test Manual”

Introduction

The **Part I – General Facility Information** section is organized based on the Florida Department of Environmental Protection (FDEP) *Hazardous Waste Facility Permit Application Instructions (5/15/1996)*.

I.A. General Information

DEP Form 62-730.900(2)(a), Effective Date 12/2019, has been completed to satisfy Part I.A, Item 1 – 21, of the Application Instructions. DEP Form 62-730.900(2)(a) is provided as **Attachment I.1 "DEP Form 62-730.900(2)(a)"**.

I.B. Site Information

DEP Form 62-730.900(2)(a), Effective Date 12/2019, has been completed to satisfy Part I.B, Item 1 – 5 of the Application Instructions. DEP Form 62-730.900(2)(a) is provided as **Attachment I.1 "DEP Form 62-730.900(2)(a)"**.

Item 1 – 2: Provided in **Attachment I.1 "DEP Form 62-730.900(2)(a)"**.

Item 3: *Attach a scale drawing and photographs of the facility showing the location of all past, present, and future treatment, storage, and disposal areas.* Photographs of the site are shown in **Attachment I.B "Site Photographs"**. **Figure II.A.5 "Existing Facility Site Plan"** shows a scale drawing of the site.

Item 4: *Attach topographic maps which show all the features indicated in the instruction sheet for this part.* **Figure I.B.3 "Topographic Map with 1 mile Radius"** 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 "Topographic Map with 1 mile Radius"** 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 2021.

b. ***100-year floodplain area:*** Floodplain areas are shown in **Figure II.A.3 "FEMA Floodplain Map"** which is a copy of the storm water map. The FEMA flood maps are also attached from 2009 as **Figure I.B.5** and **Figure I.B.4**. We have included **Figure II.A.3 "FEMA Floodplain Map"** to show and illustrate the exact location of the 100-year floodplain which is not readily discernible in the FEMA map FIRM Maps (**Figure I.B.5** and **Figure I.B.4**). These maps are provided because it shows both lots of Triumvirate Environmental Services, Inc. are 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 Services, 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 Services, Inc. site. The ponds are shown at the center of the left-hand margin and at the lower left hand corner. See **Figure II.A.1 "NPDES Stormwater 0.25-Mile Radius Map"**.

e. ***Surrounding land uses:*** On the east side of the Triumvirate Environmental Services, 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. See **Figure II.A.1.a(11) "Land Use Within 1,000 ft"**.

f. ***Legal boundaries of the facility:*** Information of distances and bearings of legal boundaries for the facility are shown in **Figure II.A.2 "Boundary and Topographic Survey"**.

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. See **Figure II.A.1 "NPDES Stormwater 0.25-Mile Radius Map"**.

I.C. Land Use Information

The information provided in this section is organized based on the Hazardous Waste Facility Permit Application Instructions (5/15/1996). DEP Form 62-730.900(2)(a), Effective Date 12/2019, has been completed to satisfy Part I.C, Item 1 – 3 of the Application Instructions. DEP Form 62-730.900(2)(a) is provided as **Attachment I.1 "DEP Form 62-730.900(2)(a)"**.

I.D. Operating Information

The information provided in this section is organized based on the Hazardous Waste Facility Permit Application Instructions (5/15/1996). DEP Form 62-730.900(2)(a), Effective Date 12/2019, has been completed to satisfy Part I.D, Item 1 – 3 of the Application Instructions. DEP Form 62-730.900(2)(a) is provided as **Attachment I.1 "DEP Form 62-730.900(2)(a)"**.

Item 1: Provided in **Attachment I.1 "DEP Form 62-730.900(2)(a)"**.

Item 2: A brief description of facility operations, in addition to the information provided in **Attachment I.1 "DEP Form 62-730.900(2)(a)"**, is provided below to develop a better understanding of the topics addressed in the application.

Facility Operations

The Triumvirate Environmental Services, Inc., facility in Orlando is presently permitted for the storage and consolidation of hazardous and solid (i.e., non-hazardous) waste. Triumvirate Environmental Services, 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

Operating and Corrective Action Permit issued on January 28, 2009. This permit allows the facility to store up to 824, 55-gallon containers in the container storage unit, and to consolidate waste with other compatible 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 Services, Inc., facility on Rocket Boulevard is also registered with the FDEP as a used oil transfer facility. Wastes accepted at Triumvirate Environmental Services, Inc. are stored, consolidated, repacked, or treated. All storage is in containers, including waste managed through the 10-day transfer area. Consolidation consists of pouring containers together into shippable drums. Re-packaging consists of removing inner containers from outer containers and placing them in appropriate containers for outbound shipments. Treatment consists of stabilization of wastes in roll-off boxes with cement or other suitable material approved by The Department.

Facility Operation Descriptions

The following discussion of the facility operations includes:

- Waste Evaluation — Procedures used to evaluate waste streams for receipt by Triumvirate Environmental Services, Inc.;
- 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 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 Services, 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.

Wastes accepted at Triumvirate Environmental Services, Inc. are stored, consolidated, repacked, or treated. All storage is in containers, including waste managed through the 10-day transfer area. Consolidation consists of pouring containers together into shippable drums. Re-packaging consists of

removing inner containers from outer containers and placing them in appropriate containers for outbound shipments. Treatment consists of stabilization of wastes in roll-off boxes with cement or other suitable material approved by The Department. As part of the evaluation process, each waste is evaluated for one of these handling methods.

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.

Inspection and Testing of Incoming Wastes: Procedures for inspection and testing of incoming wastes are described in **Attachment II.A.4 "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 waste is dependent on the management method. Results from the inspection and testing of waste are entered in an electronic database. 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 waste 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 Services, Inc. may bring "permitted waste" or "transfer facility waste". Permitted waste arrives on a manifest showing Triumvirate Environmental Services, Inc. with the EPA ID, number of FLD 980 559 728; whereas, for transfer facility waste, Triumvirate Environmental Services, Inc. with the EPA ID number of FLD 980 559 728 is not shown as the designated facility. Transfer facility waste arriving at Triumvirate Environmental Services, 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 waste in such case must leave Triumvirate Environmental Services, 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 Services, Inc. receives a barcode 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 **Attachment II.A.7 "Recordkeeping & Reporting".**

The procedures used to inspect inbound waste shipments are found in **Attachment II.A.4 "Waste Analysis Plan"**. 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. 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. DOT hazard classes are used for the segregation of waste materials.

Evaluation of Waste Before Shipment: The last part of the Waste Analysis Plan pertaining to classification of wastes deals with the 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 **Attachment II.A.4 "Waste Analysis Plan"**. 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 out the "storage only" waste. 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 concrete curb along the building's perimeter wall contains spills. 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 (40 CFR 264.175). A detailed description of dimensions, construction, and capacity of the secondary containment systems is provided in **Attachment II.B "Container Management"**. In addition to the existing Container Storage Unit, this permit application includes a request for the addition of three, pre-fabricated flammable material storage units that will be used to store ignitable and/or reactive materials.

Storage of ignitable hazardous waste at the facility is at least 15 meters from the nearest property boundary. **Attachment II.B "Container Management"** discusses ignitable and incompatibles requirements that apply to ignitable, reactive, and incompatible waste. Triumvirate Environmental Services, 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 **Attachment II.B "Container Management"**. 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 Services, Inc. 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 shown on the hazardous waste label.

The last two sections of **Attachment II.B "Container Management**" 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 of **Attachment II.B "Container Management**") includes discussion of this operation.

Triumvirate Environmental Services, Inc. is authorized to consolidate compatible hazardous wastes stored in containers 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 **Attachment II.A.4.a "Waste Compatibility Test Manual"** will be consolidated. Triumvirate Environmental Services, Inc. will not consolidate inhalation hazards, reactives (D003), or oxidizers. Flammable material which is intended for fuel blending or incineration may be consolidated in the proposed flammable material storage units. Consolidations will

take place in the Waste Consolidation and Stabilization Area identified in **Figure II.A.5 "Existing Facility Site Plan"** or will take place in the new pre-fabricated flammable storage units requested in this permit application and shown in **Figure II.A.5-1 "Modified Facility Site Plan"**.

Stabilization: Triumvirate Environmental Services, Inc. will stabilize metal bearing wastes (D004-D008, D010-D011) with stabilizing agents such as cement or other material approved by the department. Examples of such waste streams are contaminated soil with RCRA metals. Stabilization will occur in cubic yard boxes or roll-off containers. The procedures and equipment involved in stabilization are outlined in The Containers section. Details on the testing of the waste are located in **Attachment II.A.4 "Waste Analysis Plan"**.

In the solid waste permit Triumvirate Environmental Services, Inc., is authorized to solidify non-hazardous materials including, but not limited to, wastewater, antifreeze, latex paint, and resin.

Storage of Non-Hazardous Wastes: Triumvirate Environmental Services, Inc., will store non-RCRA regulated (i.e., non-hazardous) wastes per the site's existing Solid Waste Processing Permit (Permit #0288830-006-SO at the date of this permit application). Non-hazardous wastes include used oil, anti-freeze, latex paint, and oil filters. Non-hazardous wastes may also be placed inside a roll-off box for shipments offsite. Non-hazardous waste will not count toward the quantity limit of 824, 55-gallon equivalents outlined in this permit.

Triumvirate Environmental Services, Inc. follows the procedures outlined in 40 CFR 279 for on specification used oil. Triumvirate Environmental Services, Inc. also follows the hazardous waste rebuttal for used oil following the procedures outlined in 40 CFR 279/10(b)(ii).

a. Table I.D.3: Waste Code Processing

Table provided per Section D.3 "Operating Information" from Part I of DEP Form 62-730.900(2)(a) (Effective Date 12/2019).

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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 (and its epoxide)	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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Wastes from the production or manufacturing use of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives.	F020	500
S01	gallons (G) or liters (L)	Wastes from the production or manufacturing use of pentachlorophenol, or of intermediates used to produce its derivatives	F021	500
S01	gallons (G) or liters (L)	Wastes from the manufacturing use of tetra-, penta-, or hexachlorobenzenes under alkaline conditions	F022	500
S01	gallons (G) or liters (L)	Wastes from the production of materials on equipment previously used for the production or manufacturing use of tri- and tetrachlorophenols.	F023	500
S01	gallons (G) or liters (L)	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	F024	500
S01	gallons (G) or liters (L)	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution	F025	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Wastes from the production of materials on equipment previously used for the manufacturing use of tetra-, penta-, or hexachlorobenzene under alkaline conditions	F026	500
S01	gallons (G) or liters (L)	Discarded Unused Formulations of Chlorophenols	F027	5,000
S01	gallons (G) or liters (L)	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027	F028	500
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of chrome yellow and orange pigments	K002	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of molybdate orange pigments	K003	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of zinc yellow pigments	K004	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of chrome green pigments	K005	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)	K006	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of iron blue pigments	K007	500
S01	gallons (G) or liters (L)	Oven residue from the production of chrome oxide green pigments	K008	500
S01	gallons (G) or liters (L)	Distillation bottoms from the production of acetaldehyde from ethylene	K009	500
S01	gallons (G) or liters (L)	Distillation side cuts from the production of acetaldehyde from ethylene	K010	500
S01	gallons (G) or liters (L)	Bottom stream from the wastewater stripper in the production of acrylonitrile	K011	500
S01	gallons (G) or liters (L)	Bottom stream from the acetonitrile column in the production of acrylonitrile	K013	500
S01	gallons (G) or liters (L)	Bottoms from the acetonitrile purification column in the production of acrylonitrile	K014	500
S01	gallons (G) or liters (L)	Still bottoms from the distillation of benzyl chloride	K015	500
S01	gallons (G) or liters (L)	Heavy ends or distillation residues from the production of carbon tetrachloride	K016	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin	K017	500
S01	gallons (G) or liters (L)	Heavy ends from the fractionation column in ethyl chloride production	K018	500
S01	gallons (G) or liters (L)	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production	K019	500
S01	gallons (G) or liters (L)	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	K020	500
S01	gallons (G) or liters (L)	Aqueous spent antimony catalyst waste from fluoromethanes production	K021	500
S01	gallons (G) or liters (L)	Distillation bottom tars from the production of phenol/acetone from cumene	K022	500
S01	gallons (G) or liters (L)	Distillation light ends from the production of phthalic anhydride from naphthalene	K023	500
S01	gallons (G) or liters (L)	Distillation bottoms from the production of phthalic anhydride from naphthalene	K024	500
S01	gallons (G) or liters (L)	Distillation bottoms from the production of nitrobenzene by the nitration of benzene	K025	500
S01	gallons (G) or liters (L)	Stripping still tails from the production of methy ethyl pyridines	K026	500
S01	gallons (G) or liters (L)	Centrifuge and distillation residues from toluene diisocyanate production	K027	500
S01	gallons (G) or liters (L)	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	K028	500
S01	gallons (G) or liters (L)	Waste from the product steam stripper in the production of 1,1,1-trichloroethane	K029	500
S01	gallons (G) or liters (L)	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	K030	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Distillation bottoms from aniline production	K083	500
S01	gallons (G) or liters (L)	Distillation or fractionation column bottoms from the production of chlorobenzenes	K085	500
S01	gallons (G) or liters (L)	Distillation light ends from the production of phthalic anhydride from ortho-xylene	K093	500
S01	gallons (G) or liters (L)	Distillation bottoms from the production of phthalic anhydride from ortho-xylene	K094	500
S01	gallons (G) or liters (L)	Distillation bottoms from the production of 1,1,1-trichloroethane	K095	500
S01	gallons (G) or liters (L)	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane	K096	500
S01	gallons (G) or liters (L)	Process residues from aniline extraction from the production of aniline	K103	500
S01	gallons (G) or liters (L)	Combined wastewater streams generated from nitrobenzene/aniline production	K104	500
S01	gallons (G) or liters (L)	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	K105	500
S01	gallons (G) or liters (L)	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	K107	500
S01	gallons (G) or liters (L)	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	K108	500
S01	gallons (G) or liters (L)	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	K109	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	K110	500
S01	gallons (G) or liters (L)	Product washwaters from the production of dinitrotoluene via nitration of toluene	K111	500
S01	gallons (G) or liters (L)	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene	K112	500
S01	gallons (G) or liters (L)	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	K113	500
S01	gallons (G) or liters (L)	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	K114	500
S01	gallons (G) or liters (L)	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	K115	500
S01	gallons (G) or liters (L)	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine	K116	500
S01	gallons (G) or liters (L)	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene	K117	500
S01	gallons (G) or liters (L)	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene	K118	500
S01	gallons (G) or liters (L)	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene	K136	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.)	K149	500
S01	gallons (G) or liters (L)	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups	K150	500
S01	gallons (G) or liters (L)	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups	K151	500
S01	gallons (G) or liters (L)	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	K156	500
S01	gallons (G) or liters (L)	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	K157	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	K158	500
S01	gallons (G) or liters (L)	Organics from the treatment of thiocarbamate wastes	K159	500
S01	gallons (G) or liters (L)	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)	K161	500
S01	gallons (G) or liters (L)	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they	K174	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
		meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met		
S01	gallons (G) or liters (L)	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process	K175	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in paragraph (c) of this section that are equal to or greater than the corresponding paragraph (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) disposed in a Subtitle D landfill unit subject to the design criteria in § 258.40, (ii) disposed in a Subtitle C landfill unit subject to either § 264.301 or § 265.301, (iii) disposed in other Subtitle D landfill units that meet the design criteria in § 258.40, § 264.301, or § 265.301, or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in paragraph (b)(1) of this section. Paragraph (d) of this section describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under §§ 261.21-261.24 and 261.31-261.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met	K181	500
S01	gallons (G) or liters (L)	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used	K071	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production	K073	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the mercury cell process in chlorine production	K106	500
S01	gallons (G) or liters (L)	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide)	K176	500
S01	gallons (G) or liters (L)	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide)	K177	500
S01	gallons (G) or liters (L)	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process	K178	500
S01	gallons (G) or liters (L)	By-product salts generated in the production of MSMA and cacodylic acid	K031	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of chlordane	K032	500
S01	gallons (G) or liters (L)	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane	K033	500
S01	gallons (G) or liters (L)	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane	K034	500
S01	gallons (G) or liters (L)	Wastewater treatment sludges generated in the production of creosote	K035	500
S01	gallons (G) or liters (L)	Still bottoms from toluene reclamation distillation in the production of disulfoton	K036	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Wastewater treatment sludges from the production of disulfoton	K037	500
S01	gallons (G) or liters (L)	Wastewater from the washing and stripping of phorate production	K038	500
S01	gallons (G) or liters (L)	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate	K039	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of phorate	K040	500
S01	gallons (G) or liters (L)	Wastewater treatment sludge from the production of toxaphene	K041	500
S01	gallons (G) or liters (L)	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T	K042	500
S01	gallons (G) or liters (L)	2,6-Dichlorophenol waste from the production of 2,4-D	K043	500
S01	gallons (G) or liters (L)	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane	K097	500
S01	gallons (G) or liters (L)	Untreated process wastewater from the production of toxaphene	K098	500
S01	gallons (G) or liters (L)	Untreated wastewater from the production of 2,4-D	K099	500
S01	gallons (G) or liters (L)	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt	K123	500
S01	gallons (G) or liters (L)	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts	K124	500
S01	gallons (G) or liters (L)	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts	K125	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts	K126	500
S01	gallons (G) or liters (L)	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide	K131	500
S01	gallons (G) or liters (L)	Spent absorbent and wastewater separator solids from the production of methyl bromide	K132	500
S01	gallons (G) or liters (L)	Wastewater treatment sludges from the manufacturing and processing of explosives	K044	500
S01	gallons (G) or liters (L)	Spent carbon from the treatment of wastewater containing explosives	K045	500
S01	gallons (G) or liters (L)	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds	K046	500
S01	gallons (G) or liters (L)	Pink/red water from TNT operations	K047	500
S01	gallons (G) or liters (L)	Dissolved air flotation (DAF) float from the petroleum refining industry	K048	500
S01	gallons (G) or liters (L)	Slop oil emulsion solids from the petroleum refining industry	K049	500
S01	gallons (G) or liters (L)	Heat exchanger bundle cleaning sludge from the petroleum refining industry	K050	500
S01	gallons (G) or liters (L)	API separator sludge from the petroleum refining industry	K051	500
S01	gallons (G) or liters (L)	Tank bottoms (leaded) from the petroleum refining industry	K052	500
S01	gallons (G) or liters (L)	Crude oil storage tank sediment from petroleum refining operations	K169	500
S01	gallons (G) or liters (L)	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations	K170	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media)	K171	500
S01	gallons (G) or liters (L)	Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media)	K172	500
S01	gallons (G) or liters (L)	Emission control dust/sludge from the primary production of steel in electric furnaces	K061	500
S01	gallons (G) or liters (L)	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332)	K062	500
S01	gallons (G) or liters (L)	Spent potliners from primary aluminum reduction	K088	500
S01	gallons (G) or liters (L)	Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the Federal Register)	K069	500
S01	gallons (G) or liters (L)	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting	K100	500
S01	gallons (G) or liters (L)	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	K084	500
S01	gallons (G) or liters (L)	Distillation tar residues from the distillation of aniline-based compounds in the production of	K101	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
		veterinary pharmaceuticals from arsenic or organo-arsenic compounds		
S01	gallons (G) or liters (L)	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	K102	500
S01	gallons (G) or liters (L)	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead	K086	500
S01	gallons (G) or liters (L)	Ammonia still lime sludge from coking operations	K060	500
S01	gallons (G) or liters (L)	Decanter tank tar sludge from coking operations	K087	500
S01	gallons (G) or liters (L)	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations)	K141	500
S01	gallons (G) or liters (L)	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal	K142	500
S01	gallons (G) or liters (L)	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal	K143	500
S01	gallons (G) or liters (L)	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal	K144	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal	K145	500
S01	gallons (G) or liters (L)	Tar storage tank residues from coal tar refining	K147	500
S01	gallons (G) or liters (L)	Residues from coal tar distillation, including but not limited to, still bottoms	K148	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
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 (H3AsO4)	P010	500
S01	gallons (G) or liters (L)	Arsenic Oxide (As2O5)	P011	500
S01	gallons (G) or liters (L)	Arsenic Oxide (As2O3)	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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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)	Ethanedinitrile	P031	500
S01	gallons (G) or liters(L)	Cyanogen chloride	P033	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
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)	Fluorine	P056	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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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)	Mercury fulminate	P065	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)	Nitric Oxide	P076	500
S01	gallons (G) or liters (L)	Benzenamine, 4-Nitro-	P077	500
S01	gallons (G) or liters (L)	Nitrogen dioxide	P078	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
S01	gallons (G) or liters (L)	Phorate	P094	500
S01	gallons (G) or liters (L)	Carbonic dichloride	P095	500
S01	gallons (G) or liters (L)	Phosphine	P096	500
S01	gallons (G) or liters (L)	Famphur	P097	500

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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)	Tetranitromethane	P012	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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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
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)	Carbonic difluoride	U033	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	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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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	U055	500
S01	gallons (G) or liters (L)	Cyclohexane	U056	500
S01	gallons (G) or liters (L)	Cyclohexanone	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
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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)	alpha,alpha-Dimethylbenzylhydroperoxide	U096	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
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Lasiocarpine	U143	500
S01	gallons (G) or liters (L)	Lead Acetate	U144	500
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
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
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	Benzene, 1,3,5-trinitro-	U234	500
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

Table I.D.3: Waste Code Processing				
Process Code	**Process Design Capacity and Units of Measure**	**Waste Description**	**Hazardous Waste Code**	**Annual Quantity (gallons)**
S01	gallons (G) or liters (L)	Methoxychlor	U247	500
S01	gallons (G) or liters (L)	Warfarin & Salts when present at concentrations 0.3% or less	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
S01	gallons (G) or liters (L)	Propoxur	U411	500
S01	gallons (G) or liters (L)	Hazardous Waste Pharmaceuticals	PHARMS	500,000

Part II – Specific Facility Information

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Part II: Specific Facility Information

Triumvirate Environmental Services, Inc. (TESI)
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

Introduction

The information provided in this section is organized based on the Florida Department of the Environment (FDEP) *Hazardous Waste Facility Permit Application Instructions (5/15/1996)* for Part II, Section A – U.

II.A. General

II.A.1. Topographic Map

1.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.2 "Boundary and Topographic Survey Map"** are consistent with instructions in the permit application form regarding the extent of the area around the facility, the scale, and contour intervals. The scale of this map is 1" = 40'. The map was produced at this scale so that all of the requirements as outlined above can be easily ascertained for review of the pattern of surface water in the vicinity of the facility.

The map should clearly show the following:

1) Map scale and date: Scale and date are shown. (**Figure II.A.2 "Boundary and Topographic Survey Map"**)
2) 100-year floodplain areas: **Figures I.B.4 and I.B.5** are FIRM maps that show the 100-year flood plain areas. To further illustrate flood plain areas **Figure II.A.3 "FEMA Floodplain Map"** has been included and indicates floodplain areas. The shaded area shows a floodplain area to the south and east of the site.
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 identified in **Figure II.A.5 "Existing Facility Site Plan".**
5) Injection and withdrawal wells both on-site and off-site: There are no injection or withdrawal wells on-site or off-site within 1,000 feet from the hazardous waste facility (**Figure II.A.1.a(11) "Land Use within 1000 ft").** The facility stormwater drains into the storm water retention 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.2 "Boundary and Topographic Survey Map"**.
7) Contours sufficient to show the surface water flow: All storm water flows into the storm water retention pond and that flows into Boggy Creek. Water from the storm water pond is discharged through underground piping to a drainage ditch. The map **Figure II.A.2 "Boundary and Topographic Survey Map"** shows the path storm water follows toward the drainage ditch. **Figure II.A.1 "Surface Water Features"** shows the direction of the piping to Boggy Creek.
8) Loading and unloading areas: The container loading and unloading areas are identified in **Figure II.A.5 "Existing Facility Site Plan"**.

9) Drainage and flood control barriers: The facility site drains into a storm water pond located northeast corner of the property. The storm water pond is one component of the flood control barrier system at Triumvirate Environmental Services, Inc. Storm water flows from the parking lot of the facility to the northwest corner of the parking lot. A valve/pipe system is located in the northwest corner of the parking lot. This system is in the normally closed mode. After a rain event the storm water is visually inspected for potential contamination prior to opening the valve/pipe system. This inspection is documented in the operating record. Water from the storm water pond is discharged through underground piping to a drainage ditch. The map (**Figure II.A.2 "Boundary and Topographic Survey Map"**) shows the path storm water follows toward the drainage ditch. **Figure II.A.1 "Surface Water Features"** shows the direction of the piping to Boggy 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 "Existing Facility Site Plan"**. There are no clean-up areas at the facility. Additional Solid Waste Management Unit information is located in Section II.P and II.Q.

11) Runoff control system: The flow of storm water from the parking lot to the storm water pond and the procedures to control run-off are outlined as explained in paragraph (9) above.

There are no schools, churches, and other places of public gathering within 1,000' of the facility (**Figure II.A.1.a(11) "Land Use within 1000 ft")**

1.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 "Wind Rose"** shows a wind rose which contains this information.

1.c. *Traffic information — Include the information required in 270.14(b)(10):* **Figure II.A.5 "Existing Facility Site Plan"** shows traffic flow 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. The traffic volume into and out of the facility is low, averaging 4 tractor trailers per week and 4 box trucks per day. There are no data on the load bearing capacity of existing 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. Triumvirate Environmental Services, Inc. will pave additional areas of the facility as shown in Figure II.A.5-1 "Modified Facility Site Plan". The new pavement/concrete will allow for additional parking of trucks and trailers that contain hazardous materials inbound and/or outbound from the facility.

II.A.2. Financial Responsibility

2.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 Services, Inc. is shown in **Exhibit II.A.2.a-1 "Surety Bond"**. Financial assurance is updated annually.

Insurance coverage requirements are covered by **Exhibit II.A.4 "Liability Insurance (DEP Form 62-730.900(4)(k))"**.

Triumvirate Environmental Services, Inc. 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.

2.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 Services, Inc. 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.

2.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.

2.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 Services, Inc. facility is shown in **Exhibit II.A.4 "Liability Insurance"**. Triumvirate Environmental Services, Inc. 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).

II.A.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 Services, Inc. is not located in a 100-year flood plain (**Figure I.B.4 "Land Use FIRM Map" and Figure I.B.5 "Land Use FIRM Map Detailed"**). Triumvirate Environmental Services, Inc. has also included map **Figure II.A.3 "FEMA Floodplain Map"** to further delineate the 100-year flood plain boundary.

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.

3.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.

3.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.

3.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.

The site is not applicable to Item II.A.3.c.

II.A.4. Facility Security

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

Triumvirate Environmental Services, 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 with two feet of barb wire on top of the fence and by locked gates. The gates remain 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 "Existing Facility Site Plan"** shows locations of signs and fencing.

4.b *Attach a copy of the contingency plan required by 40 CFR part 264, Subpart D:*

Contingency Plan is provided in **Attachment II.A.1 "Contingency Plan"**.

4.c *Attach a description of procedures, structures or equipment used at the facility to:*

4.c.1. Mitigate effects of equipment failure and power outages

Equipment used at the Triumvirate Environmental Services, Inc. facility does not pose a human health, safety, or an environmental concern in cases of equipment failure to operate. Equipment is not used in processes for which failure may create a dangerous situation. The paragraphs below indicate what type of equipment driven by internal combustion engines or by electrical motors is used in process and storage areas at the facility and the implications that may result from not being able to operate any of this equipment at any given time.

Container Storage Unit: Forklifts may be used in this area to move containers and will not jeopardize safety if they cannot be operated at any given time. Fire alarm actuators located in this unit and in other parts of the facility are operated by a battery backup system in case of commercial power failure. The sprinkler system that covers both buildings at the facility is activated by mechanical heat sensors. The storage area sprinkler system is functional but does not meet NFPA standards for the storage of Class 1 flammables.

Consolidation/Stabilization Operations: These operations may use a backhoe, small mixer, and portable pumps and hoses. This equipment will not present a safety threat in case of power failure. Once approved and the operations commence proper equipment will be purchased.

Flammable Material Storage Unit: Forklifts may be used in this area to move containers into and out of the storage units and will not jeopardize safety if they cannot be operated appropriately.

4.c.2. Prevent hazards in unloading operations (i.e., ramps, special forklifts)

The Triumvirate Environmental Services, Inc. facility loads and unloads waste materials in containers and in bulk at several locations in the facility. Drums and other non-bulk containers are transferred throughout the facility with forklifts. Drums are loaded and unloaded at the existing dock located on the west side of the container storage unit. The containers are transferred with forklifts from the transportation vehicles, secured with truck chocks, to the container storage unit and from there to the consolidation/stabilization areas or back to the loading dock for shipment. Loading and unloading of waste material in bulk occurs in the consolidation area inside the building. Solid hazardous wastes may be consolidated into a bulk container in accordance with the Solid Waste Permit. This includes bulk loading and unloading into the permitted tank and loading and unloading of waste material in the Waste Consolidation and Stabilization Area.

The container loading/unloading dock is provided with manufactured dock plates that have been secured to the dock structure at the locations where the trailers park to load and unload containers. The dock plates are adjustable ramps that provide forklifts the safest means to access containers inside the van trailers.

Before a forklift goes inside a trailer, and while any bulk transportation vehicle is being loaded or unloaded, the wheels of the vehicle are chocked to prevent them from moving. Ramps and roll-over berms used by forklifts when transferring drums at the facility have been designed with a gentle slope.

4.c.3. Prevent undue exposure of personnel to hazardous waste (ie., protective clothing)

Selection of proper personal protective equipment has been made in accordance with the hazard presented by the operation. The next paragraphs discuss the types of personal protection equipment provided by Triumvirate Environmental Services, Inc. and the operations and locations where the equipment used is required.

Head Protection: Hard hats are required to be worn when working at the Triumvirate Environmental Services, Inc. Facility. Hard hats are not required indoors in the office space.

Eye and Face Protection: Protection to the eye and to the face from injuries caused by flying objects and corrosive liquids is provided by safety glasses and by face shields, respectively. Safety glasses are required to be worn by personnel in the facility. Safety glasses and a face shield, or full face respirator, must be worn by personnel conducting consolidation operations and sampling and testing corrosive liquid. Operators consolidating, sampling and testing non-corrosive waste liquids and solids in drums should wear a face shield.

Respiratory Protection: Respirators prevent breathing air contaminated with harmful vapors. Operators will wear respiratory protection when sampling hazardous wastes or consolidating any liquid hazardous wastes. The selection of cartridges appropriate for the material being handled is made in accordance with guidelines published by the National Institute for Occupational Safety and Health (NIOSH). Cartridges are used for no more than one shift and are changed out more frequently, if required by the manufacturer's instructions. Triumvirate Environmental (Florida), Inc will not consolidate inhalation hazards, oxidizers, or reactives (D003).

Hearing Protection: When necessary, hearing protection is provided in accordance with OSHA regulations.

Torso Protection: All facility personnel wear clothing equivalent to level D protection, with eye and head protection depending on the operation or the location where it is being conducted, as explained in other parts of this section. The level of protection is supplemented with permeable and non-permeable coveralls and corrosive-resistant aprons and suits in accordance with the guidelines shown below.

- Permeable coveralls: For consolidation of waste solids in bulk containers and in drums.
- Non-Permeable Coveralls: For consolidation of non-corrosive waste liquids.
- Corrosive-Resistant aprons: For sampling and testing waste drums.
- Corrosive-Resistant Suits: Such suits should be worn for consolidation of corrosive liquids.

Arm and Head Protection: Gloves are used at the Triumvirate Environmental Services, Inc. facility to prevent injuries due to cuts, absorption of chemicals, and acid burns of the skin. Leather gloves are worn for handling closed drums and by operators working in the consolidation of waste solids. If leather gloves are contaminated with RCRA hazardous waste they are disposed of. Chemical/Corrosive resistant gloves are used for sampling and testing waste in drums.

Foot and Leg Protection: Safety and corrosive-resistant boots or boot covers prevent workers at the Triumvirate Environmental Services, Inc. facility from injuries due to falling objects and from corrosive liquids. Steel toe safety boots are worn by operators handling closed drums and consolidating waste liquid and solids. Personnel consolidating alkaline liquids should wear corrosive-resistant boots or covers.

Air Contaminants Reduction: Triumvirate Environmental Services, Inc. waste management operations will meet current requirements from the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) regarding contaminant exposure levels that are considered safe for the health of the workers. There are two areas where employee exposure to air contaminants is a potential concern. These are: the container storage unit and the liquid consolidation operations.

The container storage unit presents a potential danger to operators only when the unit is opened for the first time during the day. There is a concern that toxic vapors may accumulate during workdays at night, weekends, or holidays. This will affect the first operator entering the container storage unit. When opening the container storage unit, after it has been closed during the night, weekend, or holiday, the worker will wear a respirator and open the doors for ventilation.

Liquid Consolidation operations may take place at the consolidation and stabilization area with the adjacent doors kept open, or may take place in the flammable material storage units if the material is flammable.

Explosion Protection: The potential for an explosion exists at the container storage unit and during the consolidation operations. If flammables are stored in the building, contingent upon NFPA upgrades, a hand-held explosion meter will be available at the facility to monitor accumulation of explosive vapors. Currently no flammables are stored in the Container Storage Unit and no explosion meter is stored at the facility, this would change if the building went through a NFPA upgrade. The proposed flammable material storage units are designed based on NFPA requirements and will be reviewed and approved by the fire department before installation.

Materials capable of causing an explosion at the container storage unit are vapor or fumes that may accumulate during weekdays at night, weekends, or holidays. Such fumes may result from chemical reactions and high vapor pressure of materials stored in the unit.

Explosion-proof lighting and the lack of other possible ignition sources minimizes the potential for an explosion at the container storage unit due to accumulated vapors or fumes. At the beginning of the work day, the first operator(s) entering the container storage unit will wear appropriate respirator(s) and open the doors for ventilation.

Other operations that may emit dust, mist, or vapor having the potential to form an explosive environment are consolidation operations. These are operations in which waste is transferred from drums into tanks or into trailers. Waste liquid transfer operations will be conducted inside a confined environment where the possibility of an explosion is minimal. The air inside this environment is removed constantly, which prevents the accumulation of vapors. Years of experience in bulking waste in trailers have proven that this operation does not generate a significant amount of dust and does not cause clouds of dust. Should waste materials

change such that dust emissions become a problem, equipment to spray a water mist over the consolidation area will be used to suppress dust generation.

4.c.4. Prevent contamination of water supplies

There are no drinking or other types of water supply wells located near the Triumvirate Environmental Services, Inc. facility that could become contaminated due to normal waste management operations or accidents at the facility. There are no surface water bodies used for water supply that could be effected by facility operations. All liquid releases will be contained in secondary containment to prevent contamination of water supplies. Spills and large releases are managed in accordance with the Preparedness and Prevention Plan and the Contingency Plan.

4.c.5. Prevent run-off from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (i.e., dikes, berms, trenches)

Attachment II.A.1 "Contingency Plan" includes information to address prevention of run-off from hazardous waste handling areas. It contains a description of the containment systems used to prevent releases from the various processes and operations conducted at the facility. Storage areas are provided with secondary containments capable of containing at least 10% of the maximum volume permitted for storage in containers in each area.

According to the October 2020 FEMA floodplain map (**Figure II.A.3 "FEMA Flood Plain Map"**), Triumvirate Environmental Services, Inc. site is not located in a 100-year floodplain area.

4.c.6. Prevent releases to atmosphere

The facility will prevent releases of air contaminants to the atmosphere that may pose a threat to the environment or to human health. Similar processes conducted at other Triumvirate Facilities without the emissions control systems have not experienced odor problems. Therefore, it is not expected that this Triumvirate Environmental Services, Inc. facility will generate odors at unacceptable levels. Environmental concerns with respect to these contaminants are mitigated by compliance with RCRA requirements of 40 CFR 264, Subpart CC.

Accidental releases may also occur during consolidation operations at the consolidation area. These releases could be caused by a reaction between waste materials or by the high vapor pressure of the waste material.

4.c.7. Prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes [270.14(b)(9)]

Processes and operations where ignitable wastes are handled at the Triumvirate Environmental Services, Inc. facility are operated in a manner that reduces or eliminates the possibility of ignition and the formation of explosive environments. Equipment and tools used to manage ignitable wastes have been designed and manufactured with materials that prevent the generation of sparks. Operators use equipment to handle open drums in a way that reduces the impact between hard surfaces, and the equipment is made of materials that do not produce sparks upon impact or friction. Non-manual driven parts and equipment are operated either by air or explosion-proof electric motors. There are no operations conducted at the facility that generate open flames or sparks. Smoking will be restricted to areas outside of the fenced property.

Waste streams received at the facility are segregated in compatibility groups in accordance with the DOT hazard class displayed on the drum. The hazard class is determined by an evaluation conducted on the waste before receipt by the facility. The segregation of wastes in compatibility groups is designed to prevent the accidental commingling of waste or materials during spills or other incidents. Before waste streams are commingled or consolidated, the waste streams will be tested for compatibility using the method described in **Attachment II.A.4 "Waste Analysis Plan"**.

4.d *Attach a description of the preparedness and prevention procedures required by 40 CFR Part 264, Subpart C, including design and operation of the facility, required equipment, testing and maintenance of equipment, access to communications or alarm system, required aisle space, and arrangement with local authorities.*

A Preparedness and Prevention Plan is provided in **Attachment II.A.2 "Preparedness and Prevention Plan"**.

4.e *Attach an outline of both the introductory and continuing training programs used to prepare persons to operate or maintain the hazardous waste management facility in safe manner to demonstrate compliance with 2964.16 [270.14(b)(12)] and a brief description of how training will be designed to meet actual job tasks [264.16(a)(3)]*

The training program is provided in **Attachment II.A.3 "Training Plan"**.

II.A.5. Chemical and Physical Analysis Reports

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).

This section requires the applicant to include copies of analytical reports for wastes managed at the facility. The number of pages of analytical 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 (WAP) is included in this application to satisfy the requirements contained in item 5 above is considered to define the information to be shown in the waste evaluation documents. This information is 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 **Attachment II.A.4 "Waste Analysis Plan"**.

II.A.6. Waste Analysis Plan

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.

The Waste Analysis Plan is included as **Attachment II.A.4 "Waste Analysis Plan"**.

II.A.7. Manifest System, Recordkeeping, and Reporting

The Manifest System, Recordkeeping, and Reporting section is addressed in **Attachment II.A.7 "Recordkeeping and Reporting"**.

II.A.8. Other Federal Laws

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

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.

II.B. Containers

This section is addressed in **Attachment II.B "Containers"**.

II.C. Tank Systems

Not applicable to the current or proposed operations at the site.

II.D. Surface Impoundments

Not applicable to the current or proposed operations at the site.

II.E. Waste Piles

Not applicable to the current or proposed operations at the site.

II.F. Land Treatment

Not applicable to the current or proposed operations at the site.

II.G. Landfills

Not applicable to the current or proposed operations at the site.

II.H. Incinerators

Not applicable to the current or proposed operations at the site.

II.I. Miscellaneous Units

This section is addressed in **Attachment II.I "Miscellaneous Units"** for the three new flammable storage units that are proposed in this application.

II.J. Containment Buildings

Not applicable to the current or proposed operations at the site.

II.K. Closure

This section is addressed in **Attachment II.K "Closure"**.

II.L. Compliance Schedule

Not applicable to the current or proposed operations at the site.

II.M. Ground Water Protection

Not applicable to the current operations at the site. This section is addressed in **Attachment II.I "Miscellaneous Units"** for the three new flammable storage units that are proposed in this application.

II.N. Research, Development, and Demonstration

Not applicable to the current or proposed operations at the site.

II.O. Exposure Information

Not applicable to the current operations at the site. This section is addressed in **Attachment II.I "Miscellaneous Units"** for the three new flammable storage units that are proposed in this application.

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

This section is addressed in **Attachment II.P "Solid Waste Management Units (SWMUs)"**.

II.Q. Information Requirements for Solid Waste Management Units (SWMUs)

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.

This section is also addressed in **Attachment II.P "Solid Waste Management Units (SWMUs)"**.

II.R. Process Vents

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

> *R.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 Services, Inc. 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 ppm_w. Triumvirate Environmental Service, Inc. does not have any such hazardous waste operations at the facility. Hence, the requirements of Subpart AA do not apply.

II.S. Requirements for Equipment

Regulations in 40 CFR Part 264, Subpart CC limit emissions from tanks, containers >0.1 m^3 (26.4 gallons) in capacity and surface impoundments handling hazardous waste with volatile organic content greater than or equal to 500 ppm_w.

Triumvirate Environmental Services, Inc. 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 to 500 ppm_w. The following containers are exempt from Subpart CC requirements:

- Containers with <0.1 m^3 (26.4 gallons) 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 Services, Inc. could be subject to Level 1 or Level 2 air emission controls depending upon its capacity (i.e., >0.1 m^3 (26.4 gallons) to 0.46 m^3 (121.5 gallons), or >0.46 m^3). Container Level 3 controls potentially apply to containers >0.1 m^3 (26.4 gallons) used for treatment of a hazardous waste by a waste stabilization process. However, Triumvirate Environmental Services, 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 ppm_w. 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 Services, 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 Services, Inc. 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.

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 Services, Inc. other than identifying equipment per 264.1064(g)(6), which is addressed in the paragraph above. If use of equipment is greater than 300 hours per year, Triumvirate will implement actions to comply with Subpart BB.

II.T. Boilers and Industrial Furnaces

Not applicable to the current or proposed operations at the site.

II.U. Requirements for Drip Pads

Not applicable to the current or proposed operations at the site.

Supporting Attachments

General Information

- Exhibit I.A.1: Site Permit List
- Attachment I.A: Siting Evaluation
- Attachment I.B: Site Photographs

Exhibit I.A.1: Triumvirate Orlando Permit List

Site Name	Title	Permit Number	Issuing Agency	Status	Effective Date	Expiration Date
Orlando	Registration as Transporter, Transfer Facility, and Small Quantity Handler Facility for Universal Waste Lamps and Devices	EPA ID# FLD9800559728	FDEP	Active	2/9/2023	3/1/2024
Orlando	SPCC - Orlando	Revised July 2018	ECS Engineering - Stanley Stokes	Active	6/1/2006	7/1/2023
Orlando	RCRA Hazardous Waste Permit (Part B)	26916-009-HO	FDEP	Active	10/17/2018	11/6/2023
Orlando	Septic Tank Permit Operating & Industrial Manufacturing	48-QO-00412	Florida Department of Health	Active	1/1/2023	12/31/2023
Orlando	Annual Registration Biomedical Waste - Transporter	48-64-1374857	Florida Department of Health	Active	10/1/2022	9/30/2023
Orlando	Operating Permit Biomedical Waste - Storage	48-64-1374849	Florida Department of Health	Active	10/1/2022	9/30/2023
Orlando	Orange County BioMedical Waste Storage Permit	48-64-1374849	Florida Department of Health - Orange County	Active	10/1/2022	9/30/2023
Orlando	Orange County BioMedical Waste Transporter Permit	48-64-1374857	Florida Department of Health (orange county)	Active	8/9/2022	9/30/2023
Orlando	Business Tax for MFG REP-CHEMICALS & WHOLESALE	Business ID #024371 3501-0100219	Orange County Tax Collector	Active	7/14/2022	9/30/2023
Orlando	Storage Tank Registration Placard	Placard #548917; STCM Account 67551	FDEP	Active	6/3/2022	6/30/2023
Orlando	Weighing and Measuring Device Permit	WM19047	Department of Agriculture and Consumer Services	Active	5/26/2022	6/30/2023
Orlando	Registration as Transporter of Hazardous Wastes	FLD9800559728	FDEP	Active	4/18/2022	6/30/2023
Orlando	Registration as Used Oil Transporter, Transfer Facility, Marketer, Filter Transporter, Filter Transfer Facility,	EPA ID# FLD9800559728	FDEP	Active	3/22/2022	6/30/2023
Orlando	Restricted Drug Distributor/Destruction Facility	5326	Florida Department of Business & Professional Regulation	Active	11/14/2021	12/31/2023
Orlando	Multi-Sector Generic Permit for Stormwater Discharge Associated with Industrial Activity	FLR05H221-003	FDEP	Active	9/10/2021	9/9/2026
Orlando	Solid Waste Renewal Permit - Solid Waste Processing Facility	0288830-006-SO	FDEP	Active	11/20/2018	11/20/2023

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment I.A: Siting Evaluation

Triumvirate Environmental Services, Inc. (TESI)
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

1. Introduction

Triumvirate is proposing modifications as part of this permit renewal application. Site modifications have the potential to trigger Florida Statute 403.7211 "Siting Requirements". Each modification is discussed below with Triumvirate's reasoning for why the modification does not trigger the Siting Requirements regulation under 403.7211.

The modifications listed below are numbered consistent with those listed in the permit application cover letter and outline.

2. Florida Statute 403.7211 (For Reference)

Florida Statue 403.7211: Hazardous waste facilities managing hazardous wastes generated offsite; federal facilities managing hazardous waste.

(1) This section applies to facilities managing hazardous waste generated offsite. This section does not apply to manufacturers, power generators, or other industrial operations that have received or apply for a permit or a modification to a permit from the department for the treatment, storage, or disposal of hazardous waste generated only onsite or from other sites owned or acquired by the permittee. Power generators are electric utilities as defined in s. 403.522 which own or operate facilities necessary for the generation, transmission, or distribution of electric energy; federally qualified facilities under the Public Utility Regulatory Act of 1978, or exempt wholesale generators under the Energy Policy Act of 1992. Notwithstanding the foregoing, this section shall apply to all federal facilities that manage hazardous waste.

(2) The department may not issue any permit under s. 403.722 for the construction, initial operation, or substantial modification of a facility for the disposal, storage, or treatment of hazardous waste generated offsite which is proposed to be located in any of the following locations:

(a) Any area where life-threatening concentrations of hazardous substances could accumulate at any residence or residential subdivision as the result of a catastrophic event at the proposed facility, unless each such residence or residential subdivision is served by at least one arterial road or urban minor arterial road, as determined under the procedures referenced in s. 334.03(10), which provides safe and direct egress by land to an area where such life-threatening concentrations of hazardous substances could not accumulate in a catastrophic event. Egress by any road leading from any residence or residential subdivision to any point located within 1,000 yards of the proposed facility is unsafe for the purposes of this paragraph. In determining whether egress proposed by the applicant is safe and direct, the department shall also consider, at a minimum, the following factors:

1. *Natural barriers such as water bodies, and whether any road in the proposed evacuation route is impaired by a natural barrier such as a water body.*
2. *Potential exposure during egress and potential increases in the duration of exposure.*
3. *Whether any road in a proposed evacuation route passes in close proximity to the facility.*
4. *Whether any portion of the evacuation route is inherently directed toward the facility.*

(b) Any location within 1,500 yards of any hospital, prison, school, nursing home facility, day care facility, stadium, place of assembled worship, or any other similar site where individuals are routinely confined or assembled in such a manner that reasonable access to immediate evacuation is likely to be unavailable.

(c) Any location within 1,000 yards of any residence.

(d) Any location which is inconsistent with rules adopted by the department under this part.

For the purposes of this subsection, all distances shall be measured from the outer limit of the active hazardous waste management area. "Substantial modification" includes: any physical change in, change in the operations of, or addition to a facility which could increase the potential offsite impact, or risk of impact, from a release at that facility; and any change in permit conditions which is reasonably expected to lead to greater potential impacts or risks of impacts, from a release at that facility. "Substantial modification" does not include a change in operations, structures, or permit conditions which does not substantially increase either the potential impact from, or the risk of, a release. Physical or operational changes to a facility related solely to the management of nonhazardous waste at the facility is not considered a substantial modification. The department shall, by rule, adopt criteria to determine whether a facility has been substantially modified. "Initial operation" means the initial commencement of operations at the facility.

(3) It shall be presumed, for the purposes of paragraph (2)(a) only, that life-threatening concentrations of hazardous substances could accumulate in a catastrophic event in any area within a radius of 3 miles of a hazardous waste transfer, disposal, storage, or treatment facility. This presumption may be rebutted by a demonstration that such life-threatening concentrations could accumulate at a greater distance, or that such life-threatening concentrations could accumulate only at a lesser distance, in light of the composition, quantity, and concentration of hazardous waste proposed to be disposed of, treated, or stored at the proposed facility. This demonstration may be made, at the election of the facility, in the form of the submissions required under Program 3 of the Accidental Release Prevention Program of s. 112(r)(7) of the Clean Air Act.

(4) For the purposes of this section, a concentration of hazardous substances shall be deemed to be life-threatening when the concentration could cause susceptible or sensitive individuals, excluding hypersensitive or hypersusceptible individuals, to experience irreversible or other serious, long-lasting effects or impaired ability to escape.

(5) No person shall construct or operate a transfer facility for the management of hazardous waste unless the facility meets the siting requirements of subsection (2).

(6) This section shall not prohibit the operation of existing transfer facilities that have commenced operation as of the effective date of this section, if the transfer facility is not relocated or if there is no substantial modification in the structure or operation of the facility after the effective date of this section.

See **Exhibit I.A-1 "Site Map with Relative Distances"**. There are no residential areas within 1,000 yards. The only locations of concern based on 403.7211(2)(b) are the following:

1. There is a soccer stadium located 500 yards to the northeast of the facility. It has reasonable access to immediate evacuation routes via W Taft Vineland Road.
2. There is a church located 1,566 yards to the northwest of the facility. It has reasonable access to immediate evacuation routes via W Taft Vineland Road and US-92.

3. Modification #1: New Flammable Material Storage Units

Triumvirate proposes the installation of three self-contained, pre-fabricated, flammable storage units on the exterior of the existing container storage unit area. Each unit will have its own secondary containment. The units would not be connected to the main building but would be free-standing and placed on new, poured concrete with additional secondary containment for the area. The units would be used to store and consolidate flammable materials, since this is currently approved in the permit but restricted inside our facility due to fire department limitations. This area is shown in **Figure II.A.5-1 "Modified Facility Site Plan"** and in **Figure I.D.1-1 "Flammable Container Storage Layout"**. The overall site limit of 824, 55-gallon containers would not be increased.

The facility is already permitted to receive flammable materials per Permit #26916-009-HO. No additional volume is being requested to the overall facility storage limit. The addition of the flammable material storage units is not a "Substantial Modification" as defined in 403.7211(2) because it does not increase the potential offsite impact, or risk of impact, from a release at that facility. The addition of the flammable storage units will *decrease* the potential offsite risk of impact compared to current operations by providing storage units that are approved by the fire department and designed per National Fire Protection Association criteria. The units also have their own secondary containment and will be located on top of new, poured concrete that also have secondary containment.

4. Modification #2: Flammable Solids Consolidation

Triumvirate proposes to also be able to consolidate flammable solids in the area created for the new flammable storage units mentioned in Modification Item #1. Flammable solids would be stored inside the new flammable material storage units. Smaller containers of flammable solids would be consolidated into larger containers just outside of the flammable storage units to allow for forklift usage. The area will be new, poured concrete and will have secondary containment. This area is shown in **Figure II.A.5-1 "Modified Facility Site Plan"** and in **Figure I.D.1-1 "Flammable Container Storage Layout"**. The overall site limit of 824, 55-gallon containers would not be increased.

The facility is already permitted to receive flammable materials per Permit #26916-009-HO. No additional volume is being requested to the overall facility storage limit. The addition of the flammable material consolidation in the new flammable material storage unit area is not a "Substantial Modification" as defined in 403.7211(2) because it does not increase the potential offsite impact, or risk of impact, from a release at that facility. The addition of the flammable storage units will *decrease* the potential offsite risk of impact compared to current operations by providing storage units that are approved by the fire department and designed per National Fire Protection Association criteria. The units also have their own secondary containment and will be located on top of new, poured concrete that also have secondary containment.

5. Modification #3: Flammable Material Pumping to Tanker Trucks

Triumvirate requests the ability to pump containers of flammable liquids into tanker trucks. Vacuum tanker trucks would arrive at the site and "sting" drums using a wand and vacuum hose. This activity would only be located in an area that has secondary containment.

The facility is already permitted to receive flammable materials per Permit #26916-009-HO. No additional volume is being requested to the overall facility storage limit. The addition of pumping flammable material containers into tankers for offsite transport is not a "Substantial Modification" as defined in 403.7211(2) because it does not increase the potential offsite impact, or risk of impact, from a release at that facility. The addition of the flammable storage unit

area will *decrease* the potential offsite risk of impact compared to current operations by providing storage units that are approved by the fire department and designed per National Fire Protection Association criteria. The units also have their own secondary containment and will be located on top of new, poured concrete that also have secondary containment.

6. Modification #4: Corrosive Material Pumping to Tanker Trucks

Triumvirate requests the ability to pump containers of corrosive liquids into tanker trucks. Vacuum tanker trucks would arrive at the site and "sting" drums using a wand and vacuum hose. This activity would only be located in an area that has secondary containment.

The facility is already permitted to receive corrosive materials per Permit #26916-009-HO. No additional volume is being requested to the overall facility storage limit. The addition of pumping corrosive material containers into tankers for offsite transport is not a "Substantial Modification" as defined in 403.7211(2) because it does not increase the potential offsite impact, or risk of impact, from a release at that facility. All pumping activities will be performed in an area that has secondary containment.

7. Modification #5: Waste Storage in Northwest Sub-unit of the Container Storage Area

Triumvirate requests a modification to the existing permit language that will allow hazardous waste and non-hazardous waste to be stored in the Northwest sub-unit within the Container Storage Area. The current permit language denotes this area as non-hazardous waste only. The area is currently bermed for secondary containment and the floor is sealed. The overall site limit of 824, 55-gallon containers would not be increased.

The facility is already permitted to receive hazardous materials per Permit #26916-009-HO. No additional volume is being requested to the overall facility storage limit. The language change to allow non-hazardous and hazardous waste to be stored in the northwest sub-unit of the Container Storage area is not a "Substantial Modification" as defined in 403.7211(2) because it does not increase the potential offsite impact, or risk of impact, from a release at that facility.

8. Modification #6: Waste Storage in Waste Stabilization and Consolidation Area

Triumvirate proposes having the option to store hazardous waste in the Waste Stabilization and Consolidation Area if the material meets compatibility requirements. The area already provides secondary containment and is bermed and sealed. The overall site limit of 824, 55-gallon containers would not be increased.

The facility is already permitted to receive hazardous materials per Permit #26916-009-HO. No additional volume is being requested to the overall facility storage limit. The language change to allow the Waste Stabilization and Consolidation area is not a "Substantial Modification" as defined in 403.7211(2) because it does not increase the potential offsite impact, or risk of impact, from a release at that facility.

9. Modification #7: Non-Hazardous Waste Storage in Waste Stabilization and Consolidation Area

Triumvirate proposes storing non-hazardous waste in the northern section of the Waste Stabilization and Consolidation warehouse. A new berm would be installed to separate this area from the hazardous waste side of the Waste Stabilization and Consolidation warehouse. This area is shown in **Figure II.A.5-1 "Modified Facility Site Plan"**. The existing, separate, non-hazardous solid waste permit (#0288830-006-SO) would be updated accordingly.

This change does not affect hazardous waste storage; therefore, is not a "Substantial Modification" as defined in 403.7211(2) because it does not increase the potential offsite impact, or risk of impact, from a release at that facility.

10. Modification #8: Update Permit Language for Non-Hazardous Waste

Triumvirate proposes a modification to the existing permit language so non-hazardous waste does not count against our hazardous waste limit. The language in the existing hazardous waste permit requires us to store non-hazardous solid waste inside the permitted hazardous waste storage areas. It also requires us to count the non-hazardous material as part of the permitted capacity listed in the hazardous waste permit (824, 55-gallon equivalents). We have an existing, separate, non-hazardous solid waste permit (#0288830-006-SO) that addresses how non-hazardous solid waste should be handled.

The permitted limit of material that can be received at the facility does not change per this modification; therefore, the change to the permit language is not a "Substantial Modification" as defined in 403.7211(2) because it does not increase the potential offsite impact, or risk of impact, from a release at that facility.

11. Modification #9: New Impervious Surface

Triumvirate proposes to pour new asphalt and concrete at the site to create an impervious surface designed with secondary containment. This will allow us to park trailers that contain hazardous, non-hazardous, and oily waste that is pending receipt or waiting to be shipped. This area is shown in **Figure II.A.5-1 "Modified Facility Site Plan"**.

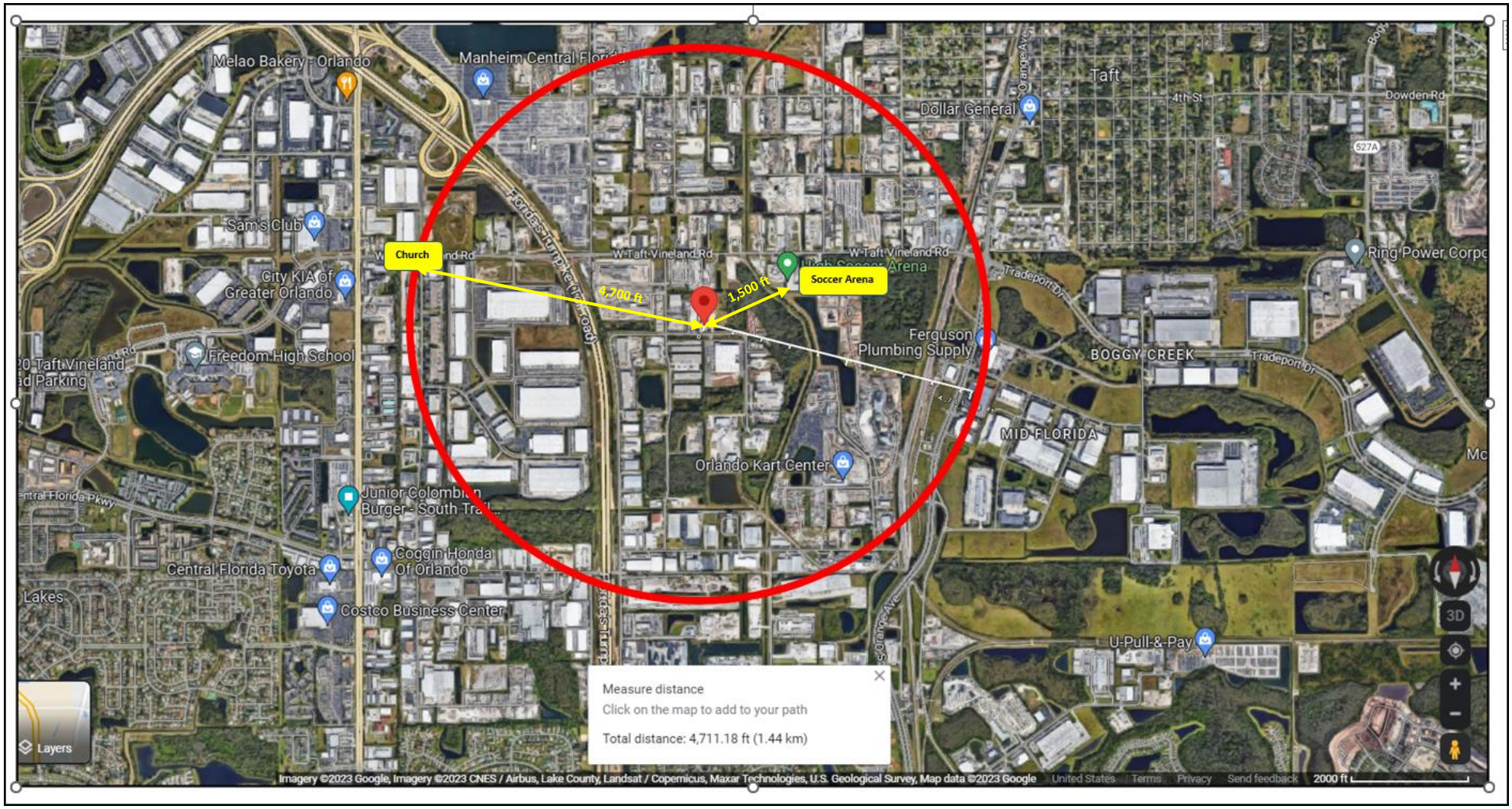
The addition of the impervious surface reduces potential offsite risks from a release of material; therefore, this modification is not a "Substantial Modification" as defined in 403.7211(2).

12. Modification #10: Packaging Language

The hazardous waste permit currently allows us to unpack containers from labpacks and repackage them into an outer container for outbound shipment. However, it limits us to only doing this for labpack containers. We propose modification of the permit language so we can repackage labpack and non-labpack containers into an outer container for outbound shipment. The outer container definition would include drums, yard boxes, and roll-offs. Chemical compatibility and DOT packaging requirements would be met.

This modification will comply with the current compatibility and packaging requirements for DOT hazardous materials. Since the site already complies with DOT compatibility and packaging requirements, this modification is not a "Substantial Modification" as defined in 403.7211(2).

13. Exhibit I.A-1: Site Map with Relative Distances



F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment I.B: Site Photographs

Triumvirate Environmental Services, Inc. (TESI)
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

Site Photographs

Photographs I.B.3-4 through I.B.3-18 illustrate the facility, its use, and are included for informational purposes. Photos I.B.3-3 through I.B.3-7 are street level and aerial views taken by Google Earth. Photos I.B.3-8 through I.B.3-18 shows various treatment and storage areas.

Figure II.A.5 "Existing Facility Site Plan" shows the hazardous waste management areas at the facility. Photos I.B.3-8 through I.B.3-18 contains views of the areas indicated in **Figure II.A.5**.

Photo I.B.3-3: View from Rocket Blvd

Photo I.B.3-4: Aerial View Looking West

Photo I.B.3-5: Aerial View Looking East

Photo I.B.3-6: Aerial View Looking South

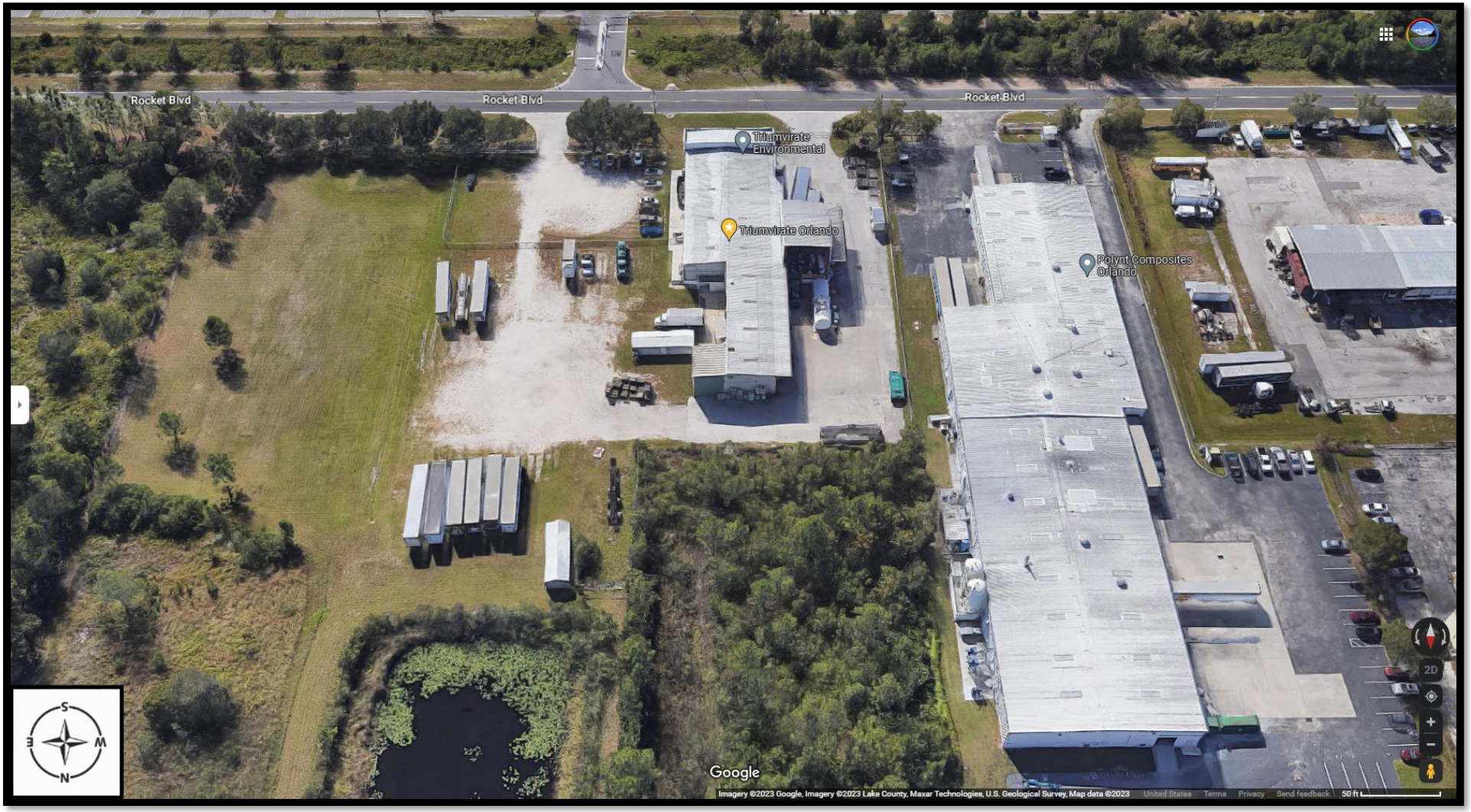


Photo I.B.3-7: Aerial View Looking North

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

Supporting Attachments

Operational Plans

- Attachment II.A.1: Contingency Plan
- Attachment II.A.2: Preparedness and Prevention Plan
- Attachment II.A.3: Training Plan
- Attachment II.A.4: Waste Analysis Plan
- Attachment II.A.4.a: Waste Compatibility Test Manual
- Attachment II.A.7: Recordkeeping and Reporting
- Attachment II.B: Container Management
- Attachment II.I: Miscellaneous Units
- Attachment II.K: Closure Plans
- Attachment II.P: Solid Waste Management Units (SWMUs)
- Attachment III: Waste Minimization Program

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.A.1: Contingency Plan

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

A. Emergency Response Contact List

Table II.A.1-1: Emergency Response Contact List		
Facility Information: Triumvirate Environmental Services, Inc. 10100 Rocket Boulevard, Orlando, Florida 32824 407-859-4441		
Emergency Coordinators:		
Primary	Michael Cutshall 2600 S. Conway Rd, Apt 1209 Orlando, FL 32812	Cell: (772) 341-1890 Alt# (407) 859-4441
Secondary	Kevin Coulon 14844 Masthead Landing Circle Winter Garden, FL 34787	Cell: (781) 254-5467 Alt# (407) 859-4441
Alternate	Randy Troy 240 Williamson Drive Davenport, FL 33897	Cell: (260) 416-4981 Alt# (407) 859-4441
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 – Michael Cutshall		Cell: (772) 341-1890
National Response Center (NRC):		1-800-424-8802
Cleanup Contractor(s):		
National Response Corporation		1-800-899-4672
Global Environmental and Industrial Response		1-866-456-2368
State Oil Pollution Control Agency – FDEP 24-Hour State Warning Point (Dept. of Community Affairs' Division of Emergency Management)		1-800-320-0519
Local Emergency Response Planning Committee:		
East Central Florida Regional Planning Council 309 Cranes Roost Boulevard, Suite 2000 Altamonte Springs, FL 32701		407-262-7772 ext. 335
Other Federal/State/Local Agencies:		
EPA – Regional IV – 24-Hour Spill Reporting		1-800-424-8802

Table II.A.1-1: Emergency Response Contact List	
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.

B. Introduction

This document is prepared for Triumvirate Environmental Services, 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 Services, 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 Services, 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.

C. General Information

This contingency plan and emergency procedures are prepared for Triumvirate Environmental Services, 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 and the Florida Turnpike. The Triumvirate Environmental Services, 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 Services, 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 Services, Inc. are consolidated in larger containers or shipped out in the same container in which they were received by the facility.

D. Emergency Service Organizations

Table II.A.1-1 "Emergency Response Contact List" 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.1-7** of this attachment shows the locations of the organizations mentioned in the previous sentence that are closest to the Triumvirate Environmental Services, 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:

1. 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 #54, which is located at the intersection of Central Florida Parkway and Sea Harbor Drive about 6.5 miles southwest or our site at 6500 Central Florida Parkway in Orlando, about 16 minutes from our location. This FD Unit is know as Squad 1. This organization will be provided a copy of the contingency plan.

2. 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 Services, 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.

3. Hospital

Orlando Regional Healthcare (ORH) can provide 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.

4. 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. If the heavy equipment is not available, Triumvirate Environmental Services, Inc. will seek the help of outside emergency response contractors to assist the facility during special emergency circumstances. Triumvirate Environmental Services, Inc. has contacts with National Response Corporation and Global Environmental and Industrial Response.

E. Emergency Coordinators

The facility emergency coordinators are listed in **Table II.A.1-1 "Emergency Response Contact List"** of this attachment. In case of emergency, they will be in charge of emergency coordination and remedial action. Each coordinator will be available 24/7.

If an emergency situation develops at the facility, the discoverer should contact an emergency coordinator listed in **Table II.A.1-1 "Emergency Response Contact List"** of this attachment. The primary emergency coordinator should be contacted first. If they are not available, the secondary emergency coordinator should be called next.

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

F. 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 loading dock, the Waste Consolidation and Stabilization Area, and the new pre-fabricated flammable storage units requested in this permit application. **Figure II.A.5 "Existing Facility Site Plan"** contains a layout of the Triumvirate Environmental Services, Inc. facility showing the areas listed above. **Figure II.A.5-1 "Modified Facility Site Plan"** contains a layout of the proposed facility if the requested permit changes are implemented. 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.

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 "Existing Container Storage Layout"**. 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 on 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.1-2** of this attachment contains the Segregation Table obtained from DOT. It has been modified to delete hazard classes that Triumvirate Environmental Services, Inc. is not permitted to manage at the facility (Class 1.1 through 1.6 explosives, and Class 7 radioactives).

Table II.A.4-2 of **Attachment II.A.4 "Waste Analysis Plan"** lists the hazardous wastes stored in the container unit. 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 Services, 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 dedicated storage 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.A.1-1** of this attachment. The cabinet is equipped with a dry chemical fire suppression system. Lock out/tag out procedures will be used to prevent personnel from placing waste in the cabinet for periods of time that the cabinet has not been maintained/inspected.

Figure I.D.1 "Existing Container Storage Layout" shows the container storage unit, with locations of each row of pallets. This figure is for informational purposes. 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. There is a concrete block wall (minimally rated as a two-hour fire 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.

2. Consolidation and Stabilization Area

Triumvirate Environmental Services, Inc. is authorized to consolidate compatible hazardous wastes stored in containers into larger containers. Hazardous waste which can be disposed of together at an approved hazardous waste facility will only be consolidated. Only hazardous waste that has passed the acceptance procedures described in the Waste Compatibility Test Manual will be consolidated. Triumvirate Environmental Services, Inc. will not consolidate acids, inhalation hazards, reactives (D003), or oxidizers. The Waste Compatibility Test Manual will determine compatibility in determining which waste streams will be intended for consolidation. Flammable material which is intended for fuel blending or incineration may be consolidated contingent upon NFPA upgrades. These upgrades will be in the form of the three pre-fabricated flammable storage units discussed in the previous section. Consolidation of flammable liquids and solids is proposed to occur in this area.

Consolidations will take place in the Waste Consolidation and Stabilization Area identified in **Figure II.A.5 "Existing Facility Site Plan"**, or in the new flammable solids consolidation area outside of the flammable material storage units shown in **Figure II.A.5-1 "Modified Facility Site Plan".**

3. Loading Dock

Hazardous and non-hazardous wastes and material are loaded, unloaded, and stored for up to 10 days on the loading the dock. The DOT segregation is followed and containers are managed per the Waste Analysis Plan. The fire suppression system has been upgraded in the Loading Dock for transfer, sampling and 10-day storage of flammable material. Sampling of permitted wastes may occur in accordance with the Waste Analysis Plan.

4. Flammable Material Storage Units

Three, pre-fabricated flammable storage units are being proposed as part of this permit application. The three units will be located as shown in **Figure II.A.5-1 "Modified Facility Site Plan"**. Each unit will have its own secondary containment and can hold a maximum of 80, 55-gallon drums each. Each unit will be designed per NFPA requirements and will be approved by the fire department prior to use.

G. Implementation Of Contingency Plan

The person discovering any fire, regardless of size/magnitude, shall immediately notify the fire department (NFPA 1-10.7.1.1). Persons shall not make, issue, post or maintain any regulation or order, written or verbal, that would require any person to take any unnecessary delaying action prior to reporting a fire to the fire department (NFPA 1-10.7.1.4).

The decision to implement the contingency plan depends upon if 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:

1. potential hazards of confined spills,
2. spills affecting incompatible wastes, and
3. 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.

H. Emergency Procedures

Emergency Plans shall include the procedures for reporting emergencies to building occupants and staff and any other requirements of the AHJ (NFPA 1-10.9.2.1). 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 Sheriff's Department, Fire Department, and the Florida DEP Central District, as needed by calling 911.

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:
    a. Name and telephone number of reporter
    b. Name and address of facility
    c. Time and type of incident (e.g., release, fire)
    d. Name and quantity of material(s) involved, to the extent known
    e. The extent of injuries, if any, and
    f. 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:
    a. Name, address, and telephone number of the owner or operator
    b. Name, address, and telephone number of the facility
    c. Date, time, and type of incident (e.g., fire, explosion)
    d. Name and quantity of material(s) involved
    e. The extent of injuries, if any
    f. An assessment of actual or potential hazards to human health or the environment, where this is applicable, and
    g. 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)).

I. 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.

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 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. The minimum height of the roll-over berm and curbs are 3.5". 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 if 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 if 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 storm water 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.

2. Waste Consolidation and Stabilization Area

Triumvirate Environmental Services, Inc. is authorized to consolidate compatible hazardous wastes stored in containers 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 Services, Inc. will not consolidate acids, inhalation hazards, reactives (D003), or oxidizers. Flammable material which is intended for fuel blending or incineration may be consolidated contingent upon NFPA upgrades via the approval of the three new pre-fabricated flammable material storage units. The Waste Compatibility Test Manual will determine compatibility in determining which waste streams will be intended for consolidation. Consolidations will take place in the Waste Consolidation and Stabilization Area identified in **Figure II.A.5 "Existing Facility Site Plan"**.

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.

3. Flammable Material Storage Units

Three, pre-fabricated flammable storage units are being proposed as part of this permit application. The three units will be located as shown in **Figure II.A.5-1 "Modified Facility Site Plan"**. Each unit will have its own secondary containment and can hold a maximum of 80, 55-gallon drums each. Each unit will be designed per NFPA requirements and will be approved by the fire department prior to use.

J. Procedures, Structures or Equipment used at the Facility to:

1. Mitigate effects of equipment failure and power outages

During a spill and or emergency the contingency plan will be activated and proper equipment will be used. All powered equipment that is owned by Triumvirate Environmental Services, 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 Services, 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.

2. 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 can conduct work. All personnel working in the facility an extensive two-part training that is outlined in the training program.

3. 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.

4. 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 separate areas from waste materials.

5. Prevent run-off from hazardous waste handling areas 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 K of this 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 trained to berm, dike and prevent a release from reaching the low point of the parking lot that discharges into the storm water retention pond.

6. 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 air pollutants.

K. 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 "Existing Facility Site Plan" shows the location of the emergency equipment. **Table II.A.1-3** of this attachment lists the equipment stored in the cabinet and shown in the figure mentioned above.

In addition to the emergency equipment that is staged throughout the facility all field and facility personnel maintain an individual spill bag that contains their own personnel emergency response equipment such as air purifying respirator with various cartridges, chemical resistant suite, nitrile gloves, chemical resistant gloves, chemical resistant boots, hardhat, flashlight, safety vest and silver shield gloves.

The facility shown in **Figure I.D.1 "Existing Container Storage Layout"** 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 we can provide 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.

L. 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:

1. The instructions for plant evacuation will be communicated using the internal paging system.
2. 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.
3. ALL personnel, visitors, and contractors will immediately leave through the exit gate to gather at the designated rally points.
4. No persons shall remain or re-enter 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.
5. All persons will be accounted for by their immediate supervisors.
6. 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 senior supervisor will compile a list of all personnel at the rally point.
7. 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.

8. 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.
9. A final tally of personnel will be made by the Emergency Coordinator.
10. 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.
11. 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.
12. 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.
13. Drills are held to practice these procedures and are treated with the same seriousness as an actual emergency.

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

M. 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/natural-disasters/hurricanes.

With tornadoes, there is usually little time to prepare. 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.

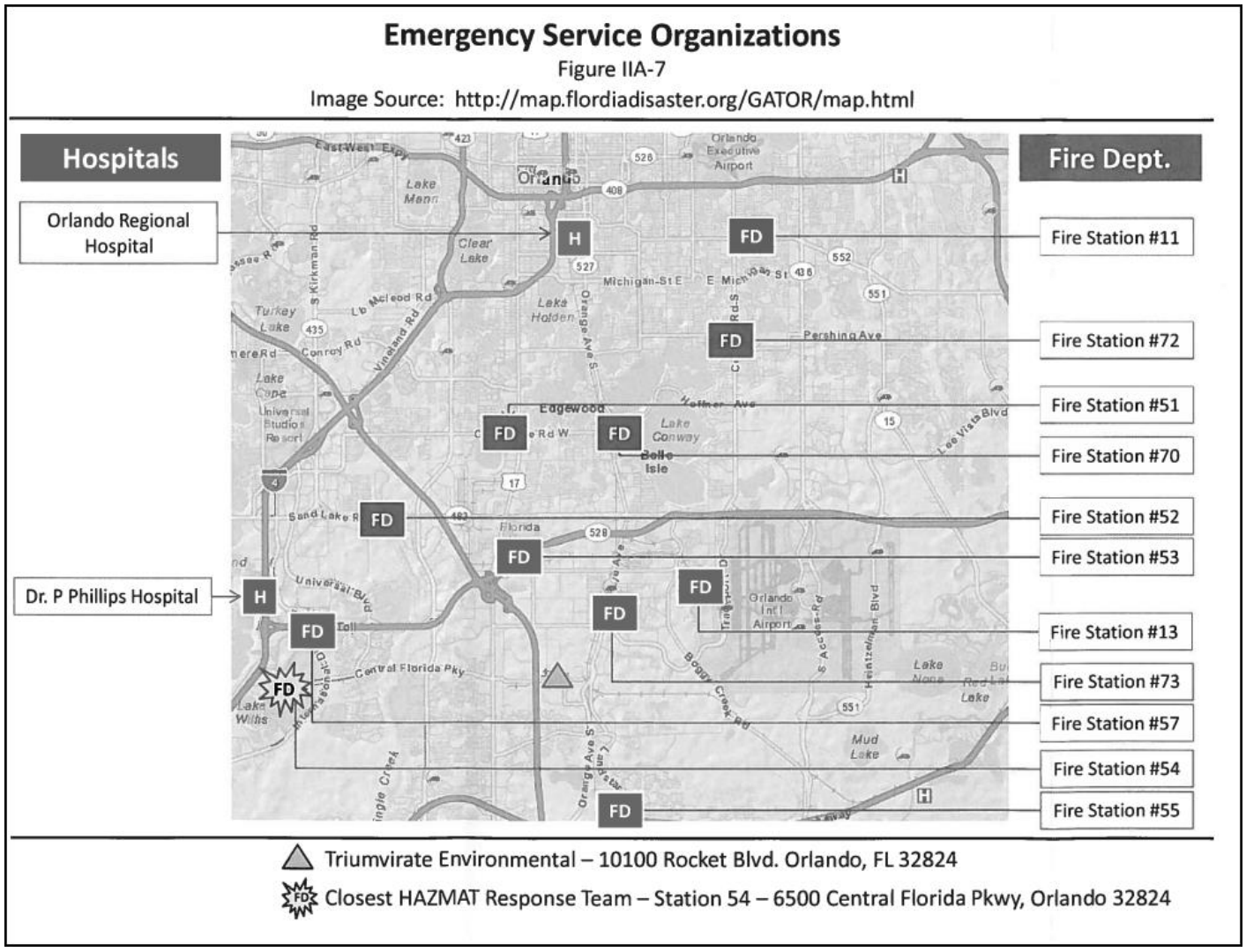
Early warning is possible with tropical storms/hurricanes. If it becomes apparent that a tropical storm or hurricane may impact the facility, personnel should attempt to track the path/progress of the storm. If the forecast predicts a tropical storm or hurricane force winds (>39 miles per hour) for the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

N. Figure II.A.1-7: Emergency Service Organization



O. Table II.A.1-2 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	0							0	0	
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)	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 materials (4.2)			X	0							X	X	
Dangerous when wet materials (4.3)			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 (6.1)	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 O indicate prohibitions and restrictions as noted below.

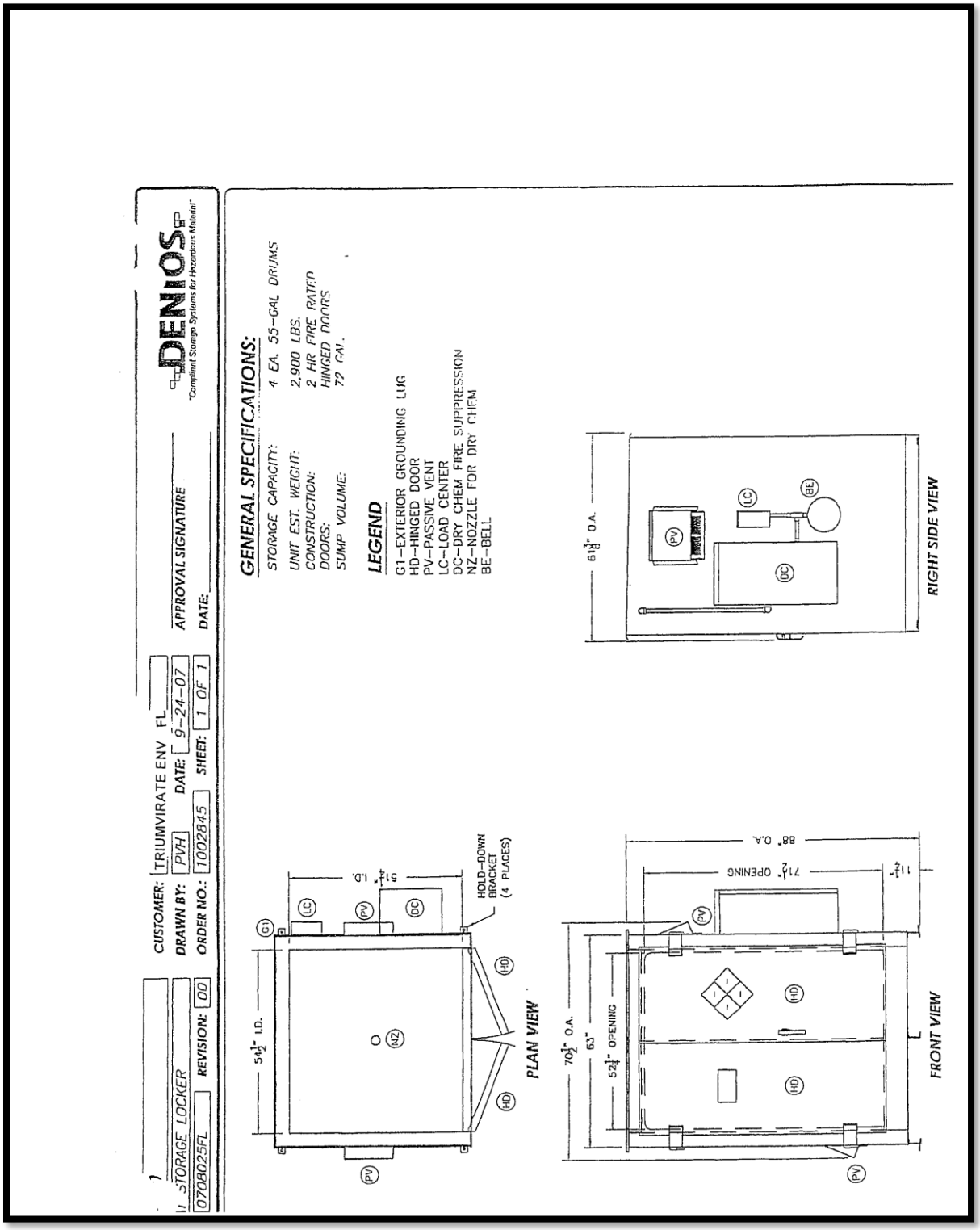
- An “X” in the table indicates that these materials may not be loaded, transported, or stored together.
- An “O” indicates that these materials may not be transported or stored together unless separated in such a way that, in the event or leakage from packages under normal transportation conditions, 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.

P. Table II.A.1-3 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) – 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

Q. Exhibit II.A.1-1: Hazmat Storage Locker Sketch



F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.A.2:
Preparedness and Prevention Plan

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

1. Design and Operation of the Facility

The hazardous waste facility owned by Triumvirate Environmental Services, 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. Located in the northwest corner of the east side of the site is a storm water retention pond, and a vacant area. The structures, buildings, and other features described above are shown in **Figure II.A.5 "Existing Facility Site Plan"**.

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.

2. 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 "Facility Layout"**. 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 "Facility Layout"**. For the purpose of this discussion, this sub-unit is labeled the south subunit. The south subunit will store DOT compatible materials as outlined in **Attachment II.B "Container Management"**.

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. Discussions of these calculations are located in **Attachment II.B "Container Management"**. 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 is a concrete block wall (minimally rated as a two hour fire wall) that separate the office from the Container Storage Unit.

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 store DOT compatible materials as outlined in **Attachment II.B "Container Management"**. 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 DOT compatible materials as outlined in **Attachment II.B "Container Management".** 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 **Attachment II.B "Container Management"**.

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 Services, Inc. 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 Services, Inc. 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 Services, 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.

3. Consolidation and Stabilization Area

Triumvirate Environmental Services, Inc. will conduct both consolidation and stabilization activities per the Containers Section, and the Waste Compatibility and Test Manual. The analysis will be done per the Waste Analysis Plan (WAP). The consolidation and stabilization operations of hazardous waste take place in the Consolidation and Stabilization Area. This area is shown in **Figure I.D.1 "Existing Container Storage Layout"**. The consolidation area manages wastes that are placed in roll-off boxes or dump trailers. This area is used to manage wastes 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. Consolidation of flammable materials is proposed to occur in the area of the three new flammable materials storage units. Consolidation of liquids can occur inside the units, while consolidation of solids can occur outside the units on a secondary containment area. Consolidation activities and procedures are identified in **Attachment II.A.4 "Waste Analysis Plan"**.

Inner containers that are to be consolidated are usually received packaged inside drums. Those drums are transferred from the container storage unit to the Consolidation and Stabilization Area. 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 **Attachment II.A.4 "Waste Analysis Plan"**. Personnel conducting this operation wear protective equipment to protect them from injury in the event of a chemical reaction. Fire extinguishers and spill kits are located in the Waste Consolidation and Stabilization Area (show in **Figure II.A.5 "Existing Facility Site Plan"**).

The inside of the Consolidation and Stabilization Area is surrounded by a berm three and a half 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 6,100 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 **Attachment II.B "Container Management"**.

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

4. Flammable Material Storage Units (Proposed)

Three, pre-fabricated flammable storage units are being proposed as part of this permit application. The three units will be located as shown in **Figure II.A.5-1 "Modified Facility Site Plan"**. Each unit will have its own secondary containment and can hold a maximum of 80, 55-gallon drums each. Each unit will be designed per NFPA requirements and will be approved by the fire department prior to use.

Inner containers that are to be consolidated are usually received packaged inside drums. Those drums are transferred to the flammable material storage units. The containers are unpacked at that location. These containers are segregated by waste material type to prevent commingling incompatible materials. Waste materials are first checked for compatibility and then consolidated per **Attachment II.A.4 "Waste Analysis Plan"**. Personnel conducting this operation wear protective equipment to protect them from injury in the event of a chemical reaction. Fire extinguishers are located within each storage unit. Spill kits will be located in the area.

5. Required Communication Equipment

This portion of Preparedness and Prevention Procedures 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.

a. Internal Communication

The facility shown in **Figure I.D.1 "Existing Container Storage Layout"** 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.

b. 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.

6. 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-pound 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.

7. Testing and Maintenance of Equipment

The facility provides regular maintenance to fire extinguishers, fire sprinklers, 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 **Figure II.B.5 "Emergency Equipment and Personnel Safety Cabinet Inspection Form"**. Communication and decontamination equipment will be maintained and repaired to maintain good working order continuously.

8. 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.

9. 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.

10. 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 Services, 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 coordinate 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 Orlando Regional Medical Center, 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, Triumvirate Environmental Services, Inc. must document the refusal in the operating record (40 CFR Part 264.39(b)).

11. Emergency Service Organizations

Table II.A.1-1 "Emergency Response Contact List" in **Attachment II.A.1 "Contingency Plan"** 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 Services, 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 Services, 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 Services, Inc. will seek the help of outside emergency. The emergency services contact list is shown in **Attachment II.A.1 "Contingency Plan"**.

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.A.3: Training Plan

Triumvirate Environmental Services, Inc. (TESI)
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

1. Introduction

Triumvirate Environmental Services, 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 Services, Inc. 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. 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. 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 II.A.3-1**, at the end of this attachment, includes a simplified organization chart for Triumvirate Environmental Services, 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 Services, 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. 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. 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. Training Outline

A sample training outline is provided as **Exhibit II.A.3-1**, at the end of this attachment. 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.

a. 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

b. 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
- 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

- Description of operations for storage and treatment

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

c. 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
- Preparedness and Prevention

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 – HAZWOPER
- 29 CFR 1910.146 – Confined space entry

- 29 CFR 1910.147 – Lockout/tagout of electrical power supply

Permit:

- Contingency Plan and Emergency Procedures
- Description of operations for storage and treatment [II.B]

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

Proper Performance on Job Assignments

Permit:

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

Operation Documents: Procedures developed for operation and processes

7. 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 II.A.3-1**, at the end of this attachment. 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 Services, 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. 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. 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 II.A.3-1**, at the end of this attachment. 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 record keeper 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. 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. 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. 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

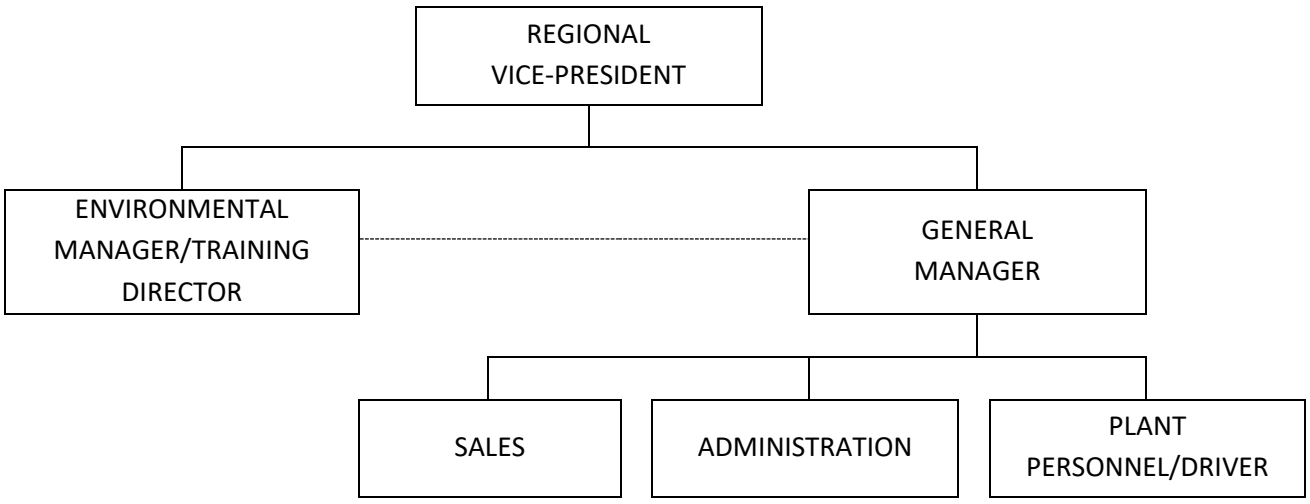
Training documents will be completed by the training instructor upon completion of the training event. Training documents will be kept at the facility either with other personnel records or separate until the facility closes or for

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.

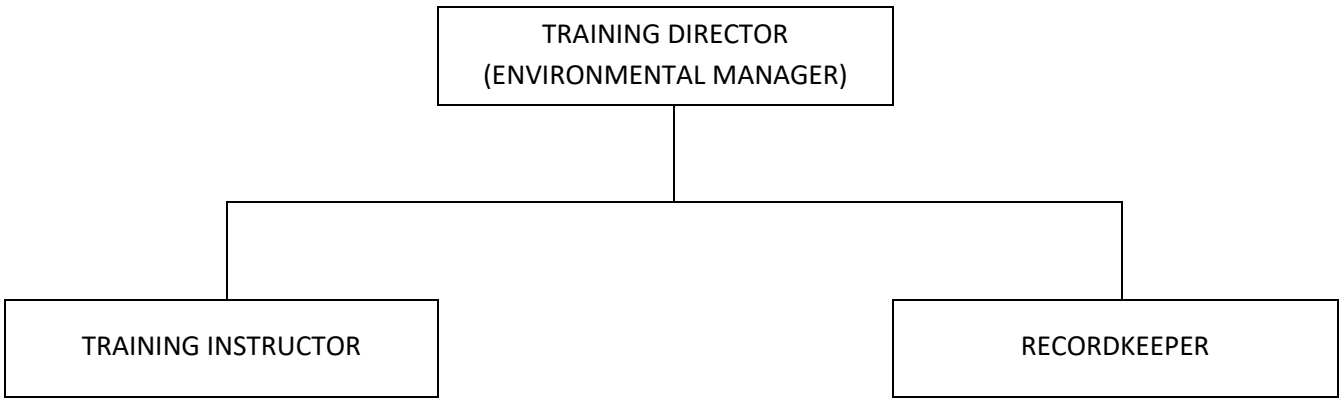
13. Job Descriptions

Triumvirate Environmental Services, 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.A.3-2**, at the end of this attachment.

14. Figure II.A.3-1: Generalized Facility Organization Chart



15. Figure II.A.3-2: Training Program Administration



16. Sample Outline/Training Plan (Exhibit II.A.3-1)

Category	I HAVE BEEN TRAINED IN AND UNDERSTAND THE FOLLOWING:	Instructor Name	Date
Occupational Health and Safety 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		
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		

Category	I HAVE BEEN TRAINED IN AND UNDERSTAND THE FOLLOWING:	Instructor Name	Date
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		

17. Job Descriptions (Exhibit II.A.3-2)

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 and respond to releases, 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. • Provide first response in traffic incidents • 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 training 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, Tyvek 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

Plant Personnel Training	
Type	**Frequency**
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.	

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.
Work Environment	Varies. Mostly office/admin environment but can also be client environments ranging from clinical/laboratory to industrial environments.

Operations Manager 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
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

Operations Manager Training	
Type	**Frequency**
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.	

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, preferred. Must be able to submit college transcript. Successful completion of OSHA/DOT physical examination. Valid driver's license.
Work Environment	Varies. Work environment can range from clinical/laboratory environment, industrial environment, to an office environment.

Plant/Environmental Personnel 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

Plant/Environmental Personnel Training	
Type	**Frequency**
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.	

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.

Administrative Training	
Type	**Frequency**
OSHA HAZWOPER First Responder Awareness Level I	Once with 4 hr annual refresher
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

Administrative Training	
Type	**Frequency**
DOT HAZMAT Initial Awareness Training	Once
DOT In-Depth Security Plan	Once
**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.	

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.A.4: Waste Analysis Plan

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

1. 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 will 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. Chemical and physical parameters are identified in accordance with this plan. Using the chemical and physical parameters the waste can be classified based on the hazards, regulatory status, and requirements for storage, treatment, and disposal. 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 methods utilized to manage the waste. The plan also describes the procedure used to evaluate the waste after it has been treated at the facility. The plan also details the procedures to obtain the necessary information to ship the waste to off-site facilities for treatment or disposal.

2. Facility Description

Triumvirate Environmental Services, Inc. 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. Triumvirate Environmental Services, Inc. also operates a 10-day transfer station, and manages used oil, oily water, or antifreeze in the one double compartment tank. Waste permitted at Triumvirate Environmental Services, Inc. include D, F, P, U, and K codes (40 CFR 261.31, 40 CFR 261.32, 40 CFR 261.33 and 40 CFR Part 261 Subpart C). Wastes prohibited at Triumvirate Environmental Services, Inc. are; forbidden materials in the hazardous materials table, DOT explosives, temperature-controlled material, radioactive materials, listed self-reactive materials defined by 49 CFR 173.224, organic peroxides type A and B listed in the HMT and defined at 49 CFR 173.128, and organic peroxides types C, D, E, and F defined in 49 CFR 173.128 and listed in the HMT requiring temperature control.

Wastes accepted at Triumvirate Environmental Services, Inc. are stored, consolidated, repacked, or treated. All storage is in containers, including waste managed through the 10-day transfer area. Consolidation consists of pouring containers together into shippable drums. Re-packaging consists of removing inner containers from outer containers and placing them in appropriate containers for outbound shipments. Treatment consists of stabilization of wastes in roll-off boxes with cement or other suitable material approved by The Department.

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. Management of Inbound Waste Streams

Upon determination that the waste characterization meets the acceptance criteria for management at the facility, appropriate process codes are assigned to manage the waste. The management method is dictated by the physical and chemical characteristics of the waste. Inbound wastes are managed in accordance with one of four activities:

(1) storage in the facility until transported off-site in the same containers that were used for transport into the facility,

(2) consolidation into larger containers,

(3) repackaging of the wastes,

(4) or stabilizing the wastes.

Wastes that are stabilized are sent to a subtitle D landfill. Wastes that cannot be stabilized at the facility are shipped to off-site facilities for treatment or disposal. Wastes of similar chemical and physical characteristics may be consolidated. Compatible wastes may be re-packaged. Wastes that are not treated, consolidated, or repackaged are stored onsite and shipped out in the same container that was used to transport the waste into the facility. 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.

Triumvirate Environmental Services, Inc. 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 Services, Inc. does not accept waste that is considered a special hazard. Waste that is not permitted is rejected and the materials may be sent back to the generator or to a facility that is permitted to accept the waste provided that all proper documentation, labels, and shipping papers are provided by the generator to the end disposal facility.

4. 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. Waste Approval Process

Before waste is accepted at Triumvirate Environmental Services, Inc., the waste characteristics must be evaluated and approved. The approval must contain all of the information so that the waste can be properly treated, consolidated, repackaged or stored in accordance with 40 CFR Part 264 or disposed in accordance with the Land Disposal Restriction (LDR) program. The approval process includes; (1) collecting a representative sample and conducting laboratory analysis or (2) evaluation of published data and generator knowledge of the waste generating process. Conducting a waste analysis 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.4-1** of this attachment and, if it is a lab-pack, information is detailed on lab-pack inventory sheets shown in **Exhibit II.A.4-4** of this attachment.

When acceptable knowledge is used for waste determinations Triumvirate Environmental Services, Inc. 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):
    a. Raw ingredients descriptions and physical and chemical properties
    b. Physical and chemical processes involved prior to and during generation
    c. Intermediate products
    d. 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.4-1** of this attachment and the lab-pack inventory sheet is located in **Exhibit II.A.4-4** of this attachment.

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 a Safety Data Sheet (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 database. 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.4-1** of this attachment 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

Information used in the approval process is indicated here such as SDS's and analytical data. Information for how the waste was generated (process generating waste) and information for proper characterization is also included. The section also includes the process code, which dictates how the waste will be handled onsite at Triumvirate Environmental Services, Inc. In this section, the shipment method meaning drums, totes, sizes, and yearly volume is also indicated.

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.
- 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 can indicate 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 halogens 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 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 F – DOT Shipping Name

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 are 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.

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: Constituents listed in part D of The Profile meeting the definition of ignitability as defined by 40 CFR 261.21

- D002: Constituents listed in part D of The Profile meeting the definition of corrosivity as defined by 40 CFR 261.22
- D003: Constituents listed in part D of The Profile meeting the definition of reactivity as defined by 40 CFR 261.23
- D004 – D043: Constituents listed in part D or H of The Profile meeting 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 – K148: Hazardous wastes from specific sources should be described in part B and have the contaminants listed in part D.
- P001 – P205: 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 – U411: 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.

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 H – Other Compounds

This part is reviewed for TCLP or Totals information for hazardous waste codes D012-D043.

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 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. Chemical dictionaries and product literature may be utilized as an alternative for an SDS when necessary.

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. When assigning the process code 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:

- Contaminates from commonly accepted waste streams/processes must match the contaminates that would typically be expected in such waste streams
- Contaminates 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 profile, 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 Services, Inc.

5.4 Assignment of Process Codes

The facility has established a number of process codes which designate how the waste will be managed at Triumvirate Environmental Services, Inc. The process codes correspond to storage, consolidation, repacking, treatment, as well as the technology and treatment facility that will handle the waste material. When a profile is reviewed an inbound 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 Services, Inc. Continuously, process codes are updated based on facility requirements, and therefore any list of process codes that would be submitted would not be up to date.

Management methods of waste are determined through characteristics and properties including:

- Hazards such as corrosivity and flash point.
- That contaminants in the waste are capable of being treated using the same process.
- Compatibility of the waste(s)

Consolidation may be utilized for wastes including corrosives, fuel blendable materials (contingent upon installation of freestanding flammable buildings), electroplating sludges, and other widely generated wastes that contain a specific group of contaminants. Triumvirate Environmental Services, Inc. will not consolidate oxidizers, reactives (D003), or poison inhalation hazards. Compatible chemicals may be consolidated in accordance with The Waste Compatibility and Test Manual. The Waste Compatibility and Test Manual includes a review of chemical literature and waste characteristics.

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.

5.5 Review and Approval of 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.A.4-2** of this attachment. 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 signed profile, an example of which is shown in **Exhibit II.A.4-3** of this attachment. The signed profile 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 profile 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 profile approval is part of the waste evaluation documents kept in files at the facility.

6. 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 Services, Inc. will verify incoming waste streams. However, the testing requirements may be removed if:

1) Additional hazards are created by inspecting the waste stream Triumvirate Environmental Services, Inc. will not open the container(s). Examples would be inhalation hazards and air-reactive materials.
2) Triumvirate Environmental Services, Inc. prepares and seals the waste for shipment. Triumvirate Environmental Services, Inc. has an ongoing on-site program established with certain generators and it 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 packaged by Triumvirate Environmental Services, Inc. will have the packing slip reviewed for DOT and RCRA regulations. The containers will not be opened because they were packaged by trained Triumvirate Environmental Services, Inc. staff.

Notwithstanding the above, all containers are inspected for color and physical state. Ten percent of hazardous wastes that are accepted at Triumvirate Environmental Services, Inc. undergo a quality control, quality assurance (QA/QC) analysis. This QA/QC consists of an 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 when discrepancies are found. Verification will be documented on the form in **Exhibit II.A.4-2** of this attachment. The parameters below are used to identify acceptance procedures for Triumvirate Environmental Services, Inc.

- 100 percent visual inspection for color and physical state.
- 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.

6.1 Consolidation/Bulking

Wastes of the same type are approved at Triumvirate Environmental Services, 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 an IBC Tote, cubic yard box to 55-gallon drums to containers having a volume equal to or greater than one liter. 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.4.a "Waste Compatibility Test Manual"** before being commingled for consolidation. Containers that are consolidated into a new DOT container will have the date of the oldest container that was consolidated into the drum. Triumvirate Environmental Services, Inc. must remove containers within one year from the time the earliest (consolidation) container enters the facility. When a container, older than the consolidation container is mixed or added to the drum, the drum is re-labeled with the oldest date.

6.2 Re-Packaged Wastes

Compatible inner containers may be re-packaged in DOT shippable containers to 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 material that has been sorted and approved to be packaged in the same container per DOT and RCRA regulations.

6.3 Treatment

The testing and analysis of treated wastes is described here. Treatment operations will consist of mixing stabilization agents with metal contaminated material and will be performed inside a container such as a roll-off box. The procedures to complete the treatment are located in the containers section (**Attachment II.B "Container Management"**) of the permit application. Only materials of similar consistency that are less than 60mm (non-debris) particulate size will be treated. These materials will be received in drums or roll-off containers. An example would be sandblast grit contaminated with lead. Treatment will be performed on wastes that fail to meet Universal Treatment Standards (40 CFR 268.48 Table UTS) for RCRA Metals (D004-D008, D010-D011) only. Wastes that are involved in treatment operations will undergo two sets of analysis:

Initial Analysis of Untreated Waste:

Initial testing of Underlying Hazardous Constituents (UHCs) will be performed by collecting a 5-point composite sample. This sample will be taken before treatment at the client site or at the Triumvirate Environmental Services, Inc. facility. The composite sample will be analyzed for TCLP metals, and other suspected UHCs, in order to determine the initial metals' concentrations prior to treatment. Wastes that fail to meet UTS for constituents other than the RCRA metals (D004-D008, D010-D011)

and mercury will not be eligible for treatment. Soils may be initially tested to determine UHCs and contaminant levels.

Post-Analysis of Treated Waste:
After treatment, all batches will undergo TCLP analysis to verify that the concentrations of RCRA metals are below the Universal Treatment Standards for metals (D004-D008, D010-D011) and no longer exhibit hazardous waste characteristics. A grab sample will be collected for the TCLP analysis.

For soils, the alternative treatment standard may be applied according to 40 CFR 268.49. Post analysis will be conducted to confirm compliance with the 90% reduction (capped by 10X UTS) option, or 10X UTS option. If after the 90% reduction, or the 10X UTS option, the results in a concentration indicate that the waste is still characteristically hazardous for toxicity, the waste will be sent to a Subtitle C landfill for disposal. See **Table II.A.4-5** of this attachment for treatment levels.

All treated waste that are de-characterized and meet the appropriate treatment standards will be sent to a permitted Subtitle D landfill. Any waste that fails to meet applicable treatment standards or exhibits hazardous waste characteristics will be shipped to a permitted TSDF for disposal.

7. 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 Services, 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 Services, 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.

8. Management of Used Oil

Used Oil is received from pump trucks, DOT-approved drums, or tanker trailers from generators such as companies in the automotive industry, cruise ships, and industrial manufacturers. Oil contaminated with water is managed as oily wastewater utilizing the same testing criteria as used oil.

Used oil and oily water are stored in the used oil tank, Container Storage Unit, or the Waste Consolidation and Stabilization Area. There are no underground tanks or piping located at the facility. All tanks, piping, and ancillary equipment are located within secondary containments.

8.1 Analysis

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

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

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

8.2 On Specification Used Oil

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

Table II.A.4-1: Used Oil Specification Levels

Constituents / Property	Allowable Levels
Arsenic	5 ppm Maximum
Cadmium	2 ppm Maximum
Chromium	10 ppm Maximum
Lead	100 ppm Maximum
Flash Point	100 F Minimum
PCB	2 ppm Maximum
Total Halogens	1,000 ppm Maximum

Pursuant to 40 CFR 279.72, a generator, transporter, processor, re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the specifications of **Table II.A.4-1** of this attachment by performing analyses or obtaining copies of analyses or other information documenting that the used oil meets the above specifications.

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

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

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

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

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

9. 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.

9.1 Consolidated and Repackaged Wastes

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 include, but not be limited to, 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 or repackaged into a DOT approved outer 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 or repackaged into a DOT approved outer container.

DOT Description

Waste streams consolidated in a consolidation container, or repackaged into a DOT approved outer container, may have had different DOT descriptions. The manifest and hazardous waste label for the consolidation container, or DOT approved outer container, may show only one DOT description. This DOT description shall be the shipping name that best describes the waste. Wastes that 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.

9.2 Treated Wastes

The container in which waste was treated as described in Section 6.3 of this plan will be transported off-site to a subtitle D landfill. All material will be tested as described in Section 6.3. All material will be shipped as a non-hazardous waste. Additionally, a one-time notification/certification statement will be provided to the Department.

10. 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 it may be bulked with other wastes in a DOT approved outer container. 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 with other wastes are placed in a DOT approved outer container. 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.

10.1 Waste Profile Form for Labpacks

Triumvirate Environmental Services, Inc. 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.4-4** of this attachment. 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. A single profile designated as a labpack can include multiple outer containers with different chemicals provided that each outer container has a unique shipping name, waste codes, and chemical inventories. The lab pack 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 lab pack inventory sheets are approved by Triumvirate Environmental Services, Inc. by either approving a unique profile or by signing off on the individual labpack inventory sheets.

10.2 Evaluation of Wastes in Labpacks

The chemicals listed on each inventory sheet for each labpack container are reviewed. A determination for acceptability and compatibility are reviewed per the requirements for bulk containers in the Waste Analysis Plan.

10.3 Classification and Segregation of Wastes in Labpacks

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.

11. Wastes Permitted and Prohibited

Waste permitted at Triumvirate Environmental Services, Inc. include D, F, P, U, and K codes (40 CFR 261.31, 40 CFR 261.32, 40 CFR 261.33 and 40 CFR Part 261 Subpart C). Wastes prohibited at Triumvirate Environmental Services, Inc. are; forbidden materials in the hazardous materials table, DOT explosives, temperature-controlled materials, radioactive materials, listed self-reactive materials defined at 49 CFR 173.224, organic peroxides type A and B listed in the HMT and defined at 49 CFR 173.128, and organic peroxides types C, D, E, and F defined in 49 CFR 173.128 and listed in the HMT requiring temperature control.

a. Forbidden Materials in the Hazardous Materials Table: Materials showing the word "forbidden" in column (3) of the 49 CFR 172.101 — Hazardous Materials Table (HMT);

b. DOT 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. Temperature controlled material: Materials that must be maintained at temperatures below the ambient temperature to prevent reactions.

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 type 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.

12. Frequency of Analysis

For each hazardous waste shipment, all containers are inspected for color and physical state. Ten percent of the hazardous wastes that are accepted at Triumvirate Environmental Services, Inc. undergo a quality control, quality assurance (QA/QC) analysis. This QA/QC consists of an 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 when discrepancies are found. Verification will be documented on the form in **Exhibit II.A.4-2** of this attachment. The parameters below are used to identify acceptance procedures for Triumvirate Environmental Services, Inc.

- 100 percent visual inspection for color and physical state.
- 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.

However, the testing requirements may be removed if:

1. Additional hazards are created by inspecting the waste stream Triumvirate Environmental Services, Inc. will not open the container(s). Examples would be inhalation hazards and air-reactive materials.
2. Triumvirate Environmental Services, Inc. prepares and seals the waste for shipment. Triumvirate Environmental Services, Inc. has an ongoing on-site program established with certain generators and it 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 packaged by Triumvirate Environmental Services, Inc. will have the packing slip reviewed for DOT and RCRA regulations. The containers will not be opened because they were packaged by trained Triumvirate Environmental Services, Inc. staff.

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.

13. Sampling Methods

Sampling operations at the facility are conducted on solid and liquid wastes, which may be in containers, and bulk transport containers. **Table II.A.4-3** of this attachment summarizes the methods used to sample wastes at the facility. **Table II.A.4-4** of this attachment 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.

13.1 Initial Analysis of Untreated Waste

Initial testing of Underlying Hazardous Constituents (UHCs) will be performed by collecting a 5-point composite sample. This sample will be taken before treatment at the client site or at the Triumvirate Environmental Services, Inc. facility. The composite sample will be analyzed for TCLP metals in order to determine the initial metals' concentrations prior to treatment. Wastes that fail to meet UTS for constituents other than the RCRA metals (D004-D008, D010-D011) and mercury will not be eligible for treatment. Soils may be initially tested to determine UHCs and contaminant levels.

13.2 Post-Analysis of Treated Waste

After treatment, all batches will undergo TCLP analysis to verify that the concentrations of RCRA metals are below the Universal Treatment Standards for metals (D004-D008, D010-D011) and no longer exhibit hazardous waste characteristics. A grab sample will be collected for the TCLP analysis. The samples will be taken from each side and the top of the roll-off container.

For soils, the alternative treatment standard may be applied according to 40 CFR 268.49. Post analysis will be conducted to confirm compliance with the 90% reduction (capped by 10X UTS) option, or 10X UTS option. If after the 90% reduction, or the 10X UTS option, the results in a concentration indicate that the waste is still characteristically hazardous for toxicity, the waste will be sent to a Subtitle C landfill for disposal. See **Table II.A.4-5** of this attachment for treatment levels.

All treated waste that are de-characterized and meet the appropriate treatment standards will be sent to a permitted Subtitle D landfill. Any waste that fails to meet applicable treatment standards or exhibits hazardous waste characteristics will be shipped to a permitted TSDF for disposal.

14. 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 Services, 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.4-4** of this attachment. In any event, characterization of the waste remains the responsibility of the generator.

15. Compatibility Test Methods

Testing procedures, developed and used by Triumvirate Environmental Services, 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 **Attachment II.A.4.a "Waste Compatibility Test Manual"**. 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.4.a "Waste Compatibility Test Manual"**.

16. Recordkeeping

Triumvirate Environmental Services, Inc. shall comply with the requirements of 40 CFR 262.40 and 40 CFR268.7.

17. Permitted Waste (Table II.A.4-2)

Waste permitted at Triumvirate Environmental Services, Inc. include D, F, P, U, and K codes (40 CFR 261.31, 40 CFR 261.32, 40 CFR 261.33 and 40 CFR Part 261 Subpart C) plus the PHARMS code for hazardous waste pharmaceuticals.

Table II.A.4-2: Permitted Waste (F & K Codes)

Waste Code	Hazardous waste	Hazard code
F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(T)
F002	The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
F003	The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and, a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(I)*
F004	The following spent non-halogenated solvents: Cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(T)
F005	The following spent non-halogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures	(I,T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum	(T)
F007	Spent cyanide plating bath solutions from electroplating operations	(R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations	(R, T)
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. Wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process will not be subject to this listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a landfill for disposal and are either: disposed in a Subtitle D municipal or industrial landfill unit that is equipped with a single clay liner and is permitted,	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
	licensed or otherwise authorized by the state; or disposed in a landfill unit subject to, or otherwise meeting, the landfill requirements in § 258.40, § 264.301 or § 265.301. For the purposes of this listing, motor vehicle manufacturing is defined in paragraph (b)(4)(i) of this section and (b)(4)(ii) of this section describes the recordkeeping requirements for motor vehicle manufacturing facilities	
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions	(H)
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in § 261.31 or § 261.32.)	(T)
F025	Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution	(T)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions	(H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from pre-purified 2,4,5-trichlorophenol as the sole component.)	(H)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027	(T)
F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol	(T)
F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol	(T)
F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol	(T)
F037	Petroleum refinery primary oil/water/solids separation sludge—Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under § 261.4(a)(12)(i), if those residuals are to be disposed of	(T)
F038	Petroleum refinery secondary (emulsified) oil/water/solids separation sludge—Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
	biological treatment units as defined in § 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing	
F039	Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of this part. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other Hazardous Wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028.)	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol	(T)
Inorganic pigments:		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments	(T)
K008	Oven residue from the production of chrome oxide green pigments	(T)
Organic chemicals:		
K009	Distillation bottoms from the production of acetaldehyde from ethylene	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile	(R, T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile	(T)
K015	Still bottoms from the distillation of benzyl chloride	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene	(T)
K026	Stripping still tails from the production of methy ethyl pyridines	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane	(T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene	(T)
K083	Distillation bottoms from aniline production	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane	(T)
K103	Process residues from aniline extraction from the production of aniline	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(C,T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(I,T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene	(C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene	(T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.)	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
K159	Organics from the treatment of thiocarbamate wastes	(T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)	(R,T)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or non-hazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met	(T)
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process	(T)
K181	Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in paragraph (c) of this section that are equal to or greater than the corresponding paragraph (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) disposed in a Subtitle D landfill unit subject to the design criteria in § 258.40, (ii) disposed in a Subtitle C landfill unit subject to either § 264.301 or § 265.301, (iii) disposed in other Subtitle D landfill units that meet the design criteria in § 258.40, § 264.301, or § 265.301, or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in paragraph (b)(1) of this section. Paragraph (d) of this section describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under §§ 261.21-261.24 and 261.31-261.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met	(T)
Inorganic chemicals:		
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
K106	Wastewater treatment sludge from the mercury cell process in chlorine production	(T)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide)	(E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide)	(T)
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process	(T)
Pesticides:		
K031	By-product salts generated in the production of MSMA and cacodylic acid	(T)
K032	Wastewater treatment sludge from the production of chlordane	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane	(T)
K035	Wastewater treatment sludges generated in the production of creosote	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton	(T)
K037	Wastewater treatment sludges from the production of disulfoton	(T)
K038	Wastewater from the washing and stripping of phorate production	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate	(T)
K040	Wastewater treatment sludge from the production of phorate	(T)
K041	Wastewater treatment sludge from the production of toxaphene	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane	(T)
K098	Untreated process wastewater from the production of toxaphene	(T)
K099	Untreated wastewater from the production of 2,4-D	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide	(C, T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide	(T)
Explosives:		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives	(R)
K045	Spent carbon from the treatment of wastewater containing explosives	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds	(T)
K047	Pink/red water from TNT operations	(R)
Petroleum refining:		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry	(T)
K049	Slop oil emulsion solids from the petroleum refining industry	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry	(T)
K051	API separator sludge from the petroleum refining industry	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry	(T)
K169	Crude oil storage tank sediment from petroleum refining operations	(T)
K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations	(T)
K171	Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media)	(I,T)
K172	Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media)	(I,T)
Iron and steel:		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332)	(C,T)
Primary aluminum:		
K088	Spent potliners from primary aluminum reduction	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
Secondary lead:		
K069	Emission control dust/sludge from secondary lead smelting. (**Note:** This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting this stay, EPA will publish a notice of the action in the **Federal Register**)	(T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting	(T)
Veterinary pharmaceuticals:		
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds	(T)
Ink formulation:		
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead	(T)
Coking:		
K060	Ammonia still lime sludge from coking operations	(T)
K087	Decanter tank tar sludge from coking operations	(T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations)	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal	(T)

Table II.A.4-2: Permitted Waste (F & K Codes)		
Waste Code	**Hazardous waste**	**Hazard code**
K147	Tar storage tank residues from coal tar refining	(T)
K148	Residues from coal tar distillation, including but not limited to, still bottoms	(T)

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P001	1 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P001	1 81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P002	591-08-2	Acetamide, -(aminothioxomethyl)-
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P003	107-02-8	2-Propenal
P004	309-00-2	Aldrin
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P005	107-18-6	Allyl alcohol
P005	107-18-6	2-Propen-1-ol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P008	504-24-5	4-Aminopyridine
P008	504-24-5	4-Pyridinamine
P009	131-74-8	Ammonium picrate (R)
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P010	7778-39-4	Arsenic acid H_3 AsO_4
P011	1303-28-2	Arsenic oxide As_2 O_5

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic oxide $As_2 O_3$
P012	1327-53-3	Arsenic trioxide
P013	542-62-1	Barium cyanide
P014	108-98-5	Benzenethiol
P014	108-98-5	Thiophenol
P015	7440-41-7	Beryllium powder
P016	542-88-1	Dichloromethyl ether
P016	542-88-1	Methane, oxybis[chloro-
P017	598-31-2	Bromoacetone
P017	598-31-2	2-Propanone, 1-bromo-
P018	357-57-3	Brucine
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P020	88-85-7	Dinoseb
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P022	75-15-0	Carbon disulfide
P023	107-20-0	Acetaldehyde, chloro-
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	Benzenamine, 4-chloro-
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P027	542-76-7	3-Chloropropionitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P028	100-44-7	Benzene, (chloromethyl)-
P028	100-44-7	Benzyl chloride

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P031	460-19-5	Ethanedinitrile
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P036	696-28-6	Arsonous dichloride, phenyl-
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta, 7aalpha)-
P038	692-42-2	Arsine, diethyl-
P038	692-42-2	Diethylarsine
P039	298-04-4	Disulfoton
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P042	51-43-4	Epinephrine
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P044	60-51-5	Dimethoate
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methyl amino)-2-oxoethyl] ester

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime
P045	39196-18-4	Thiofanox
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	1 534-52-1	4,6-Dinitro-o-cresol, & salts
P047	1 534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P048	51-28-5	2,4-Dinitrophenol
P048	51-28-5	Phenol, 2,4-dinitro-
P049	541-53-7	Dithiobiuret
P049	541-53-7	Thioimidodicarbonic diamide $[(H_2\ N)C(S)]_2\ NH$
P050	115-29-7	Endosulfan
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P051	1 72-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta, 7aalpha)-, & metabolites
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P054	151-56-4	Aziridine
P054	151-56-4	Ethyleneimine
P056	7782-41-4	Fluorine
P057	640-19-7	Acetamide, 2-fluoro-
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P058	62-74-8	Fluoroacetic acid, sodium salt
P059	76-44-8	Heptachlor
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P060	465-73-6	Isodrin
P062	757-58-4	Hexaethyl tetraphosphate

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P064	624-83-9	Methane, isocyanato-
P064	624-83-9	Methyl isocyanate
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P065	628-86-4	Mercury fulminate (R,T)
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P066	16752-77-5	Methomyl
P067	75-55-8	Aziridine, 2-methyl-
P067	75-55-8	1,2-Propylenimine
P068	60-34-4	Hydrazine, methyl-
P068	60-34-4	Methyl hydrazine
P069	75-86-5	2-Methyllactonitrile
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P070	116-06-3	Aldicarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P071	298-00-0	Methyl parathion
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P072	86-88-4	alpha-Naphthylthiourea
P072	86-88-4	Thiourea, 1-naphthalenyl-
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide $Ni(CN)_2$
P075	1 54-11-5	Nicotine, & salts
P075	1 54-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P076	10102-43-9	Nitric oxide

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P076	10102-43-9	Nitrogen oxide NO
P077	100-01-6	Benzenamine, 4-nitro-
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P078	10102-44-0	Nitrogen oxide NO_2
P081	55-63-0	Nitroglycerine (R)
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P082	62-75-9	Methanamine, -methyl-N-nitroso-
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P084	4549-40-0	Vinylamine, -methyl-N-nitroso-
P085	152-16-9	Diphosphoramide, octamethyl-
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	Endothall
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	56-38-2	Parathion
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P092	62-38-4	Mercury, (acetato-O)phenyl-
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P093	103-85-5	Thiourea, phenyl-
P094	298-02-2	Phorate
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P095	75-44-5	Carbonic dichloride
P095	75-44-5	Phosgene
P096	7803-51-2	Hydrogen phosphide

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P096	7803-51-2	Phosphine
P097	52-85-7	Famphur
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P099	506-61-6	Potassium silver cyanide
P101	107-12-0	Ethyl cyanide
P101	107-12-0	Propanenitrile
P102	107-19-7	Propargyl alcohol
P102	107-19-7	2-Propyn-1-ol
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	1 157-24-9	Strychnidin-10-one, & salts
P108	1 157-24-9	Strychnine, & salts
P109	3689-24-5	Tetraethyldithiopyrophosphate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P110	78-00-2	Plumbane, tetraethyl-
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Methane, tetranitro-(R)
P112	509-14-8	Tetranitromethane (R)
P113	1314-32-5	Thallic oxide

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P113	1314-32-5	Thallium oxide $Tl_2 O_3$
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P114	12039-52-0	Tetraethyldithiopyrophosphate
P115	7446-18-6	Thiodiphosphoric acid, tetraethyl ester
P115	7446-18-6	Plumbane, tetraethyl-
P116	79-19-6	Tetraethyl lead
P116	79-19-6	Thiosemicarbazide
P118	75-70-7	Methanethiol, trichloro-
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Ammonium vanadate
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V_2O_5
P120	1314-62-1	Vanadium pentoxide
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide $Zn_3 P_2$, when present at concentrations greater than 10% (R,T)
P123	8001-35-2	Toxaphene
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
P127	1563-66-2	Carbofuran
P128	315-8-4	Mexacarbate
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime.
P185	26419-73-8	Tirpate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)
P188	57-64-7	Physostigmine salicylate
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P189	55285-14-8	Carbosulfan

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P190	1129-41-5	Metolcarb
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester
P191	644-64-4	Dimetilan
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P192	119-38-0	Isolan
P194	23135-22-0	Ethanimidthioic acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester
P194	23135-22-0	Oxamyl
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,
P196	15339-36-3	Manganese dimethyldithiocarbamate
P197	17702-57-7	Formparanate
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy]phenyl]-
P198	23422-53-9	Formetanate hydrochloride
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy]phenyl]-monohydrochloride
P199	2032-65-7	Methiocarb
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Promecarb
P202	64-00-6	m-Cumenyl methylcarbamate
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P203	1646-88-4	Aldicarb sulfone
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime
P204	57-47-6	Physostigmine
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P205	137-30-4	Ziram

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U001	75-07-0	Acetaldehyde (I)
U001	75-07-0	Ethanal (I)
U002	67-64-1	Acetone (I)
U002	67-64-1	2-Propanone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U004	98-86-2	Ethanone, 1-phenyl-
U005	53-96-3	Acetamide, -9H-fluoren-2-yl-
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U007	79-06-1	2-Propenamide
U008	79-10-7	Acrylic acid (I)
U008	79-10-7	2-Propenoic acid (I)
U009	107-13-1	Acrylonitrile
U009	107-13-1	2-Propenenitrile
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U010	50-07-7	Mitomycin C
U011	61-82-5	Amitrole
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U012	62-53-3	Aniline (I,T)
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Auramine
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U015	115-02-6	Azaserine
U015	115-02-6	L-Serine, diazoacetate (ester)
U016	225-51-4	Benz[c]acridine

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U017	98-87-3	Benzal chloride
U017	98-87-3	Benzene, (dichloromethyl)-
U018	56-55-3	Benz[a]anthracene
U019	71-43-2	Benzene (I,T)
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U021	92-87-5	Benzidine
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U022	50-32-8	Benzo[a]pyrene
U023	98-07-7	Benzene, (trichloromethyl)-
U023	98-07-7	Benzotrichloride (C,R,T)
U024	111-91-1	Dichloromethoxy ethane
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U025	111-44-4	Dichloroethyl ether
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U026	494-03-1	Chlornaphazin
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U027	108-60-1	Dichloroisopropyl ether
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U028	117-81-7	Diethylhexyl phthalate
U029	74-83-9	Methane, bromo-
U029	74-83-9	Methyl bromide
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U030	101-55-3	4-Bromophenyl phenyl ether
U031	71-36-3	1-Butanol (I)
U031	71-36-3	n-Butyl alcohol (I)
U032	13765-19-0	Calcium chromate

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt
U033	353-50-4	Carbonic difluoride
U033	353-50-4	Carbon oxyfluoride (R,T)
U034	75-87-6	Acetaldehyde, trichloro-
U034	75-87-6	Chloral
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
U037	108-90-7	Benzene, chloro-
U037	108-90-7	Chlorobenzene
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U041	106-89-8	Epichlorohydrin
U041	106-89-8	Oxirane, (chloromethyl)-
U042	110-75-8	2-Chloroethyl vinyl ether
U042	110-75-8	Ethene, (2-chloroethoxy)-
U043	75-01-4	Ethene, chloro-
U043	75-01-4	Vinyl chloride
U044	67-66-3	Chloroform
U044	67-66-3	Methane, trichloro-
U045	74-87-3	Methane, chloro- (I,T)
U045	74-87-3	Methyl chloride (I,T)
U046	107-30-2	Chloromethyl methyl ether
U046	107-30-2	Methane, chloromethoxy-
U047	91-58-7	beta-Chloronaphthalene

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U047	91-58-7	Naphthalene, 2-chloro-
U048	95-57-8	o-Chlorophenol
U048	95-57-8	Phenol, 2-chloro-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U052	1319-77-3	Phenol, methyl-
U053	4170-30-3	2-Butenal
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Benzene, (1-methylethyl)-(I)
U055	98-82-8	Cumene (I)
U056	110-82-7	Benzene, hexahydro-(I)
U056	110-82-7	Cyclohexane (I)
U057	108-94-1	Cyclohexanone (I)
U058	50-18-0	Cyclophosphamide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U059	20830-81-3	Daunomycin
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U060	72-54-8	DDD
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U061	50-29-3	DDT
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-di chloro-2-propenyl) ester
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U064	189-55-9	Benzo[rst]pentaphene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U067	106-93-4	Ethane, 1,2-dibromo-
U067	106-93-4	Ethylene dibromide
U068	74-95-3	Methane, dibromo-
U068	74-95-3	Methylene bromide
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	Benzene, 1,2-dichloro-
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	Benzene, 1,3-dichloro-
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	Benzene, 1,4-dichloro-
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	[1,1’-Biphenyl]-4,4’-diamine, 3,3’-dichloro-
U073	91-94-1	3,3’-Dichlorobenzidine
U074	764-41-0	2-Butene, 1,4-dichloro-(I,T)
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U075	75-71-8	Methane, dichlorodifluoro-
U076	75-34-3	Ethane, 1,1-dichloro-
U076	75-34-3	Ethylidene dichloride
U077	107-06-2	Ethane, 1,2-dichloro-
U077	107-06-2	Ethylene dichloride
U078	75-35-4	1,1-Dichloroethylene
U078	75-35-4	Ethene, 1,1-dichloro-

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U079	156-60-5	1,2-Dichloroethylene
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U080	75-09-2	Methane, dichloro-
U080	75-09-2	Methylene chloride
U081	120-83-2	2,4-Dichlorophenol
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	2,6-Dichlorophenol
U082	87-65-0	Phenol, 2,6-dichloro-
U083	78-87-5	Propane, 1,2-dichloro-
U083	78-87-5	Propylene dichloride
U084	542-75-6	1,3-Dichloropropene
U084	542-75-6	1-Propene, 1,3-dichloro-
U085	1464-53-5	2,2’-Bioxirane
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U086	1615-80-1	N,N’-Diethylhydrazine
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U089	56-53-1	Phenol, 4,4’-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U090	94-58-6	Dihydrosafrole
U091	119-90-4	[1,1’-Biphenyl]-4,4’-diamine, 3,3’-dimethoxy-
U091	119-90-4	3,3’-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U092	124-40-3	Methanamine, -methyl-(I)

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-(R)
U097	79-44-7	Carbamic chloride, dimethyl-
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	1,2-Dimethylhydrazine
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U101	105-67-9	2,4-Dimethylphenol
U101	105-67-9	Phenol, 2,4-dimethyl-
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U103	77-78-1	Sulfuric acid, dimethyl ester
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Diethyleneoxide
U108	123-91-1	1,4-Dioxane

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U109	122-66-7	1,2-Diphenylhydrazine
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U110	142-84-7	Dipropylamine (I)
U110	142-84-7	1-Propanamine, N-propyl-(I)
U111	621-64-7	Di-n-propylnitrosamine
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U112	141-78-6	Acetic acid ethyl ester (I)
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U114	1111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts & esters
U114	1111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U115	75-21-8	Ethylene oxide (I,T)
U115	75-21-8	Oxirane (I,T)
U116	96-45-7	Ethylenethiourea
U116	96-45-7	2-Imidazolidinethione
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U117	60-29-7	Ethyl ether (I)
U118	97-63-2	Ethyl methacrylate
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U119	62-50-0	Ethyl methanesulfonate
U119	62-50-0	Methanesulfonic acid, ethyl ester
U120	206-44-0	Fluoranthene
U121	75-69-4	Methane, trichlorofluoro-
U121	75-69-4	Trichloromonofluoromethane
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U124	110-00-9	Furfuran (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U125	98-01-1	Furfural (I)
U126	765-34-4	Glycidylaldehyde
U126	765-34-4	Oxiranecarboxyaldehyde
U127	118-74-1	Benzene, hexachloro-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U128	87-68-3	Hexachlorobutadiene
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U129	58-89-9	Lindane
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Ethane, hexachloro-
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U132	70-30-4	Phenol, 2,2’-methylenebis[3,4,6-trichloro-
U133	302-01-2	Hydrazine (R,T)
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H_2S
U136	75-60-5	Arsinic acid, dimethyl-
U136	75-60-5	Cacodylic acid
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U138	74-88-4	Methane, iodo-
U138	74-88-4	Methyl iodide
U140	78-83-1	Isobutyl alcohol (I,T)

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-
U143	303-34-4	Lasiocarpine
U144	301-04-2	Acetic acid, lead(2+) salt
U144	301-04-2	Lead acetate
U145	7446-27-7	Lead phosphate
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U146	1335-32-6	Lead subacetate
U147	108-31-6	2,5-Furandione
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U149	109-77-3	Malononitrile
U149	109-77-3	Propanedinitrile
U150	148-82-3	Melphalan
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I,T)
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U153	74-93-1	Methanethiol (I,T)
U153	74-93-1	Thiomethanol (I,T)
U154	67-56-1	Methanol (I)

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U154	67-56-1	Methyl alcohol (I)
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U155	91-80-5	Methapyrilene
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U159	78-93-3	2-Butanone (I,T)
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U161	108-10-1	Methyl isobutyl ketone (I)
U161	108-10-1	4-Methyl-2-pentanone (I)
U161	108-10-1	Pentanol, 4-methyl-
U162	80-62-6	Methyl methacrylate (I,T)
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U163	70-25-7	Guanidine, -methyl-N'-nitro-N-nitroso-
U163	70-25-7	MNNG
U164	56-04-2	Methylthiouracil
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U165	91-20-3	Naphthalene
U166	130-15-4	1,4-Naphthalenedione
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	1-Naphthalenamine
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	2-Naphthalenamine

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U168	91-59-8	beta-Naphthylamine
U169	98-95-3	Benzene, nitro-
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U170	100-02-7	Phenol, 4-nitro-
U171	79-46-9	2-Nitropropane (I,T)
U171	79-46-9	Propane, 2-nitro- (I,T)
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	Ethanol, 2,2’-(nitrosoimino)bis-
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	Ethanamine, -ethyl-N-nitroso-
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	N-Nitroso-N-methylurea
U177	684-93-5	Urea, N-methyl-N-nitroso-
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U179	100-75-4	Piperidine, 1-nitroso-
U180	930-55-2	N-Nitrosopyrrolidine
U180	930-55-2	Pyrrolidine, 1-nitroso-
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U181	99-55-8	5-Nitro-o-toluidine
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U182	123-63-7	Paraldehyde
U183	608-93-5	Benzene, pentachloro-

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Ethane, pentachloro-
U184	76-01-7	Pentachloroethane
U185	82-68-8	Benzene, pentachloronitro-
U185	82-68-8	Pentachloronitrobenzene (PCNB)
U186	504-60-9	1-Methylbutadiene (I)
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Acetamide, -(4-ethoxyphenyl)-
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U189	1314-80-3	Phosphorus sulfide (R)
U189	1314-80-3	Sulfur phosphide (R)
U190	85-44-9	1,3-Isobenzofurandione
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U191	109-06-8	Pyridine, 2-methyl-
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U192	23950-58-5	Pronamide
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U193	1120-71-4	1,3-Propane sultone
U194	107-10-8	1-Propanamine (I,T)
U194	107-10-8	n-Propylamine (I,T)
U196	110-86-1	Pyridine
U197	106-51-4	p-Benzoquinone
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U200	50-55-5	Reserpine
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester,(3beta,16beta,17alpha,18beta,20alpha)-

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U201	108-46-3	1,3-Benzenediol
U201	108-46-3	Resorcinol
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS_2 (R,T)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-carbonyl]amino]-
U206	18883-66-4	Streptozotocin
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Ethene, tetrachloro-
U210	127-18-4	Tetrachloroethylene
U211	56-23-5	Carbon tetrachloride
U211	56-23-5	Methane, tetrachloro-
U213	109-99-9	Furan, tetrahydro-(I)
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Acetic acid, thallium(1+) salt
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Nitric acid, thallium(1+) salt
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Ethanethioamide
U218	62-55-5	Thioacetamide
U219	62-56-6	Thiourea
U220	108-88-3	Benzene, methyl-
U220	108-88-3	Toluene
U221	25376-45-8	Benzenediamine, ar-methyl-
U221	25376-45-8	Toluenediamine
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U222	636-21-5	o-Toluidine hydrochloride
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U223	26471-62-5	Toluene diisocyanate (R,T)
U225	75-25-2	Bromoform
U225	75-25-2	Methane, tribromo-
U226	71-55-6	Ethane, 1,1,1-trichloro-
U226	71-55-6	Methyl chloroform
U226	71-55-6	1,1,1-Trichloroethane
U227	79-00-5	Ethane, 1,1,2-trichloro-
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Ethene, trichloro-
U228	79-01-6	Trichloroethylene
U234	99-35-4	Benzene, 1,3,5-trinitro-
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U236	72-57-1	Trypan blue
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U237	66-75-1	Uracil mustard
U238	51-79-6	Carbamic acid, ethyl ester
U238	51-79-6	Ethyl carbamate (urethane)
U239	1330-20-7	Benzene, dimethyl- (I,T)
U239	1330-20-7	Xylene (I)
U240	1 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U240	1 94-75-7	2,4-D, salts & esters
U243	1888-71-7	Hexachloropropene
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U244	137-26-8	Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2 S_2$, tetramethyl-
U244	137-26-8	Thiram
U246	506-68-3	Cyanogen bromide (CN)Br
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4- methoxy-
U247	72-43-5	Methoxychlor
U248	1 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, & salts, when present at concentrations of 0.3% or less
U248	1 81-81-2	Warfarin, & salts, when present at concentrations of 0.3% or less
U249	1314-84-7	Zinc phosphide $Zn_3 P_2$, when present at concentrations of 10% or less
U271	17804-35-2	Benomyl
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-, methyl ester
U278	22781-23-3	Bendiocarb
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U279	63-25-2	Carbaryl
U279	63-25-2	1-Naphthalenol, methylcarbamate
U280	101-27-9	Barban

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U328	95-53-4	Benzenamine, 2-methyl-
U328	95-53-4	o-Toluidine
U353	106-49-0	Benzenamine, 4-methyl-
U353	106-49-0	p-Toluidine
U359	110-80-5	Ethanol, 2-ethoxy-
U359	110-80-5	Ethylene glycol monoethyl ether
U364	22961-82-6	Bendiocarb phenol
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-,
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U367	1563-38-8	Carbofuran phenol
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U372	10605-21-7	Carbendazim
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U373	122-42-9	Propham
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U387	52888-80-9	Prosulfocarb
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U389	2303-17-5	Triallate
U394	30558-43-1	A2213
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U395	5952-26-1	Diethylene glycol, dicarbamate
U395	5952-26-1	Ethanol, 2,2’-oxybis-, dicarbamate
U404	121-44-8	Ethanamine, N,N-diethyl-
U404	121-44-8	Triethylamine
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester
U409	23564-05-8	Thiophanate-methyl
U410	59669-26-0	Ethanimidothioic acid, N,N’-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester

Table II.A.4-2 (cont.): Permitted Waste (P & U Codes)		
Waste Code	**CAS #**	**Hazardous Waste**
U410	59669-26-0	Thiodicarb
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U411	114-26-1	Propoxur
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
See F027	87-86-5	Pentachlorophenol
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
See F027	93-72-1	Silvex (2,4,5-TP)
See F027	93-76-5	2,4,5-T
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol

Table II.A.4-2 (cont.): Permitted Waste (D Codes)			
EPA HW No. 1	**Contaminant**	**CAS No. 2**	**Regulatory Level (mg/L)**
D001	Varies	NA	NA
D002	Varies	NA	NA
D003	Varies	NA	NA
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0

Table II.A.4-2 (cont.): Permitted Waste (D Codes)			
EPA HW No. 1	**Contaminant**	**CAS No. 2**	**Regulatory Level (mg/L)**
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	4 200.0
D024	m-Cresol	108-39-4	4 200.0
D025	p-Cresol	106-44-5	4 200.0
D026	Cresol		4 200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	3 0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	3 0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	3 5.0
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5

Table II.A.4-2 (cont.): Permitted Waste (D Codes)			
EPA HW No. 1	**Contaminant**	**CAS No. 2**	**Regulatory Level (mg/L)**
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

18. Methods Used to Sample Waste (Table II.A.4-3)

Table II.A.4-3: 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) Device used is dependent upon density of waste materials.			

19. Sample Analysis Methods (Table II.A.4-4)

Table II.A.4-4: Sample 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.

20. Soil Treatment Levels: (Table II.A.4-5)

Table II.A.4-5: Soil Treatment Levels			
RCRA Metals	**40 CFR 268.48 Table Universal Treatment Standard (mg/L) (Non-wastewaters)**	**40 CFR 268.49 Alternative Treatment Standards for Soil: 10 x UTS (mg/L)**	**40 CFR 261.24-TCLP Regulatory Level (mg/L)**
D004 - Arsenic	5.0	50	5.0
D005 - Barium	21	210	100
D006 - Cadmium	0.11	1.1	1.0
D007 - Chromium	0.60	6	5.0
D008 - Lead	0.75	7.5	5.0
D010 - Selenium	5.7	57	1.0
D011 - Silver	0.14	1.4	5.0

21. Waste Material Profile Form (Exhibit II.A.4-1)

WASTE PROFILE SHEET

TRIUMVIRATE ENVIRONMENTAL

Triumvirate Environmental (Florida), Inc.
10100 Rocket Boulevard
Orlando, FL 32824
Phone: (407) 859-4441 Fax: (407) 855-2812

Approval #: example

A. Generator Information:			**Customer Information:**		
Generator Name: Triumvirate Environmental Services, Inc.			Customer Name: Triumvirate Environmental Services, Inc.		
Mail Address: 10100 Rocket Blvd.			Address: 10100 Rocket Blvd.		
City: Orlando	State: FL	Zip: 32824	City: Orlando	State: FL	Zip: 32824
Contact: Pat Malloy	Title:		Contact:		Title:
Site Phone:	EPA ID: FLD980559728		Customer Phone: (407) 859-4441		Sic Code:
Site Address: 10100 Rocket Blvd. Orlando, FL 32824			Customer Fax:		

B. COMMON NAME OF WASTE: example profile — **MSDS / Analytical (Y/ N)** — **SAMPLE**

Process generating waste: Equipment Change Out — Process Code: OAERCAB

Shipment Method: Drum (size): /(type): Bulk: Quantity: 0 /mo. ☐qtr. ☐yr. ☐ one time ☐

C. Physical Properties: Color: Total Halogens (%)0 Odor: none ☐ mild ☐ strong ☐

Liquids (%) Solids (%) Sludge (%) Powder (%) Debris: Specific Gravity:

PH: BTU/Lb: ☐ <5000 ☐ <10,000 ☐ >10,000 Flash Point (f): ☐ <100 ☐<140 ☐ <200 ☐ >200

D. Waste Composition (list all haz & non-haz components)					**G. Metals: None** ☒ **TCLP** ☐ **TOTAL** ☐			
ALKALINE BATTERIES	100	-	100	%	D004 Arsenic 5mg/l:	0	D005 Barium 100mg/l:	0
		-		%	D006 Cadmium 1mg/l:	0	D007 Chromium 5mg/l:	0
		-		%	D008 Lead 5mg/l:	0	D009 Mercury 0.2 mg/l:	0
		-		%	D010 Selenium 1mg/l:	0	D011 Silver 5mg/l:	0
		-		%	Copper:	0	Nickel:	0
		-		%	Zinc:	0		

E. Hazardous Properties:				**H. Other Compounds: TCLP** ☐ **Total** ☐			
None ☒	Water Reactive ☐	Shock Sensitive ☐	Radioactive ☐	D012 Endrin	☐	D029 Dichloroethlene	☐
Dioxins ☐	Benzene Neshap ☐	Air Sensitive ☐	Pyrophoric ☐	D013 Lindane	☐	D030 2,4-Dinitrotoluene	☐
Explosive ☐	Etiological ☐	Polymerizable ☐	Pathogen ☐	D014 Methoxychlor	☐	D031 Heptachlor/epoxide	☐
Biological ☐	Pesticide/Herbicide/Insecticide ☐			D015 Toxaphene	☐	D032 Hexachlorobenzene	☐
Special Handling/Compatibility Concerns:				D016 2,4-Dichlorophenoxyacetic Acid			☐
				D017 2,4,5 TP (Silvex)	☐	D033 Hexachlorobutadiene	☐
Cyanides ☐	Sulfides ☐	Amines ☐	PCB's ☐ Phenols ☐	D018 Benzene	☐	D034 Hexachloroethane	☐
F. DOT Shipping Name:	Batteries, dry, sealed, n.o.s.			D019 Carbon Tetrachloride	☐	D035 Methyl Ethyl Ketone	☐
				D020 Chlorodane	☐	D036 Nitrobenzene	☐
Additional Description:				D021 Chlorobenzene	☐	D037 Pentachlorophenol	☐
Hazard Class: UN/NA:	Packing Group:			D022 Chloroform	☐	D038 Pyridine	☐
EPA Code:				D023 o-Cresol	☐	D039 Tetrachloroethylene	☐
State Code:				D024 m-Cresol	☐	D040 Trichloroethylene	☐
Is this material a Hazardous Waste under 40CFR 261.3		☐Yes ☒ No		D025 p-Cresol	☐	D041 2,4,5-Trichlorophenol	☐
Is this a Hazardous Substance/Marine Pollutant per 49 CFR (DOT)		☐Yes ☒ No		D027 1,4-Dichlorobenzene	☐	D042 2,4,6- Trichlorophenol	☐
Form Code: WNA Source Code: GNA Subpart CC (voc>500ppm):				D028 1,2 Dichloroethane	☐	D043 Vinyl Chloride	☐
				Notes:			

Generator Certification: I hereby certify that the waste identified or described on this waste profile conforms with the identifications or descriptions provided, and with analytical data or other specifications provided to the TSDF. To the extent the waste does not conform, the Generator agrees to indemnify Triumvirate Environmental (Florida), Inc. from all liability and damages arising therefrom. No deliberate or willful omissions of composition or properties exist and that all known or suspected hazards have been disclosed. I also certify that the obtained sample is representative of the waste material described above and give this TSDF permission and consent to make amendments and corrections.

Name:	**Title:**
Signature:	**Date:**

Facility Certification:

As required by 40 CFR 264.12(b) of US EPA Hazardous Waste Regulations, Triumvirate Environmental (Florida), Inc. certifies that they possess the proper current licenses required by the US Environmental Protection Agency and the Florida Department of Environmental Protection to accept and store the waste listed above. The generator will be notified in writing within seven days of any changes in license status affecting the ability of Triumvirate Environmental (Florida), Inc. to accept the above waste.

(For Triumvirate Envoronmental Use Only)

Authorized Signature:	**Printed Name:**	**Date:**	**Title:**
Off Site Codes:	**Disposal Restrictions:**		

22. Compliance Review Form (Exhibit II.A.4-2)

INCOMING TRACKING-QA/QC LAB FORM

Shipment # 32630 Date: 02/16/2023

Customer Name: [redacted] Manifest # 016725383 FLE

Container #	Line Item	Drum Size	Drum Type	Pnd/Gal	Storage Area	Approval #	Drum Space Quant-ity	Waste Type/Comments	pH	Spec-ific Grav-ity	% Liquid	% Solid	Layers	Water Solu-ble	Water Re-active	Chlor-n-Oil Test	fp	Lab Re-lease
01-01 - 01-02	1	DF	55	463 P	Receiving	TO1140392	2	-	~8	-	100	0	-	N	N	-	-	Yes

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

23. Notice of Approval (Exhibit II.A.4-3)

DocuSign Envelope ID: BED342A4-BCE2-4CBD-8172-9CCFF713B4CB

WASTE PROFILE SHEET

TRIUMVIRATE ENVIRONMENTAL

Triumvirate Environmental (Florida), Inc.
10100 Rocket Boulevard
Orlando, FL 32824
Phone: (407) 859-4441 Fax: (407) 855-2812

Approval #: TO130453

A. Generator Information:			Customer Information:		
Generator Name: [redacted]			Customer Name: [redacted]		
Mail Address: [redacted]			Address: [redacted]		
City: Wilson	State: NC	Zip: 27893	City: Wilson	State: NC	Zip: 27893
Contact: [redacted]	Title:		Contact:		Title:
Site Phone: [redacted]	EPA ID: [redacted]		Customer Phone [redacted]		Sic Code:
Site Address: [redacted]			Customer Fax:		

B. COMMON NAME OF WASTE: Non Haz Pharma Waste — MSDS / Analytical (Y/ N) — SAMPLE

Process generating waste: Off spec products — Process Code: OWSBNH

Shipment Method: Drum (size): Pail /(type): Bulk: Quantity: 0 /mo. ☐qtr. ☐yr. ☐ one time ☐

C. Physical Properties: Color: Varies Total Halogens (%) 0 Odor: none ☐ mild ☐ strong ☐

Liquids (%) 0 Solids (%) 100 Sludge (%) 0 Powder (%) 0 Debris: Specific Gravity: 1.1

PH: 7.1 BTU/Lb: ☐ <5000 ☒ <10,000 ☐ >10,000 Flash Point (f): ☐ <100 ☐ <140 ☐ <200 ☒ >200

D. Waste Composition (list all haz & non-haz components)					G. Metals: None ☒ TCLP ☐ TOTAL ☐			
NON HAZARDOUS SUPPLEMENTS	30	- 50	%	D004 Arsenic 5mg/l:	0	D005 Barium 100mg/l:	0
LACTOSE	10	- 30	%	D006 Cadmium 1mg/l:	0	D007 Chromium 5mg/l:	0
STARCH	10	- 30	%	D008 Lead 5mg/l:	0	D009 Mercury 0.2 mg/l:	0
SODIUM BICARBONATE	10	- 30	%	D010 Selenium 1mg/l:	0	D011 Silver 5mg/l:	0
CITRIC ACID	10	- 30	%	Copper:	0	Nickel:	0
POLYSORBATE 80	10	- 30	%	Zinc:	0		

E. Hazardous Properties:				H. Other Compounds: TCLP ☐ Total ☐			
None ☒	Water Reactive ☐	Shock Sensitive ☐	Radioactive ☐	D012 Endrin ☐	D029 Dichloroethlene ☐		
Dioxins ☐	Benzene Neshap ☐	Air Sensitive ☐	Pyrophoric ☐	D013 Lindane ☐	D030 2,4-Dinitrotoluene ☐		
Explosive ☐	Etiological ☐	Polymerizable ☐	Pathogen ☐	D014 Methoxychlor ☐	D031 Heptachlor/epoxide ☐		
Biological ☐	Pesticide/Herbicide/Insecticide ☐			D015 Toxaphene ☐	D032 Hexachlorobenzene ☐		
Special Handling/Compatibility Concerns:				D016 2,4-Dichlorophenoxyacetic Acid ☐			
				D017 2,4,5 TP (Silvex) ☐	D033 Hexachlorobutadiene ☐		
Cyanides ☐	Sulfides ☐	Amines ☐	PCB's ☐	Phenols ☐	D018 Benzene ☐	D034 Hexachloroethane ☐	
F. DOT Shipping Name: Non-RCRA, Non-DOT Regulated Material ,				D019 Carbon Tetrachloride ☐	D035 Methyl Ethyl Ketone ☐		
(cartons, pills, patches, powders)				D020 Chlorodane ☐	D036 Nitrobenzene ☐		
Additional Description:				D021 Chlorobenzene ☐	D037 Pentachlorophenol ☐		
Hazard Class: UN/NA: Packing Group:				D022 Chloroform ☐	D038 Pyridine ☐		
EPA Code:				D023 o-Cresol ☐	D039 Tetrachloroethylene ☐		
State Code:				D024 m-Cresol ☐	D040 Trichloroethylene ☐		
Is this material a Hazardous Waste under 40CFR 261.3 ☐Yes ☒ No				D025 p-Cresol ☐	D041 2,4,5-Trichlorophenol ☐		
Is this a Hazardous Substance/Marine Pollutant per 49 CFR (DOT) ☐Yes ☒ No				D027 1,4-Dichlorobenzene ☐	D042 2,4,6- Trichlorophenol ☐		
Form Code: W409 Source Code: G11 Subpart CC (voc>500ppm):				D028 1,2 Dichloroethane ☐	D043 Vinyl Chloride ☐		
				Notes:			

Generator Certification: I hereby certify that the waste identified or described on this waste profile conforms with the identifications or descriptions provided, and with analytical data or other specifications provided to the TSDF. To the extent the waste does not conform, the Generator agrees to indemnify Triumvirate Environmental (Florida), Inc. from all liability and damages arising therefrom. No deliberate or willful omissions of composition or properties exist and that all known or suspected hazards have been disclosed. I also certify that the obtained sample is representative of the waste material described above and give this TSDF permission and consent to make amendments and corrections.

Name: [redacted]	DocuSigned by:	Title: Associate Director, HS&E
Signature: [redacted]	18E46EF272674F0...	Date: 4/4/2023

Facility Certification:

As required by 40 CFR 264.12(b) of US EPA Hazardous Waste Regulations, Triumvirate Environmental (Florida), Inc. certifies that they possess the proper current licenses required by the US Environmental Protection Agency and the Florida Department of Environmental Protection to accept and store the waste listed above. The generator will be notified in writing within seven days of any changes in license status affecting the ability of Triumvirate Environmental (Florida), Inc. to accept the above waste.

(For Triumvirate Envoronmental Use Only)

Authorized Signature: DocuSigned by: Michael Cutshall 251F02D1CB3A41B...	Printed Name: Michael Cutshall	Date: 5/5/2023	Title: Facility Manage
Off Site Codes: .	Disposal Restrictions:		

24. Labpack/Drum Inventory Form (Exhibit II.A.4-4)

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

Packaged By: _____ Date: _____

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.A.4.a:
Waste Compatibility Test Manual

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

A. 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.

B. Operations Description

Consolidation of waste takes place in the facility inside the consolidation and stabilization area. In the consolidation area liquid and solid waste is consolidated into containers (totes, 55-gallon drums, or smaller sized containers). The consolidation area is identified in **Figure II.A.5 "Existing Facility Site Plan"**.

Consolidation of waste may also take place in the pre-fabricated flammable material storage units proposed in this permit application. In this area liquid and solid waste are proposed to be consolidated into containers (cubic yard boxes for solids, totes, 55-gallon drums, or smaller sized containers). The flammable material consolidation area is identified in **Figure II.A.5-1 "Modified Facility Site Plan"**.

Waste consolidated may be from lab packs 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 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).

C. 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. Wastes 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 lab pack wastes, wastewater treatment sludge from electroplating operations, and when filling partially full containers.

D. Test Description

Consolidation will occur in bulk containers. Bulk containers are defined as containers that have free liquids/solids, and not inner containers, inside them.

A compatibility test for consolidation operations will be conducted as follows:

STEP A: Samples to be consolidated will be combined in a 5 gallon bucket one after another within one minute intervals 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. 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.

STEP B: This step 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.

STEP C: 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. Volumetric ratios for each container will be the same for each step. Example volumes would be four ounces for a 5 gallon pail, or forty ounces for a 55 gallon drum. The test vessel will be a 5 gallon pail, or larger as appropriate.

STEP D: This step consists of recording the mixture temperature, time, and visual observations for each comingled waste, volumes are added individually with a least one minute between volumes. After all liquids are mixed and after at least fifteen minutes has passed the test is completed. After the temperature and time readings are completed, they are entered in the log. An alarm watch or clock should be used to keep time intervals.

An example of the test log used for the compatibility test for bulk containers is included as **Exhibit II.A.4.a "Waste Compatibility Test Log"**. Test will end at 15 minutes after the last container was consolidated.

Consolidation of waste could take place in a tanker. For such consolidation, waste in containers should be transferred into a tote before pumping it into a tanker. The same compatibility test operations must be followed for consolidation of waste in tankers.

E. 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 cartridges 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.

F. Test Equipment

The following equipment and conditions should be used for conducting the compatibility test:

- Testing vessel
- Alarm clock or watch
- Ambient temperature
- Thermometer or other temperature measuring device

G. 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).

H. Evaluation Of Suspected Reactants

Provided that 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.

Reacting materials will be classified with reaction codes depending on the consequences described in the table shown below.

Reaction Codes and Consequences	
Reaction Codes	**Reaction Consequences**
H	Generates heat by chemical reactions, recorded by a temperature change
E	Produces a visual reaction consisting of bubbling, polymerization, flames, or other notable changes.

I. Exhibit II.A.4.a: Waste Compatibility Testing Log

Waste Compatibility Testing Log						
Inbound Drum #	**Lab Pack/Bulk**	**Outbound Container #**	**Time (start)**	**Time (stop)**	**Reaction Code**	**Comments**

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.A.7: Recordkeeping and Reporting

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

1. 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. 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 for 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. 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. 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 on the manifest(s). All waste that is received by the facility is assigned a barcode label. 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 the 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.

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. All discrepancies must be resolved 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 are 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. Processes at the Facility

The previous sub-section describes 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 Environmental Services, Inc. uses a custom 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.

PERMIT is an electronic system that tracks all waste that is at the Triumvirate Environmental Services, Inc. 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 handheld 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 and the DOT shipping description will determine where it can be stored.

The server which houses the Triumvirate Environmental Services, Inc.'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. 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 interact with 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 Services, Inc. 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 are only printed from PERMIT to keep the inventory in PERMIT accurate. The waste that is sent to a TSDF will meet the characteristics of the profile. 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 Services, Inc. facility may be classified as follows:

- Waste bulked in containers such as tankers, roll-off boxes, dump trailers, 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 Services, 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 is generated from that list which 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 at the facility the shipment preview report is completed from the data management system that tracks the movement of bulked wastes. A manifest is then prepared for the bulked materials from the system.

7. Transfer Facility

Triumvirate Environmental Services, Inc. operates a transportation fleet that has been licensed by the State of Florida to transport hazardous waste. Triumvirate Environmental Services, Inc. facility in Orlando is also a hazardous waste transporter and also operates a transfer facility which allows waste to be held in transit for up to ten days.
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 Services, Inc. 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. When waste is placed inside the facility it is clearly separated from permitted waste and segregated 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 Services, Inc. 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 Services, Inc. approval codes; transfer facility waste drums do not show Triumvirate Environmental Services, Inc. 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 and are segregated and identified 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 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. Unauthorized Waste Shipments

When inbound waste streams are tested and inspected in accordance with the procedures described in the Waste Analysis Plan 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 Services, 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 Services, 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.

9. 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. Required Reports And Notifications

Triumvirate Environmental Services, Inc. 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. 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.

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.B: Container Management

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

Container management requirements per 264.175(c):

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 Services, Inc. facility stores wastes containing free liquids. Therefore, this application does not address item a. shown above.

The application continues with paragraph b:

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 block wall (minimally rated as a two-hour fire 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. **Figure I.D.1 "Existing Container Storage Layout"** and **Figure I.D.1.a "Container Storage Unit"** have been included as references and are for informational purposes to show the containments described in this section. The figures are for information purposes only and they are not to scale.

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 I.D.1.a "Container Storage Unit"** 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-2 "Floor Coating Sika Sikafloor SDS"**. The facility may use other materials that provide similar results.

Three, pre-fabricated flammable storage units are being proposed as part of this permit application. The three units will be located as shown in **Figure II.A.5-1 "Modified Facility Site Plan"**. Each unit will have its own secondary containment and can hold a maximum of 80, 55-gallon drums each. Each unit will be designed per NFPA requirements and will be approved by the fire department prior to use. The area will be newly poured concrete with its own secondary containment capability.

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.

The three, pre-fabricated flammable storage units being proposed as part of this permit application will have grated floors with secondary containment beneath the grating. Any free liquids would fall through the grating and into the containment below. Containers would not be in contact with standing liquids based on this design.

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 (South Subunit)

As shown in **Figure I.D.1.a "Container Storage Unit"**, six cells are located along the south wall of the unit (the south sub-unit). The 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 = 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 (East Subunit)

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 = 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 2a (Cell 201)

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 = 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 (Northwest Subunit)

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 concrete block wall (minimally rated as a 2 hour fire wall) along the north side. **Figure I.D.1.a "Container Storage Unit"** shows the area. 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).

Containment Volume 4 (Stabilization and Consolidation Area)

This containment represents the Stabilization and Consolidation Area is identified in **Figure II.A.5 "Existing Facility Site Plan"**. The northeast corner of the unit is 25' (300") by 22' (264"). The other part of the area is 75' (900") by 30' (360"). Both areas are surrounded by roll-over berm and curb that is, at least, 3.5" high.

Area of the northeast corner: 300" x 264" = 79,200 square inches
Cubic inches of the northeast corner: 79,200" x 3.5" = 277,200 cubic inches

Area of the rest of the unit: 360" x 900" = 324,000 square inches
Cubic inches of the rest of the unit: 324,000" x 3.5" = 1,134,000 cubic inches

Total cubic inches: 1,134,000 + 277,200 = 1,411,200 square inches

Total volume in gallons: 1,373,400 cubic inches x 0.004329 (cubic inches to gallons conversation factor) = 6,109.08 gallons

As noted in Modification #7 on the Cover Letter and Outline, Triumvirate proposes to berm off the top section of the Stabilization and Consolidation Area as shown in **Figure II.A.5-1 "Modified Facility Site Plan"**. This would reduce the total volume of the hazardous waste storage area for the Stabilization and Consolidation Area noted above by approximately one-third.

The three, pre-fabricated flammable storage units being proposed as part of this permit application will each have their own secondary containment designed in accordance with 40 CFR 264.175(b)(3) and will be approved by the fire department prior to installation. The area where the flammable storage units sit will be newly poured concrete and will also have its own secondary containment system.

Provisions for preventing or managing run-on; and

All container storage areas are under roof and fully enclosed.

How accumulated liquids can be analyzed and removed to prevent overflow.

Liquids spilled in any cell of the container storage 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.

Liquids spilled in the flammable material storage unit will be contained in the secondary containment basin below the drums. 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 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 units to operate the equipment necessary to remove spilled waste.

II.B.2. Ignitables And Incompatibles

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 15 meters from the facility's property line (**Figure II.A.5 "Existing Facility Site Plan"**). Consequently, wastes stored in the unit are also located beyond the required property line set-back distance. The entire perimeter of the proposed flammable material storage unit area is located at least 15 meters from the facility's property line (**Figure II.A.5-1 "Modified Facility Site Plan"**).

Wastes accepted at Triumvirate Environmental Services, Inc. are stored, consolidated, repacked, or treated. All storage is in containers, including waste managed through the 10-day transfer area. Consolidation consists of pouring or pumping containers together into shippable containers. Consolidations of ignitable materials will be completed using bonding and grounding and will occur in the flammable material storage unit area proposed in this application.

Re-packaging consists of removing inner containers from outer containers and placing them in appropriate containers for outbound shipments. Treatment consists of stabilization of wastes in roll-off boxes with cement or other suitable material approved by The Department. Containers containing RCRA metals (D004-D008, D010-D011), may be stabilized using cement or other suitable material approved by the department.

An example would be lead contaminated sandblast grit. Procedures to prevent incompatible wastes from being consolidated in the same container are described in **Attachment II.A.4 "Waste Analysis Plan"** and **Attachment II.A.4.a "Waste Compatibility Test Manual"**.

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 (40 CFR 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

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, with a third area, the flammable material storage unit area, proposed in this application. 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.

a. 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 Services, Inc. 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 Services, Inc. gives careful consideration to the assignment of the hazard class to waste materials during the approval process. The chart shown in **Table II.B-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-1: Segregation Table for Hazardous Material													
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 liq 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 (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 1, 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.

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 manifests to Triumvirate Environmental Services, Inc. Upon review of the hazard class and shipping label the drum is transferred to the appropriate cell in accordance with the DOT segregation system.

Table II.B-2: Container Storage Layout

Area	Row	Type of Material Stored
Northwest Subunit	101, 102, 103, 104, 105	DOT Class: 6.1, 8, 9, and Non-regulated material
East Subunit	201, 202, 203, 204, 205, 206, 207, 208	DOT Class: 6.1, 8, 9, and Non-regulated material
	209, 210	DOT Class: 6.1, 8, 9, and Non-regulated material
South Subunit	301, 302, 303, 304, 305, 306	DOT Class: 5.1, 5.2, 6.1, 8, 9, and Non-regulated material

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-1** of this attachment 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.

Organic peroxides (5.2) accepted by Triumvirate Environmental Services, 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 (Class 5.1) may be accepted by the facility. The Class 5.1 materials are generally stored separately from wastes containing a significant proportion of organic constituents. Oxidizers (Class 5.1) and organic peroxides (Class 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.

Currently, Triumvirate Environmental Services, Inc. does not store flammable wastes in the container storage unit. Flammables may be stored in the proposed flammable material storage units contingent upon fire department approval.

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 only allowed outside of the fence surrounding the property. Smoking is not allowed on the property within any of the operating areas.

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. Contingent upon NFPA upgrades a hand-held explosion meter will be kept on-site to detect high concentrations of flammable vapors. Ignitables will be consolidated and pumped within the new flammable material storage units.

b. Consolidation And Stabilization Operations

Triumvirate Environmental Services, Inc. consolidates and stabilizes compatible hazardous wastes at the facility inside the Waste Consolidation and Stabilization Area. These consolidation and stabilization areas are identified in **Figure II.A.5 "Existing Facility Site Plan"**. Re-packaging of non-reactive wastes may occur in the Waste Consolidation and Stabilization Area, the Container Storage Unit, or the proposed flammable material storage unit area.

Triumvirate Environmental Services, Inc. is authorized to consolidate compatible hazardous wastes stored in containers into larger bulk containers. Hazardous waste which can be disposed of together at an approved hazardous waste facility will only be consolidated together. Only hazardous wastes that have passed the acceptance procedures described in **Attachment II.A.4.a "Waste Compatibility Test Manual"** will be consolidated. Triumvirate Environmental Services, Inc. will not consolidate inhalation hazards, reactives (D003), or oxidizers. Flammable material which is intended for fuel blending or incineration may be consolidated contingent upon installation of the proposed flammable material storage units. The Waste Compatibility Test Manual will determine compatibility in determining which waste streams will be intended for consolidation. Consolidations will take place in the consolidation and stabilization area, identified in **Figure II.A.5 "Existing Facility Site Plan"**, or in the flammable material storage unit area identified in **Figure II.A.5-1 "Modified Facility Site Plan".**

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 **Attachment II.A.4 "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.

c. Consolidation in Bulk Transport Containers (tankers)

Procedures outlined in **Attachment II.A.4.a "Waste Compatibility Test Manual"** of **Attachment II.A.4 "Waste Analysis Plan"** are followed for consolidation.

d. Consolidation of Lab pack Containers

Procedures outlined in **Attachment II.A.4.a "Waste Compatibility Test Manual"** of **Attachment II.A.4 "Waste Analysis Plan"** are followed for consolidation.

e. Drum Consolidation of Non-Labpack Wastes

Procedures outlined in **Attachment II.A.4.a "Waste Compatibility Test Manual"** of **Attachment II.A.4 "Waste Analysis Plan"** are followed for consolidation.

f. Consolidation of Corrosive liquids

Procedures outlined in **Attachment II.A.4.a "Waste Compatibility Test Manual"** of **Attachment II.A.4 "Waste Analysis Plan"** are followed for consolidation.

g. Consolidation of Non-Corrosives

Procedures outlined in **Attachment II.A.4.a "Waste Compatibility Test Manual"** of **Attachment II.A.4 "Waste Analysis Plan"** are followed for consolidation.

h. Stabilization

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 and lead contaminated media from gun ranges.

The stabilization operation will be performed in a 20 or 30 yard roll-off container located in the Waste Stabilization and Consolidation Area. The roll-off container will be lined. Waste and stabilization media will be mixed thoroughly by using mechanical equipment. Drums will be consolidated into the roll-off while the stabilization media is continuously added to ensure proper mixing. For waste that arrives in roll-off containers, proper mixing is ensured by the use of mechanical equipment mixing the waste and stabilizing agent in proper ratios. Stabilization materials will consist of a mixture of pozzolanic products as needed. Possible examples include: Portland cement or other material approved by the department. All additives will be contained in a dry and secure portion of the warehouse.

Equipment used for stabilization will be decontaminated after each batch. Decontamination involves physically removing contaminates and cleaning the equipment with soap and water. Consolidation of similar wastes may occur prior to stabilization; examples would be soils and sludge's. During the consolidation process, a compatibility test would be completed, as described previously. The sampling of stabilized material is discussed in the Waste Analysis Plan.

Prior to treatment the storage times will follow the hazardous waste storage limits of one year. The oldest container added to the roll-off will be used for the one year time limit. After treatment and verification that the waste is non-hazardous the time limit will follow the non-hazardous regulations for Triumvirate Environmental Services, Inc. If LDR's are not met the waste will be sent offsite for disposal as a hazardous waste.

II.B.4. Management Of Containers

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 Services, Inc. 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 onto 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 overpacks 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 sludges are shipped to the facility in steel, fiberboard boxes, IBC Totes, and cubic yard boxes/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 **Attachment I.B "Site Photographs"**.

Drums in the container storage 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.

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 "Existing Container Storage Layout"** as the staging area. This is the area where the drums are tested and inspected before being placed in the storage cells. Drums are also tested and inspected on the loading dock. 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. 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.

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.

These procedures would apply to the proposed flammable material storage units as well.

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 on 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 **Figure II.B.4 "Weekly Inspection Log"** and **Figure II.B.5 "Emergency Equipment and Personnel Safety Cabinet Inspection Form"**.

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 is shown in **Figure II.B.5 "Emergency Equipment and Personnel Safety Cabinet Inspection Form"**.

II.B.6. Closure Plan

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)]

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

II.B.7. Closure Cost Estimate

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 Services, Inc. is not required to have a post-closure plan because it is not a hazardous waste disposal facility. All information requested by Section II.B.6 and Section II.B.7 is provided in **Attachment II.K "Closure"**.

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.I: Miscellaneous Units

Triumvirate Environmental Services, Inc. (TESI)
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

1. Introduction

Triumvirate Environmental Services, Inc. requests approval to install three pre-fabricated flammable material storage units. The applicant must provide the following information in accordance with 40 CFR Part 264, Subpart X [§270.23].

2. Unit Description

Attach a detailed description of the unit in use or proposed for use, including the following:

a. Physical characteristics, materials of construction, and dimensions of the unit;

b. Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated [§264.73], maintained [§264.33], monitored, inspected [§264.15], and closed [§264.112] to comply with the requirements of §§264.601 and 264.602; and

c. For disposal units, a detailed description of the plans to comply with the post-closure requirements of §§264.603 and 264.118.

See **Exhibit II.I-1 "Flammable Material Unit Specifications"** of this attachment for details on the proposed flammable material storage units. The units are only for storage of material, they are not disposal units. The add-ons we would like to include are to have steel grating floors in all three, explosion resistant air conditioning units in all three, and the industrial exhaust system in one unit. Carbon filters can be added to prevent vapor emissions.

3. Land Use Assessment

Attach detailed hydrologic, geologic, and meteorological assessments and land-use maps for the region surrounding the site that address and ensure compliance of the unit with each factor in the environmental performance standards in §264.601.

The following land use information was obtained from the Phase I Environmental Site Assessment conducted at the site by Vanasse Hangen Brustlin, Inc. (VHB):

a. Soils/Surficial Geology

According to the United States Department of Agriculture, Soil Survey of Orange County, Florida, the majority of the Site is mapped St. Johns fine sand and Smyma fine sand. These soil types are defined by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Custom Soil Resource Report as having 0 to 2 percent slopes and being poorly drained. The reported depths to the water table for St. Johns fine sand and Smyma fine sand are about 6 to 12 inches and about 6 to 18 inches, respectively.

b. Bedrock Geology

The State of Florida lies principally on the Florida Platform. A thick sequence of carbonate rocks capped by a thin, siliciclastic sediment-rich sequence forms the Florida Platform. These sediments range in age from mid-Mesozoic (200 million years ago [mya]) to Recent. Florida's aquifer system developed in the Cenozoic sediments ranging from latest Paleocene (55 mya) to late Pleistocene (<100,000 years ago) in age (Scott). The sediments supra-adjoining to the Floridan aquifer system include quartz, sands, silts and clay (siliciclastics) with varying admixtures of carbonates as discrete beds and sediment matrix. Deposition of these sediments occurred from Miocene (24 mya) to the Recent. The Neogene (24 mya to 1.6 mya) and Quaternary (1.6 mya to the present) sediments form the intermediate aquifer and/or confining unit and the surficial aquifer system (Scott).

According to the Bedrock Geology Map of Florida (2001), the upper-most bedrock unit underlying the site is the Ocala Limestone. This water bearing limestone formation is the upper-most unit of the regionally extensive Floridan aquifer.

c. Groundwater

The Floridan aquifer system is the major source for municipal supplies in the vicinity of the subject site. In Orange County, the Floridan aquifer includes the Lake City Limestone, the Avon Park Limestone, the Ocala Group, and parts of the Hawthorn Group. The aquifer consists of alternating layers of limestone and dolomitic limestone. The Hawthorn Formation acts as a confining layer or aquiclude that retards upward movement of water from underlying artesian Floridan aquifer system as well as inhibiting downward movement of surficial aquifer waters. Isolated aquifers may be present within the Hawthorn Formation. An unconfined surficial aquifer is present in the undifferentiated sediments overlying the Hawthorn Formation.

Groundwater in the vicinity of the Site is classified by the South Florida Water Management District as G-2 water quality. Groundwater resources classified G-2 are those resources that refer to potable water use; groundwater in aquifers which have a total dissolved solids content of less than 10,000 milligrams per liter.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology and characteristics of the soil. Based on historical groundwater sampling information collected in 1997, groundwater flow at the Site was towards the southeast; however, groundwater flow across the Site may have been influence by the installation of the large retention pond that was installed on the northern portion of the Site between 1995 and 1997.

d. Surface Water

The closest surface water body is an unnamed pond located on the northern portion of the Site. According to FDEP Water Quality Regulations, the pond is a Class III water body. Class III water bodies are designated for recreation, propagation, and maintenance of a healthy well-balanced population of fish and wildlife.

4. Exposure Pathways

Attach information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents and on the potential magnitude and nature of such exposures as per §§264.601(a)(8), (b)(10) and (c)(6).

Potential exposure pathways are from a release to the soil of hazardous materials or a release to the air of hazardous materials during a fire event.

The storage units will be designed with internal secondary containment integral to each unit. In addition, the units themselves will be set on newly poured concrete that has its own secondary containment system.

The storage units are designed to store flammable materials. They will be properly rated and approved by the fire department before installation.

5. Treatment Effectiveness

Attach a report on a demonstration of the effectiveness of the treatment of each treatment unit based on laboratory or field data.

Material will not be treated in the new flammable materials storage units. Material will only be stored, consolidated, or repackaged in this area.

6. Ignitable, Reactive, or Incompatible Waste Requirements

If placing ignitable, reactive, or incompatible wastes in the miscellaneous unit, attach an explanation of how the applicant will comply with the requirements of §264.17.

Precautions will be taken to prevent accidental ignition or reaction of ignitable or reactive waste. The storage units are designed for storage of flammable materials. “No Smoking” signs will be on the units and in the immediate area. Smoking is not allowed on the property.

Training will be performed to ensure no hot work is performed in the units or in the surrounding area without proper precautions and oversight by the Health and Safety Manager at the site. The flammable storage units will be located at least 50 feet from the property boundary.

7. Closure and Post-Closure

Submit the information described in Part II, K. - Closure, including Closure and Post-closure plans as required. Attach a copy of the closure cost estimate [§270.14(b)(14)] and the post-closure cost estimate [§270.14(b)(15)].

Closure information for the new flammable material storage unit area is included in **Attachment II.K “Closure”**.

8. Groundwater Protection

Submit the information described in Part II, M. - Ground Water Protection, if applicable. [§270.14(c)]

Each flammable storage unit has its own secondary containment. In addition, the units will be set on newly poured concrete that itself has secondary containment. The concrete will be poured to a depth that is adequate to accommodate the weight of the loaded flammable material storage units in accordance with engineer’s recommendations.

9. Exposure Information

Submit the information described in Part II, O. - Exposure Information. [§264.601(a)(8)]

The potential for health risks caused by human exposure to waste constituents is the same as those for the existing permit. Only hazardous materials that are currently approved in the existing permit will be stored in the flammable material storage units.

10. Inspection Requirements

Attach a schedule and procedure for meeting the inspection requirement of §264.15.

The flammable storage units and the immediate area will be added to the inspection list that exists for the rest of the facility (**Attachment II.B.4 "Weekly Inspection Log"**).

11. Exhibit II.I-1: Flammable Material Unit Specifications

https://www.calpaclab.com/80-drum-hazmat-storage-building-55-gallon/sa-b8000

Photograph example of proposed flammable material storage unit.

Preliminary specifications for proposed flammable material storage units. Additional details will be provided as necessary.

Securall

HazMat Drum Storage Building with Optional Fire Rating, 80 Drum

List: ~~$82,250.00~~

$54,061.60

(You save $28,188.40)

Part Number: SA-B8000
Lead Time: Call for current availability
Minimum Purchase: 1 unit
Shipping: FREE SHIPPING on most orders over $50*
Quantity: each
Size: 80 drum
Color: gray
Material: steel
Style: outdoor storage building

Fire Rating: *

Choose Options

Quantity: 1

ADD TO CART

Supply Chain Disruptions: Some items currently have longer-than-average lead times. Please contact us for current availability.

DESCRIPTION

HazMat Drum Storage Building with Optional Fire Rating, 80 Drum.

Specifically designed for outdoor hazardous material storage and dispensing from 55-gallon drums containing flammable or combustible liquids. Outer wall is constructed of all-welded 16 or 12 gauge steel. Inner wall is constructed of 20 gauge steel. The double wall construction contains 3" of air space throughout. All Hazmat Storage Buildings are designed in accordance with the standards set forth by NFPA Code 30 and comply with OSHA and EPA regulations. All models are FM Approved for the storing and dispensing of flammable and combustible liquids. All electrical installations are U.L. Approved & Compliant to 1999 & 2002 NEC.

Approvals

- Complies with EPA & current OSHA regulations
- FM-Factory Mutual Approved
- NFPA - Designed in accordance with specifications set forth by the National Fire Protection Association
- UL - Include UL listed electrical accessories

Dimensions: 8'4"H x 42'W x 8'D
Approximate Ship Weight: 15369 lbs

Door Style: 1-60" W x 80" H door installed with a UL Classified commercial grade keyed lockset. The door shall serve as personnel entrance and exit.

Standard Design Features

The chart below lists the standard features that are included with these buildings. Details of each feature are listed below the table.

Exterior Walls	12 or 16 gauge galvannealed steel
Interior Walls	20 gauge galvannealed steel (3" air space between walls)
Sump	12 gauge steel liquid tight, continuously welded
Forklift Channel	Urethane coated 12 gauge galvannealed steel
NFPA & OSHA Compliant Grounding	Static ground connection inside and out on all x rated models
Labeling	NFR warning label, Hazard Ratings System, Instructions
Venting	Natural convection vents
Paint	Chemical, corrosive, ultraviolet and impact resistant
Flooring	Removable galvanized steel safety floor planking

Interlocking Wall Structure - Securall® Chemical Storage Buildings are designed using **Interlocking Wall Sections** which provide superior strength and durability.

Exterior Wall Construction - Securall® HazMat Storage Buildings are all-welded using 12 or 16 gauge galvannealed steel outer walls and 20 gauge cold rolled steel inner walls provide maximum durability, weather resistance, and rigidity.

Safety Floor Planking - Slip resistant planking 13" wide, 12 gauge galvanized steel with raised perforated buttons and debossed holes protruding down. Galvanized steel floor planking above sump area for maximum corrosion resistance. Floor planking designed to sustain a minimum uniformly distributed load of 250 pounds per square foot. Floor planking and supports are removable to facilitate sump cleaning in the event of a spill.

Upgrades Available

Hurricane Resistant Walls - These buildings are available in hurricane rated and have been tested to determine the amount of force they can withstand and were shown to withstand F-4 tornado force winds of 250 mph. The chart below demonstrates the wind speed that a particular length of wall will resist. Upgrade package is available for Tornado Resistant Walls.

Explosion Relief Panels - Used in the construction of buildings designed for the storage and dispensing of Class IA and Class IB flammable liquids. Explosion relief panels limit the damage within an enclosed hazardous location. When the panel(s) are subjected to an explosive force, the pressure relieving panel quickly vents the force before it causes major damage. The panels are designed to release at 20 psf.

Fire Rating - FM Approved Fire Rated Wall & Roof Design Tested at Intertek Testing Laboratory
Fire-Rated Storage Buildings (8'4"H X 42'W X 9'D Max Dimensions) carry the Factory Mutual System Approval label and have an FM Approved Fire Rated Wall & Roof Design. Wall and roof are tested at Intertek Testing Laboratories. Storage buildings are constructed based upon UL Fire Resistance Ratings classification criteria. Check with your local authority having jurisdiction for correct wall/roof rating needed. In addition, all Fire-Rated Buildings come with hydraulic operated Self-Close, fire-rated doors and fire damper protected vents.

- Standard models are available in 2-hour and 4-hour fire ratings
- Wall ratings are either 2 or 4 hour fire rated
- Roof ratings are either 1.5 or 3 hour fire rated)

2 Hour Fire Rated wall construction built with 1.5 hour fire rated roof construction, 1.5 hour fire rated door construction, and 2 hr wall design. Air inlet vents with UL Classified and labeled fire damper with louvers. Dampers have a galvanized steel frame, curtain-type galvanized steel blades and a UL Classified 165° F fusible link.

4 Hour Fire Rated wall construction built with 3 hour fire rated roof construction, 3 hour fire rated door construction, and 4 hr wall design. Air inlet vents with UL Classified and labeled fire damper with louvers. Dampers have a galvanized steel frame, curtain-type galvanized steel blades and a UL Classified 165° F fusible link.

Many other upgrades are available, including:

- Steel or Aluminum Ramps
- Electrical Classification
- Explosion-Proof Light with Switch (interior or exterior)
- Dust/Vapor Resistant Lights
- Explosion-Proof Heater (6,143 BTU, 12,286 BTU, 24,000 BTU, 10,000 BTU, 25,600 BTU, 34,100 BTU)
- Explosion-Proof Air Conditioner (19,000 BTU)
- Temperature Switch (to activate accessories, sold separately)
- R-11 Insulation
- Dry Chemical Fire Suppression System
- Dry Chemical Alarm
- Sprinkler System - One or Three Heads
- Fire Department Hose Connection
- Liquid Level Detector with Alarm
- Sump Liner
- Door and Exit Upgrades
- Eyewash Stations
- Sump Drain with lockable valve or drain only
- Custom paint
- Primer coat for saltwater
- Fusible link hold open, door closer
- Solar panels
- And much more!

Please call us toll free at (888) 322-5722 or email at info@cplabsafety.com for a more accurate quote with all the options you require.

MPN: B8000

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.K: Closure

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

II.K.1. Closure Performance

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.

II.K.2. Removal Of Inventory

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 (CL), 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 CL 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-3 "Estimated Costs for Inventory Disposal" 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 wastewater will be discussed with The State at the time of closure. The structure surface areas for decontamination are listed below.

Table II.K-1: Structure Surface Areas for Decontamination

Structure Decontamination	**Surface Area (ft^2)**
Consolidation and 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. See **Table II.K-6 "Closure Cost Estimate for Transportation of Inventory"**.

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;

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.

II.K.3. Closure Description

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.

a. 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-3 "Estimated Costs for Inventory Disposal"**. 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. 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.

b. 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. Final rinsate samples will be taken as discussed earlier.

c. Flammable Material Storage Units

Containers holding hazardous waste will be segregated into groups based on recommended treatment methods, following the waste classification system of **Table II.K-3 "Estimated Costs for Inventory Disposal"**. All waste inventories in drums will be loaded in trucks or tankers 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), as shown in the Container Storage Unit section above.

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

II.K.4. Verification Of Decontamination

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 (Florida), 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. Samples should be taken from the bottom of the concrete within the fill material from under the foundation. The contaminants of concern will depend on the waste material types handled in the areas where soils are to be sampled.

Figure II.K.1 "Facility Closure Sampling Locations and SWMUs" shows the planned sampling locations for the contamination assessment program to be conducted under this plan. The sampling locations may vary depending on the conditions at closure. Crack in the concrete, in the transfer area, will also be sampled. The sampling locations have been selected representing the areas where waste materials are stored or treated in the facility. A sample will be obtained from each area to be submitted to the laboratory. For clean closure discrete samples must be taken, and if the samples are composited for volatiles, they must be composited in the lab. Samples will be taken for metals and SVOCs. **Table II.K-8a "Soil Sampling Locations and Analytical Methods"** indicates the contaminants of concern for each area of **Figure II.K.1 "Facility Closure Sampling Locations and SWMUs"**. 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.

II.K.5. Closure Schedule

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.

Table II.K-2: Closure Schedule

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	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 (Florida), Inc. 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 **Section II.K.6 "Closure Cost Estimates".**

II.K.6. Closure Cost Estimates

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. The tables used to calculate the closure cost estimate are shown as one sequential set of data at the end of this attachment (following Page 10 of Attachment II.K "Closure").

a. Disposal

The cost estimate for disposal presented here is based on the 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 in **Table II.K-3 "Estimated Costs for Inventory Disposal".**

The closure cost estimate for the disposal of the waste inventory from all storage units at the facility is shown in **Table II.K-4 "Closure Cost Estimate for Disposal of Inventory"**.

b. Transportation

The cost of transportation was estimated based on actual waste shipments made from Triumvirate Environmental Services, Inc. **Table II.K-5 "Estimated Cost of Transportation"** summarizes transportation cost data.

Table II.K-6 "Closure Cost Estimate for Transportation of Inventory" shows the cost estimate for the transportation of the waste inventory described previously in this section.

c. Labor

Labor cost estimates for activities related to the decontamination of structures during facility closure are presented in **Table II.K-7 "Closure Cost Estimate for Decontamination"**. The cost estimates were calculated from labor rates based on cost per man-hour and cost per square foot. 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-7 "Closure Cost Estimate for Decontamination"**.

d. 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 was estimated based on Triumvirate's field service costing rates. It was conservatively assumed that boring and collecting a soil sample would take one hour per sample. The soil sample depth would be 0-2 feet below grade. The same labor rate was used for the collection of the final rinsate sample from the container storage area, the consolidation/stabilization areas, and each of the new pre-fabricated flammable storage units. Sample collection time for final rinsate sampling was assigned 0.5 hr/sample. **Table II.K-8a "Soil Sampling Locations and Analytical Methods"** shows the analytical methods used for sample collection. The location of each sample location is shown on **Figure II.K.1 "Facility Closure Sampling Locations and SWMUs"**.

Table II.K-8a: Soil Sampling Locations and Analytical Methods			
Sampling Area Name	**Sample Locations**	**Contaminants of Concern**	**Analytical Methods**
South Container Storage Unit	SC 1 – SC 2	Semi-Volatile Organics, Volatile Organic Compounds, Leachable RCRA Metals*	8270, 8260, 1311/6010
Outside the Loading Dock	LD 1	Semi-Volatile Organics, Volatile Organic Compounds, Leachable RCRA Metals*	8270, 8260, 1311/6010
Roll-off Box Staging Area	RB 1	Semi-Volatile Organics, Volatile Organic Compounds, Leachable RCRA Metals*	8270, 8260, 1311/6010
East Container Storage Unit	EC 1 – EC 2	Semi-Volatile Organics, Volatile Organic Compounds, Leachable RCRA Metals*	8270, 8260, 1311/6010
Northeast Container Storage	NC 1 – NC 4	Semi-Volatile Organics, Volatile Organic Compounds, Leachable RCRA Metals*	8270, 8260, 1311/6010
Consolidation/ Stabilization Area (Inside North Building)	CA 1 – CA 3	Semi-Volatile Organics, Volatile Organic Compounds, Leachable RCRA Metals*	8270, 8260, 1311/6010
General Parking and Material Movement Area (Outside North Building)	GM 1 – GM 2	Semi-Volatile Organics, Volatile Organic Compounds, Leachable RCRA Metals*	8270, 8260, 1311/6010
New Flammable Storage Unit Area	FS 1 – FS 10	Semi-Volatile Organics, Volatile Organic Compounds, Leachable RCRA Metals*	8270, 8260, 1311/6010
Total Soil Sample Locations: 23 Total Composite Samples: 8 (one composite for each sampling area in the table above) **Sample method 8081, 8141, or 8151 may be added as needed based on known storage of pesticide or herbicide material at time of closure.*			

A cost estimate of the sampling and testing operations is presented in **Table II.K-8 "Closure Cost Estimate for Sampling and Analysis"**.

e. 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-9 "Engineer Certification of Closure"** 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.

f. Overall Closure Cost Summary

Table II.K-10 "Summary of Closure Cost Estimates" 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. The closure fund will be adjusted for inflation as required for subsequent years. Annual increases will be calculated using the most current Implicit Price Deflator figure.

Table II.K-3: Pricing for Inventory Disposal

Waste Types	Process Code	Quantity (gal)	Facility Name	$/55-gal drum
Corrosive Liquid	CL	3,960	Clean Earth - Calvert City, KY	$97.90
Waste Fuels	HI/WF	24,200	Clean Earth - Calvert City, KY	$66.00
Inorganic Waste	MH	14,740	Stablex Canada - Blainville, QC	$131.00
Poison/Organic	PH1	440	Clean Earth - Calvert City, KY	$94.00
Poison/Inorganic	PH2	440	Ross Incineration Services - Grafton, OH	$392.15
Oxidizers	RI	660	Stablex Canada - Blainville, QC	$419.00
Flammable Solids	RI	660	Clean Earth - Calvert City, KY	$115.50
Reactives	RX	220	Ross Incineration Services - Grafton, OH	$625.60

Table II.K-4: Closure Cost Estimate for Disposal of Inventory

Container Storage Unit	Unit Cost	Quantity (55-gal Drums)	Total
a. Corrosive Liquids - 55gal CL	$97.90	72	$7,048.80
b. Waste Fuels - 55gal HI/WF	$66.00	440	$29,040.00
c. Inorganic Waste - 55gal MH	$131.00	268	$35,108.00
d. Poison-Organic Waste - 55gal PH1	$94.00	8	$752.00
e. Poison-Inorganic Waste - 55gal PH2	$392.15	8	$3,137.20
f. Oxidizers - 55gal RI	$419.00	12	$5,028.00
g. Flammable Solids - 55gal RI	$115.50	12	$1,386.00
h. Reactives - 55gal RX	$625.60	4	$2,502.40
Disposal Cost for the Container Storage Unit			**$84,002.40**

Table II.K-5: Estimated Cost of Transportation

Facility	Destination	Waste Type	# of 55-gal Drums
Clean Earth	Calvert City, KY	Corrosives	72
		Flammable Solids	12
		Waste Fuels	440
		# of Trips	7
		Cost per Trip	$ 3,200
Stablex Canada	Blainville, CA	Inorganics	268
		Oxidizers	12
		# of Trips	4
		Cost per Trip	$ 5,400
Ross Incineration Services	Grafton, OH	Poison - Organics (PH1)	8
		Reactives	4
		Poison - Inorganics (PH2)	8
		# of Trips	1
		Cost per Trip	$ 3,400

Table II.K-6: Closure Cost Estimate for Transportation of Inventory

*90 Drums per Trip

Disposal Facility	Waste Type	Quantity	Total Cost
1. Clean Earth	Corrosive Liquids	72	
	Waste Fuel	440	
	Flammable Solids	12	
	Total Drums	524	
	Trips	7	
	$/Trip	$3,200.00	
		Total Transportation Cost	**$21,831.11**
2. Stablex Canada	Inorganics	268	
	Oxidizers	12	
	Total Drums	280	
	Trips	4	
	Trip Cost	$5,400.00	
		Total Transportation Cost	**$22,200.00**
3. Ross Incineration	Poisons	16	
	Reactives	4	
	Total Drums	20	
	Trips	1	
	Trip Cost	$3,400.00	
		Total Transportation Cost	**$4,155.56**
		Total Cost for Transportation Inventory	**$48,186.67**

Table II.K-7: Closure Cost Estimate for Decontamination

Container Storage Unit	Unit Cost	Quantity	Total Cost
Labor for loading wastes for transportation in man-hrs			
Cost of labor per man-hr (Based on field service labor costs within Triuvmirate's network)	$48.00	43.00	$2,064.00
Cost of loading wastes for transportation			
Area of structure to be decontaminated in sq. ft.:		5488	
Cost of labor per sq. ft. (Previous value was $0.19/sq ft. A 10% inflation factor was added.)	$0.21		
Cost of decontamination of structures			**$1,152.48**
Consolidation/Stabilization Area (inside North Building)			
Area of structure to be decontaminated in sq. ft.		3583	
Cost of labor per sq. ft. (Previous value was $0.19/sq ft. A 10% inflation factor was added.)	$0.21		
Cost of decontamination of structure			**$752.43**
Consolidation/Stabilization Area (west of North Building)			
Area of structure to be decontaminated in sq. ft.		1000	
Cost of labor per sq. ft. (Previous value was $0.19/sq ft. A 10% inflation factor was added.)	$0.21		
Cost of decontamination of structure			**$210.00**
Steam Cleaner Rental			
Number of days for using the cleaner		1	
Cost of renting the cleaner per day (A 10% inflation factor was added to the value from the 2018 submittal.)	$350.00		
Cost of steam cleaner rental			**$350.00**
Total Decontamination Cost			**$4,528.91**

Table II.K-8: Closure Cost Estimate for Sampling and Analysis

Container Storage Unit	# of Samples	Hours Required	Cost per Unit	Total Cost
1. Soil Sampling				
Number of borings for sampling of soils	23			
Cost per boring (Cost estimated based on internal field service labor costs within Triumvirate's network)			$69.00	
			Total Sampling Cost	**$1,587.00**
2. Soil Testing				
Number of soil tests using analysis method 8270 (semi-volatile VOCs); Total Composite samples (See Table II.K-8a in Attachment II.K)	8			
Cost per test (Cost per test calculated from PACE Analytical Fee Schedule 2021. A worst case estimate was used by totaling the cost of all soil related Method 8270 tests, plus the sample disposal and environmental impact fees assigned to each invoice.)			$556.50	
			Cost of soil test using analysis method 8270	**$4,452.00**
Number of soil test using analysis method 8260 (VOCs); Total Composite samples (See Table II.K-8a in Attachment II.K)	8			
Cost per test (Cost per test calculated from PACE Analytical Fee Schedule 2021. A worst case estimate was used by totaling the cost of all soil related Method 8260 tests, plus the sample disposal and environmental impact fees assigned to each invoice.)			$110.50	
			Cost of soil test using analysis method 8260	**$884.00**
Number of soil test using analysis method 1311/6010; Total Composite samples (See Table II.K-8a in Attachment II.K)	8			
Cost per test (Cost per test calculated from PACE Analytical Fee Schedule 2021. A worst case estimate was used by totaling the cost of all soil related Method 1311/6010 tests, plus the sample disposal and environmental impact fees assigned to each invoice.)			$230.50	
			Cost of soil test using analysis method 1311/6010	**$1,844.00**
			Total Soil Testing	**$7,180.00**
3. Rinsate Samples				
Sample Collection (3x Container Storage Unit, 3x Consolidation/Stabilization Area, 3x Flammable Material Storage Units)	9	4.5	$70.00	$315.00
Rinsate Analysis (Cost per test calculated from PACE Analytical Fee Schedule 2021. A worst case estimate was used by totaling the cost of all water related tests for Method 8270, 8260, and 6010, plus the sample disposal and environmental impact fees assigned to each invoice.)	9		$944.50	$8,500.50
			Total Rinsate & Analysis Cost	**$8,815.50**
			Total Cost for Sampling and Analysis of Soils and Rinsate	**$17,582.50**

Table II.K-9: Engineer Certification of Closure

Engineer Certification Costs	Units
Time to review closure plan (hrs)	4
Time to inspect closure operations (hrs)	12
Time to prepare certification of closure (hrs)	4
Total Professional Service Hours	*20*
Cost of professional service ($/hr)	$95.00
Total Cost of Engineer Certifications	**$1,900.00**

Table II.K-10: Summary of Closure Cost Estimates

Cost Category	Cost, $
Disposal of Inventory (Table II.K-4)	$84,002.40
Transportation of Inventory (Table II.K-6)	$48,186.67
Decontamination of Structures (Table II.K-7)	$4,528.91
Sampling and Testing of Soils and Final Rinsates (Table II.K-8)	$17,582.50
Engineer Certification (Table II.K-9)	$1,900.00
Sub-Total	*$156,200.48*
10% for Management and Supervision	$15,620.05
10% for Contingencies	$15,620.05
Total Closure Cost Estimate	**$187,440.57**

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.P:

Solid Waste Management Units (SWMUs)

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Table of Contents

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.

See **Figure II.K.1 "Facility Closure Sampling Locations and SWMUs"** for the location of all SWMUs.

1. List of SWMUs/AOCs requiring Confirmatory Sampling:

Table II.P-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.			

2. List of SWMUs/AOCs requiring a Site Assessment or a Risk Assessment

Table II.P-2: List of SWMUs/AOCs requiring a RCRA Facility Investigation 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.				

3. List of SWMUs/AOCs requiring a Remedial Action Plan or Natural attenuation with Monitoring Plan

Table II.P-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.			

4. List of SWMUs/AOCs implementing a Remedial Action Plan or Natural Attenuation with Monitoring Plan

Table II.P-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.			

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

Table II.P-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.		

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

Table II.P-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.		

7. List of SWMUs/AOCs Where No Further Action Determinations have been made based on no suspected or confirmed contamination

Table II.P-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)	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	Regulated Unit; No evidence of release
SWMU 9	Former stormwater retention area	CS 1996, Closed 1997
SWMU 10	Bermed unloading area (by the dock)	Regulated Unit; 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 (Outside North Building)	Closed 2009
SWMU 14	Used Oil Tank	No evidence of release
SWMU 15	Septic Tank	No evidence of Release
SWMU 16	Proposed Flammable Material Storage Unit #1	Regulated Unit
SWMU 17	Proposed Flammable Material Storage Unit #2	Regulated Unit
SWMU 18	Proposed Flammable Material Storage Unit #3	Regulated Unit
SWMU 19	Consolidation of Flammable Solids Area	Regulated Unit

8. Active SWMUs

See **Figure II.K.1 "Facility Closure Sampling Locations and SWMUs"** for the location of all SWMUs.

SWMU #1: Container Storage Area (East subunit)	
Description	Regulated unit for container storage
Operational History	Built in 1984
Status	Active
Waste Characteristics	Non-hazardous waste, hazardous waste, universal waste, universal pharmaceutical waste, biological waste
Waste Management	Storage and Transfer Unit
Maintenance Procedures	Weekly Inspection
Release History	No Known Releases
Potential Pathways	Storm Water Runoff Drain
Exposure Potential	On-Site Retention Basin
Remedial Action	None

SWMU #4: Container Storage Area (South subunit)	
Description	Regulated unit for container storage
Operational History	Built in 1984
Status	Active
Waste Characteristics	Non-hazardous waste, hazardous waste, universal waste, universal pharmaceutical waste, biological waste
Waste Management	Storage and Transfer Unit
Maintenance Procedures	Weekly Inspection
Release History	No Known Releases
Potential Pathways	Storm Water Runoff Drain
Exposure Potential	On-Site Retention Basin
Remedial Action	None

SWMU #5: Container Storage Area (North-west subunit)	
Description	Regulated unit for container storage
Operational History	Built in 1984
Status	Active
Waste Characteristics	Non-hazardous waste, hazardous waste, universal waste, universal pharmaceutical waste, biological waste
Waste Management	Storage and Transfer Unit
Maintenance Procedures	Weekly Inspection
Release History	No Known Releases
Potential Pathways	Storm Water Runoff Drain
Exposure Potential	On-Site Retention Basin
Remedial Action	None

SWMU #8: Roll-Off Box staging area	
Description	Regulated unit non-hazardous roll-off box
Operational History	Built in 1997
Status	Active
Waste Characteristics	non-hazardous waste management
Waste Management	Consolidation, repackaging
Maintenance Procedures	Weekly Inspection
Release History	No Known Releases
Potential Pathways	Storm Water Runoff Drain
Exposure Potential	On-Site Retention Basin
Remedial Action	None

SWMU #10: Bermed unloading area (by the dock)	
Description	Regulated unit to transfer containers
Operational History	Built in 1997
Status	Active
Waste Characteristics	Non-hazardous waste, hazardous waste, universal waste, universal pharmaceutical waste, biological waste
Waste Management	container transfer and storage
Maintenance Procedures	Weekly Inspection
Release History	No Known Releases
Potential Pathways	Storm Water Runoff Drain
Exposure Potential	On-Site Retention Basin
Remedial Action	None

SWMU #11: Storm water retention pond	
Description	storm water runoff
Operational History	installed 1997
Status	Active
Waste Characteristics	none
Waste Management	none
Maintenance Procedures	Quarterly SWPP inspections
Release History	No Known Releases
Potential Pathways	boggy creek
Exposure Potential	none
Remedial Action	None

SWMU #12: Consolidation Area A (Inside North Building)	
Description	Regulated unit for consolidation and repackaging
Operational History	Installed 1997
Status	Active
Waste Characteristics	Non-hazardous waste, hazardous waste, universal waste, universal pharmaceutical waste, biological waste
Waste Management	Consolidation, repackaging
Maintenance Procedures	Weekly Inspection
Release History	No Known Releases
Potential Pathways	Storm Water Runoff Drain
Exposure Potential	On-Site Retention Basin
Remedial Action	None

SWMU #14: Used Oil Storage Tank	
Description	22,000 Gallon Capacity Tank with two compartments. 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

SWMU #15: Septic Tank	
Description	Septic Tank
Operational History	Installed prior to 2008
Status	Active
Waste Characteristics	Septic
Waste Management	Storage
Maintenance Procedures	Periodic cleanout
Release History	No Known Releases
Potential Pathways	Leach field
Exposure Potential	Leach field
Remedial Action	None

SWMU #16: Proposed Flammable Material Storage Unit #1	
Description	Flammable Material Storage Unit
Operational History	N/A; not operational, pending approval
Status	Proposed for Use
Waste Characteristics	Flammable Materials
Waste Management	Storage
Maintenance Procedures	Routine inspections
Release History	N/A; not operational, pending approval
Potential Pathways	Soil below unit
Exposure Potential	Soil below unit
Remedial Action	N/A; not operational, pending approval

SWMU #17: Proposed Flammable Material Storage Unit #2	
Description	Flammable Material Storage Unit
Operational History	N/A; not operational, pending approval
Status	Proposed for Use
Waste Characteristics	Flammable Materials
Waste Management	Storage

Maintenance Procedures	Routine inspections
Release History	N/A; not operational, pending approval
Potential Pathways	Soil below unit
Exposure Potential	Soil below unit
Remedial Action	N/A; not operational, pending approval

SWMU #18: Proposed Flammable Material Storage Unit #3	
Description	Flammable Material Storage Unit
Operational History	N/A; not operational, pending approval
Status	Proposed for Use
Waste Characteristics	Flammable Materials
Waste Management	Storage
Maintenance Procedures	Routine inspections
Release History	N/A; not operational, pending approval
Potential Pathways	Soil below unit
Exposure Potential	Soil below unit
Remedial Action	N/A; not operational, pending approval

SWMU #19: Consolidation of Flammable Solids	
Description	Consolidation in area between the flammable material storage units
Operational History	N/A; not operational, pending approval
Status	Proposed for Use
Waste Characteristics	Flammable Materials
Waste Management	Consolidation Only; No Storage
Maintenance Procedures	Routine inspections
Release History	N/A; not operational, pending approval
Potential Pathways	Soil below area
Exposure Potential	Soil below area
Remedial Action	N/A; not operational, pending approval

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment II.P.1: DEP Form 62-730.900(2)(c)

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

P. Information Regarding Potential Releases from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)

Facility Name Triumvirate Environmental Services, Inc.

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

Facility location Orlando (City) FL (State)

1. Are any of the following (SWMUs or AOCs), existing or closed at your facility?

A 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 this form does not include all types of SWMUs. These are examples of the more common types of units. If you have a different type of SWMU, mark "yes" under "other".

AOCs are indiscernible units 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. Examples of AOCs include areas where loading and unloading of chemicals may have occurred or an area of contamination with no known source.

Do not include hazardous waste units that are currently being permitted 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
Satellite accumulation areas	☐ Yes	☒ No
Less than 90-day storage units	☐ Yes	☒ No
Stormwater retention ponds	☐ Yes	☒ No
Septic tanks	☐ Yes	☒ No
Used oil/oil filter collection units	☐ Yes	☒ No
Aerosol can/drum crushers	☐ Yes	☒ No
On-ground areas, pits, ditches	☐ Yes	☒ No
Other (units not listed above)	☒ Yes	☐ No

2. For each "yes" answer in one (1.) above, on separate sheet(s) of paper:

   a. Describe the wastes that were stored, treated or disposed of in each unit, and whether 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.

   b. Describe each unit, type of unit including construction details, capacity, dimensions (supply any available drawings), and location at the facility on the topographic map provided under 40 CFR 270.14(b)(19). Provide a site plan, if available, and the dates of operation of the unit [40 CFR 270.14(d)(1)]. If the information has previously been submitted formally to the Department, references to the documents and or summary tables may be submitted to meet this requirement.

   c. Include a copy of federal, state and local permits or authorizations for SWMUs that may be permitted under other environmental programs.

3. For each unit described in two (2.) above, and for each hazardous waste unit in your Part B application [40 CFR 270.14(d)(2)], on separate sheet(s) of paper, provide available data 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. If the data has previously been submitted formally to the Department, references to the documents and or summary tables may be submitted to meet this requirement. Provide the following information for each SWMU/AOC:

   a. Date of release
   b. Estimated or known quantity or volume of waste released
   c. Location of the release
   d. Describe the nature of the release (i.e., spill, overflow, ruptured pipe or tank, etc.).

4. Provide, for each unit, all available analytical data that describes the nature and extent of the environmental contamination due to the releases described in three (3.) above, on separate sheet(s) of paper. Focus on the concentrations of hazardous wastes or constituents present in contaminated media (e.g., soil, sediment, surface water and groundwater) [40 CFR 270.14(d)(3)]. If the information has previously been submitted formally to the Department, references to the documents and or summary tables may be submitted to meet this requirement.

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Attachment III: Waste Minimization Program

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd, Orlando, FL 32824

Hazardous Waste Minimization Plan

A. Introduction

Triumvirate Environmental Services, Inc. Hazardous Waste Minimization Program is to be implemented with the goal of reducing the amount of toxicity of waste generated through its operations. Triumvirate Environmental Services, Inc. remains committed to hazardous waste minimization with the understanding that minimization is necessary in order to help decrease present and future threats to human health and the environment.

In addition, Triumvirate Environmental recognizes the existence of potential added benefits of hazardous waste minimization including cost savings opportunities in the form of avoided disposal costs and the creation of safer working and learning conditions for it employees and clients.

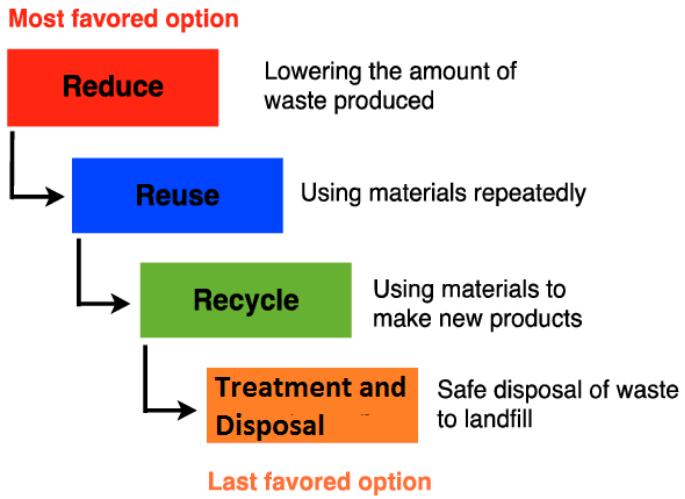
B. Roles and responsibilities

All Triumvirate personnel are responsible for identifying hazardous waste and adhering to the Hazardous Waste Facility Permit (26196-009-HO).

The Environmental, Transportation, Safety and Compliance Specialist is responsible for assisting the facility with regulatory compliance, and safety and training of personnel at the facility.

C. Waste Minimization Plan

All Triumvirate personnel should make waste minimization an active and ongoing component of their operations. Waste minimization is a waste management approach that focuses on reducing the amount and toxicity of waste that is generated. The waste management hierarchy (below) illustrates hazardous waste management methods in order of preference when waste minimization is a priority.



1. Reduce

Reduce – Changing practices and processes in order to reduce or eliminate the generation of hazardous waste – is the most preferable option in the waste management hierarchy. Source reduction can be accomplished through:

- Effective purchasing
- Chemical substitution
- Good housekeeping
- Conducting experiments and sampling at the microscale.

2. Reuse and Recycling

When source reduction is not possible, the next best way to minimize the production of hazardous wastes is through reuse and recycling. Reuse and recycling can be using a waste material for another purpose.

3. Treatment and Disposal

Some wastes can be treated to render them non-hazardous or less hazardous. When possible, Triumvirate will neutralize or detoxify a chemical prior to disposal.

In the event that hazardous waste generation is unavoidable Triumvirate will comply with strict waste disposal procedures in order to prevent injury, minimize environmental health hazards and meet regulatory requirements.

Supporting Attachments

Land Use/Flood Maps

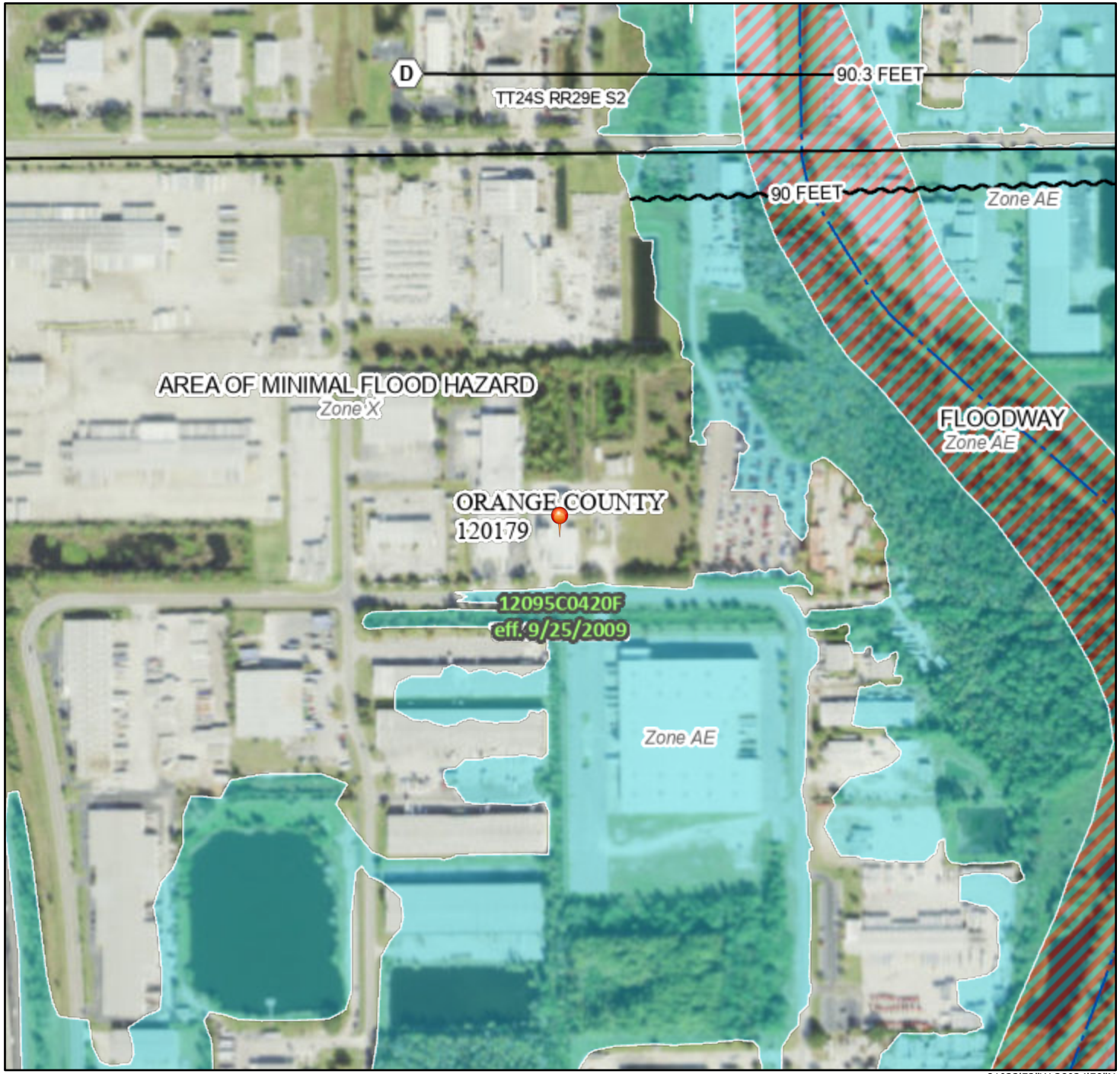
- Figure II.A.3: FEMA Flood Plain Map
- Figure I.B.4: FIRM Map 1” = 1000’ (from 2018 Application for Reference)
- Figure I.B.5: FIRM Map 1” = 1000’ (Detailed) (from 2018 Application for Reference)
- Figure II.A.1.a(11): Land Use within 1,000 ft of Site and Topographic Map within 1,000 ft
- Figure II.A.1: NPDES 0.25 Mile Radius Map
    - Figure II.A.1a: NPDES Stormwater Map (Permit FLR05H221-003)
    - Figure II.A.1b: NPDES 0.25 Mile Radius Map (from 2018 Application for Reference)

National Flood Hazard Layer FIRMette

FEMA

Figure II.A.3

81°23'30"W 28°25'21"N



81°22'52"W 28°24'50"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/10/2023 at 2:55 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

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.

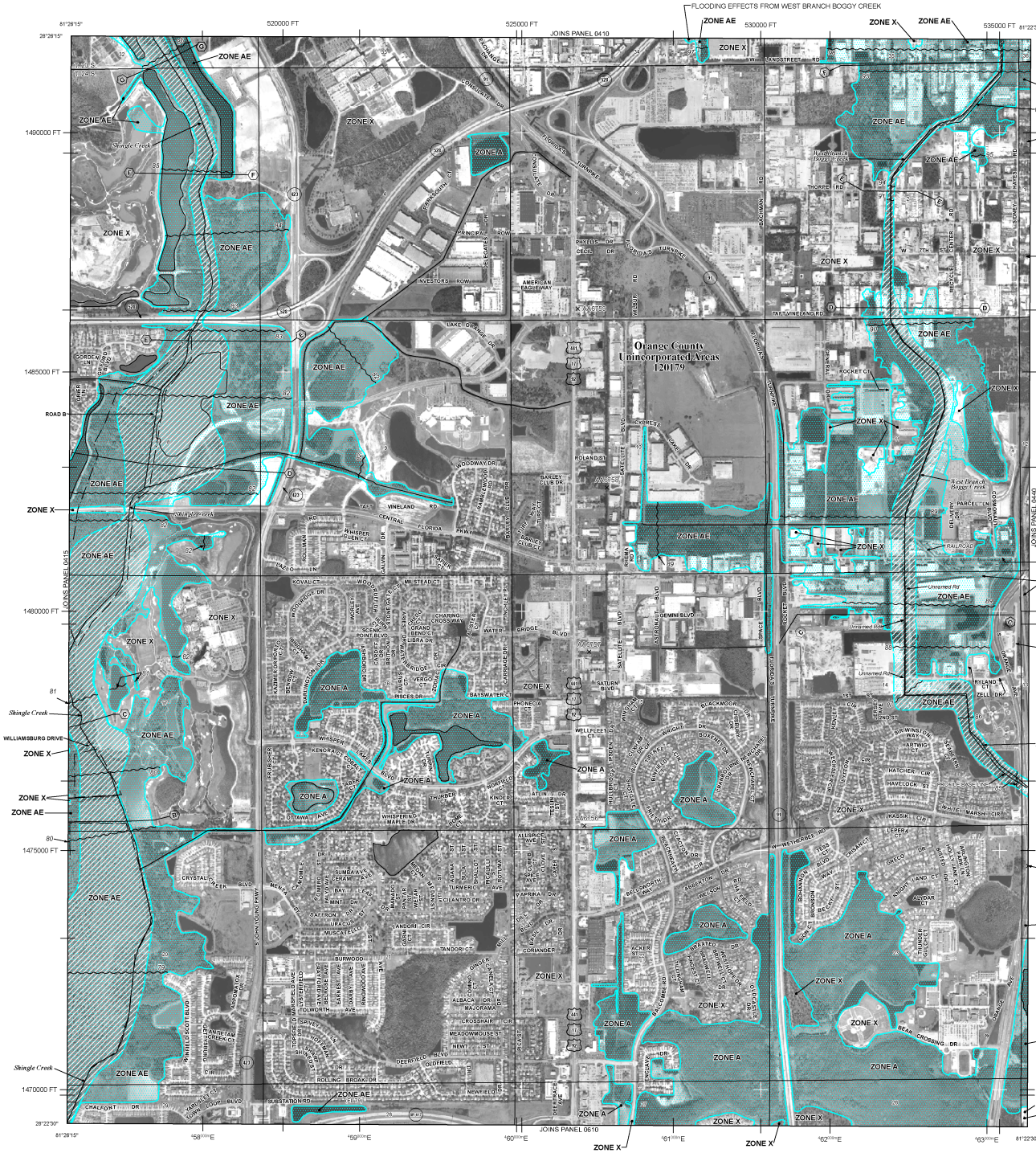
Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a *Flood Insurance Study* report, and/or digital versions of this map. The FEMA Map Service Center may also 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	-0.97	-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	0.02
Shingle Creek	-0.88	-0.95	-0.91	0.04
St. Johns River	-1.08	-1.33	-1.19	0.14
Wekiva River	-0.88	-1.01	-0.94	0.07

Figure I.B.4: FIRM Map from 2018 Permit Application (for Reference)



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** — Areas 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 undermined, 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*
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- A23 — A23 — Cross section line
- B23 — B23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 4275000mE — 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
300 0 300 600 METERS

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:

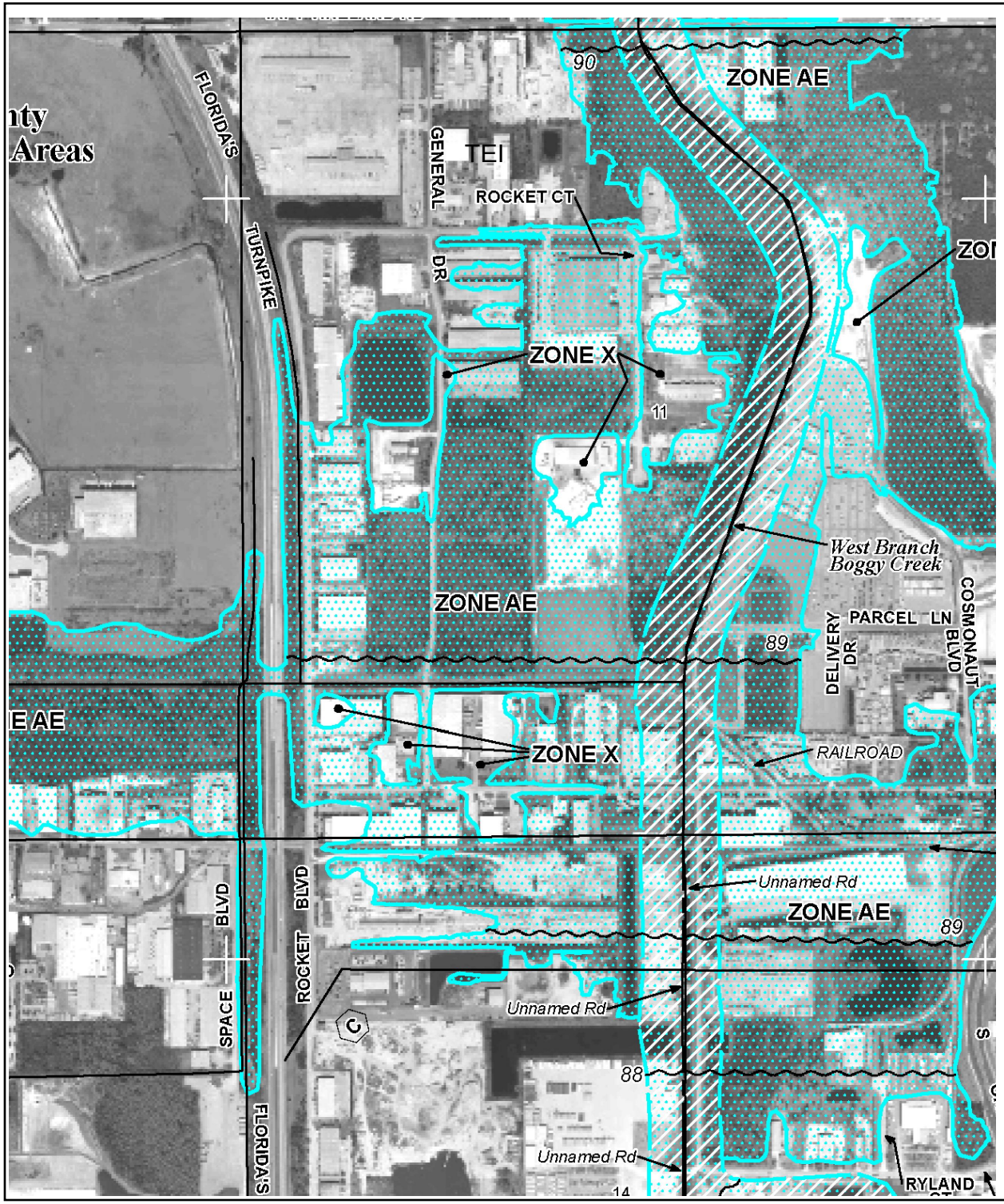
COMMUNITY	NUMBER	PANEL	SUFFIX
ORANGE COUNTY	120179	0420	F

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



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 : FIRM Map detail from 2018 permit application (for reference)

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

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/

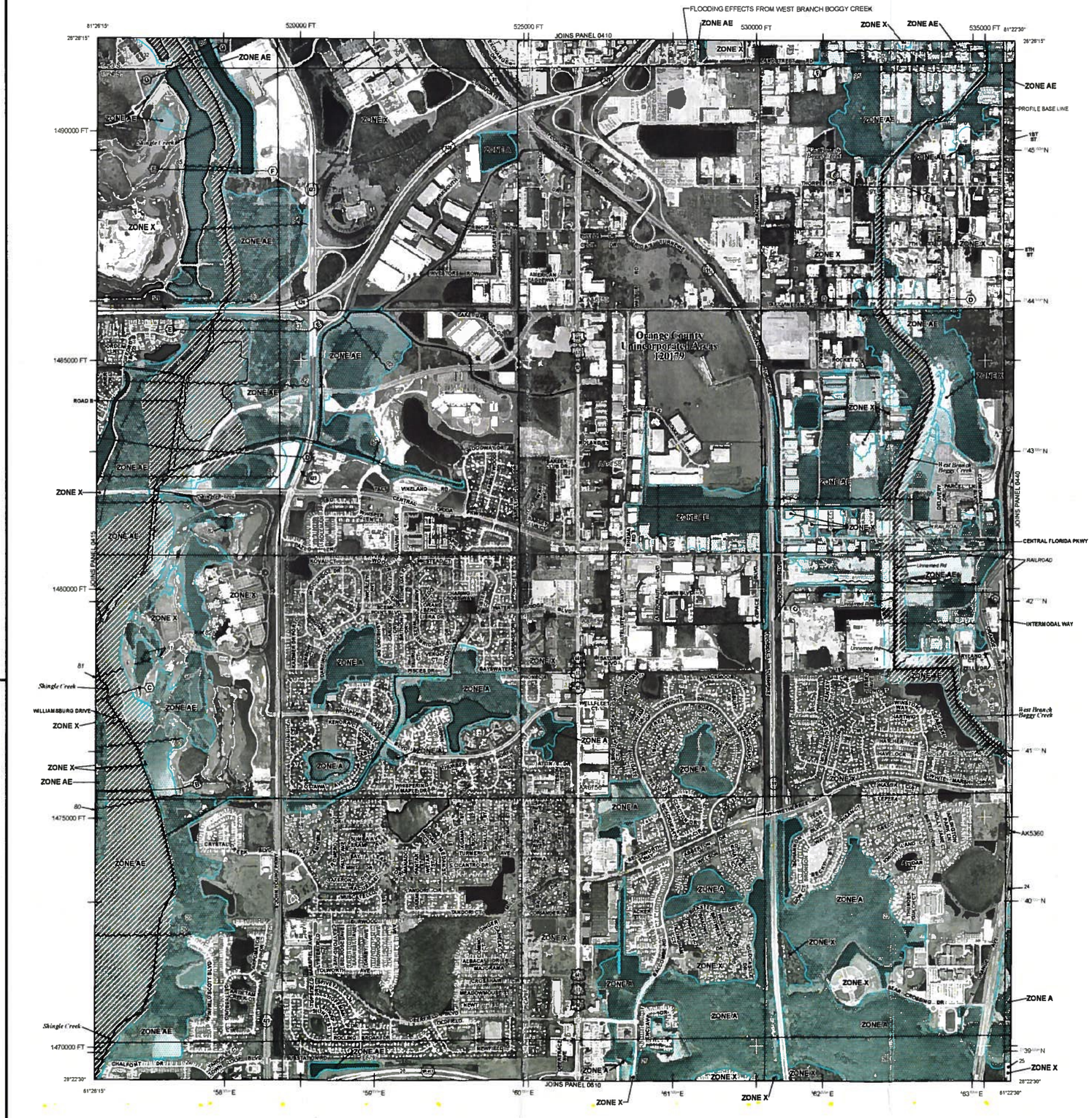
NGVD29 to NAVD88 Vertical Datum Conversion Table (feet)

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 97	-0 91	0 05
Lake Hart	-0 97	-1 07	-1 02	0 05
Little Econlockhatchee River	-0 93	-1 07	-1 01	0 09
Little Wekiva River	-0 91	-1 02	-0 95	0 07
Ready Creek	-0 86	-0 89	-0 88	0 02
Shingle Creek	-0 86	-0 95	-0 91	0 04
St Johns River	-1 06	-1 33	-1 19	0 14
Wekiva River	-0 88	-1 01	-0 94	0 07

Land Use/Flood Maps

I.B.5

Figure I.B.5: FIRM Map from 2018 permit application (for reference)



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 equalled 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, AR/, 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* / Base Flood Elevation value where uniform within zone; 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
- 4275 000mE — 1,000-meter Universal Transverse Mercator grid ticks, zone 17
- 8000000 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 8, 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'

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

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

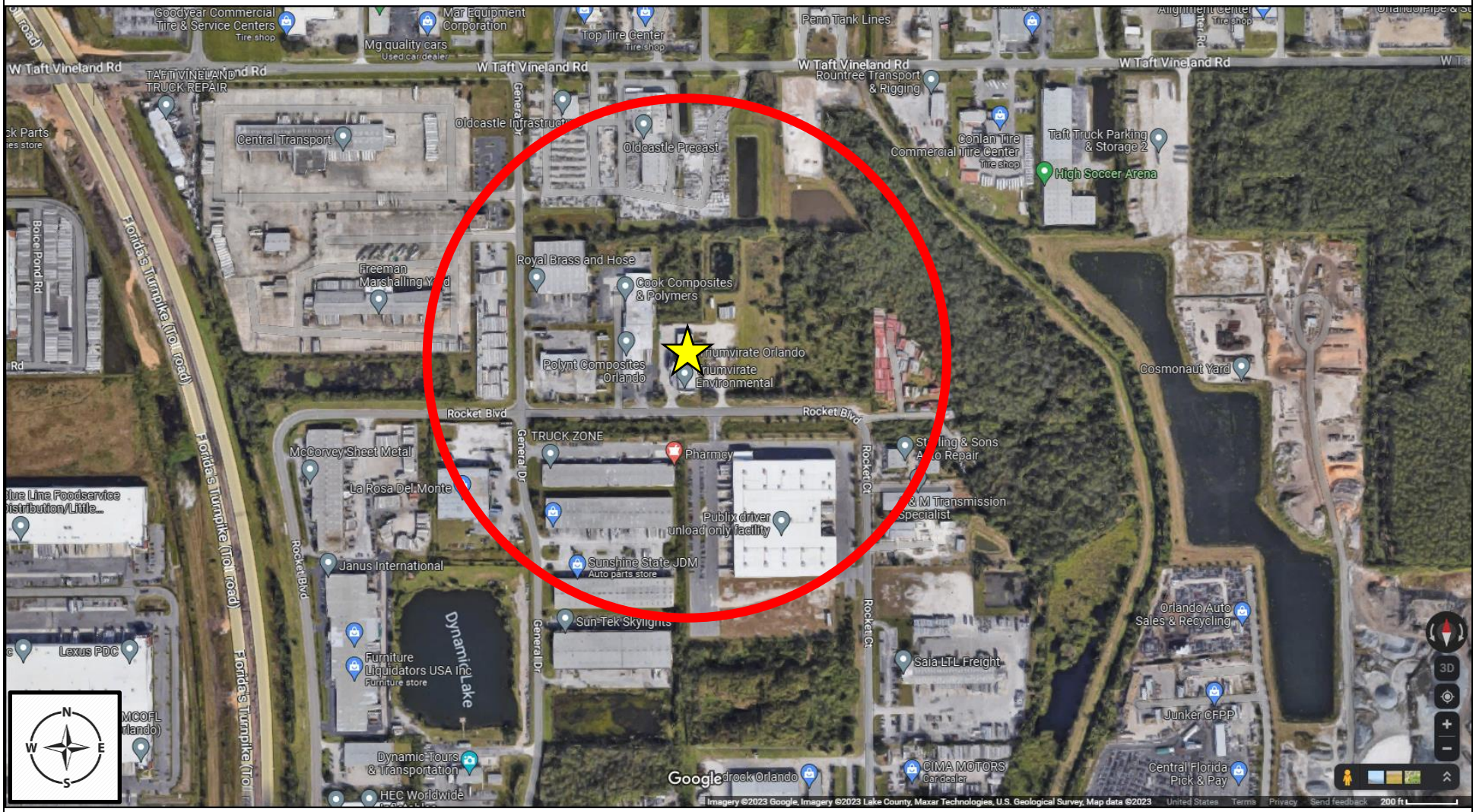
Figure II.A.1.a(11):
Land Use Within 1,000 ft of Site

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

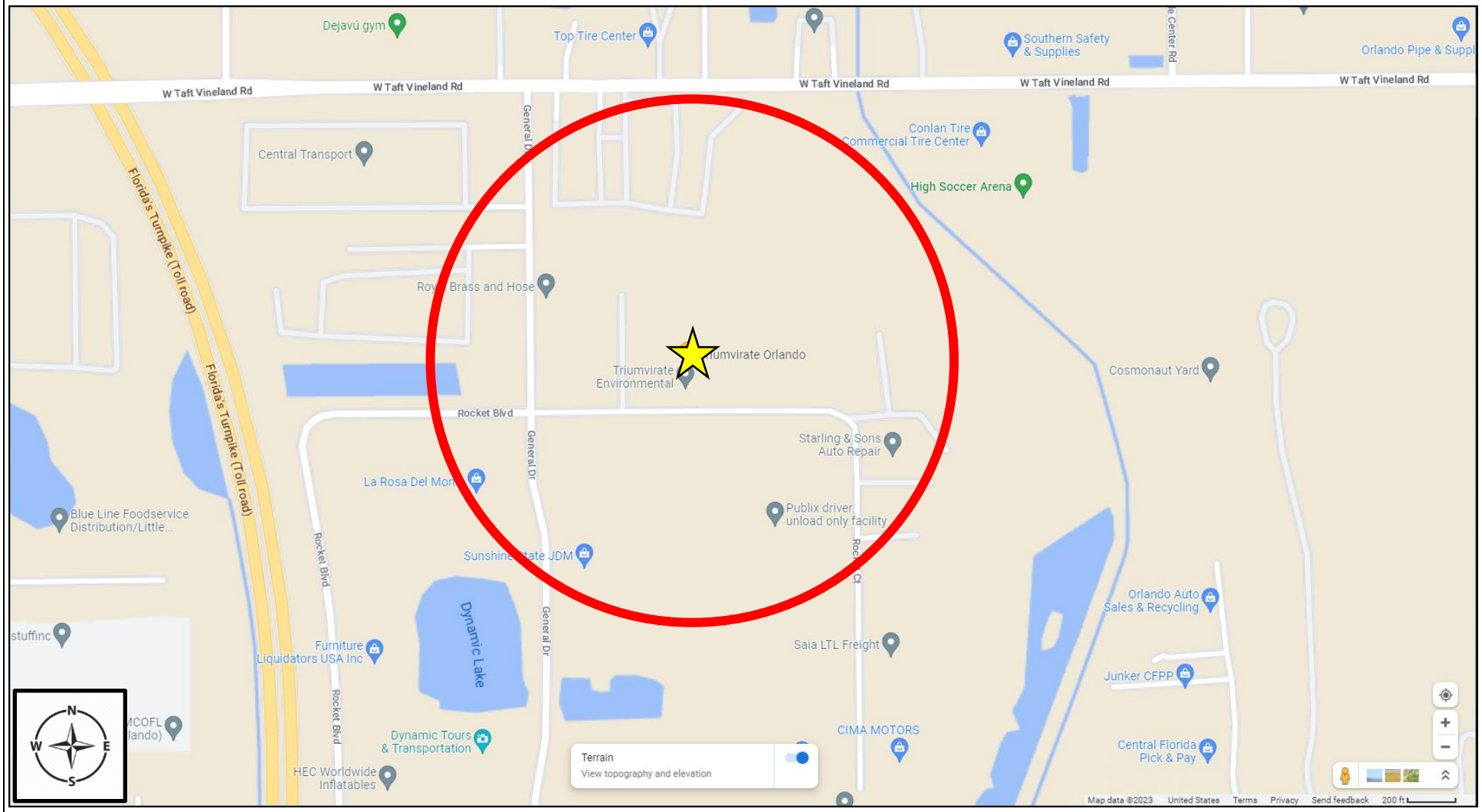
Application Date: May 1, 2023

Figure II.A.1.a(11): Land Use Within 1,000 ft of Site (1" to 200 ft Scale)



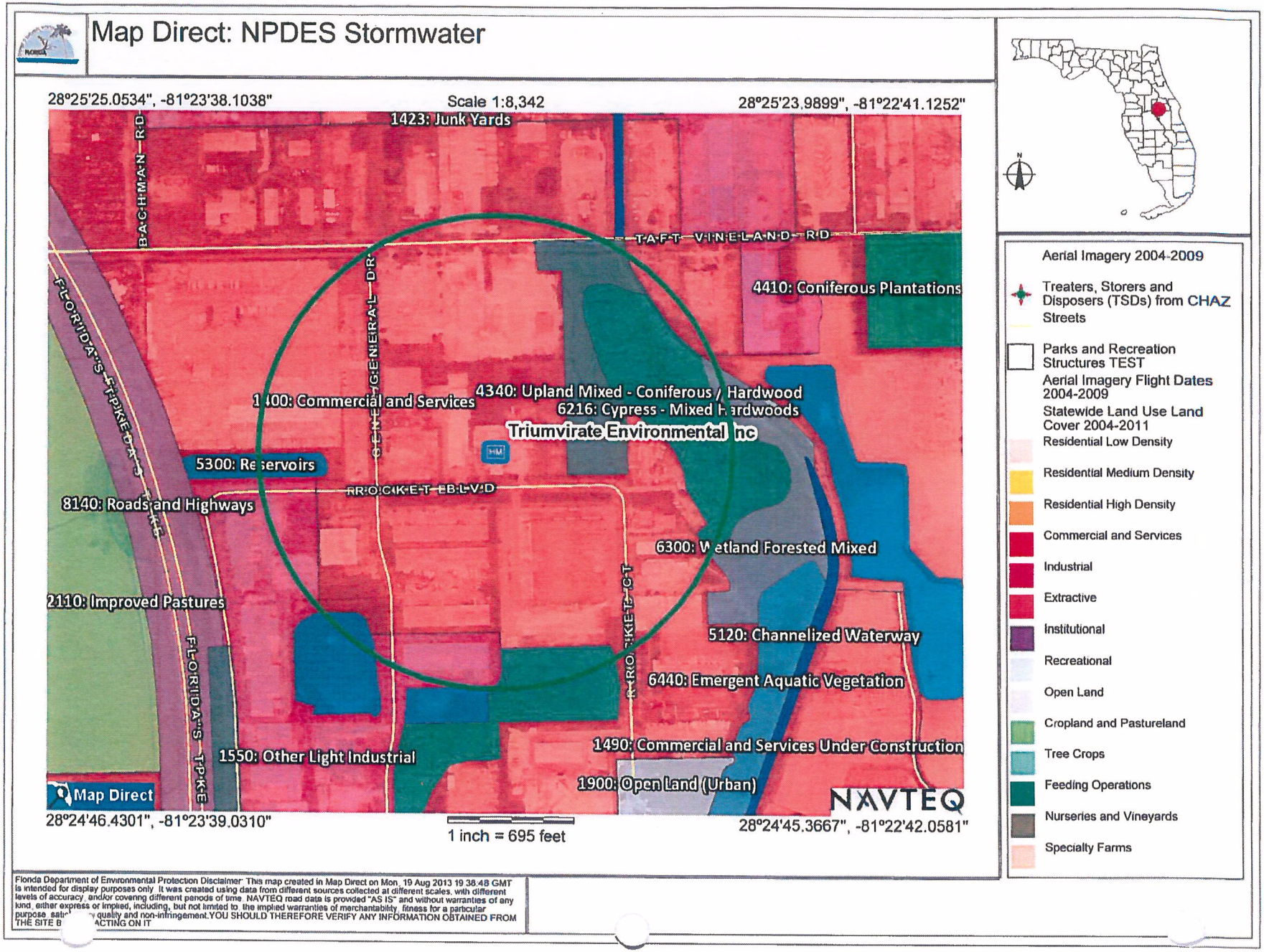
Site location denoted by yellow star. Red circle denotes a 1,000 foot radius around the site. Image shown is an excerpt from Google Maps dated 2023. Business and land use is noted on the map.

Figure II.A.1.a(11): Topographic Map Within 1000 ft of Site (1” to 200 ft Scale)



Site location denoted by yellow star. Red circle denotes a 1,000 foot radius around the site. Image shown is an excerpt from Google Maps Topographic Terrain Map dated 2023. Area is flat; no elevation changes are shown within 1,000 ft.

Figure II A 1.a(11) Land Use within 1,000' of 10100 Rocket Blvd, Orlando Florida
(2018 Application Version for Reference)
Image Source: http://ca.dep.state.fl.us/mapdirect/



F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

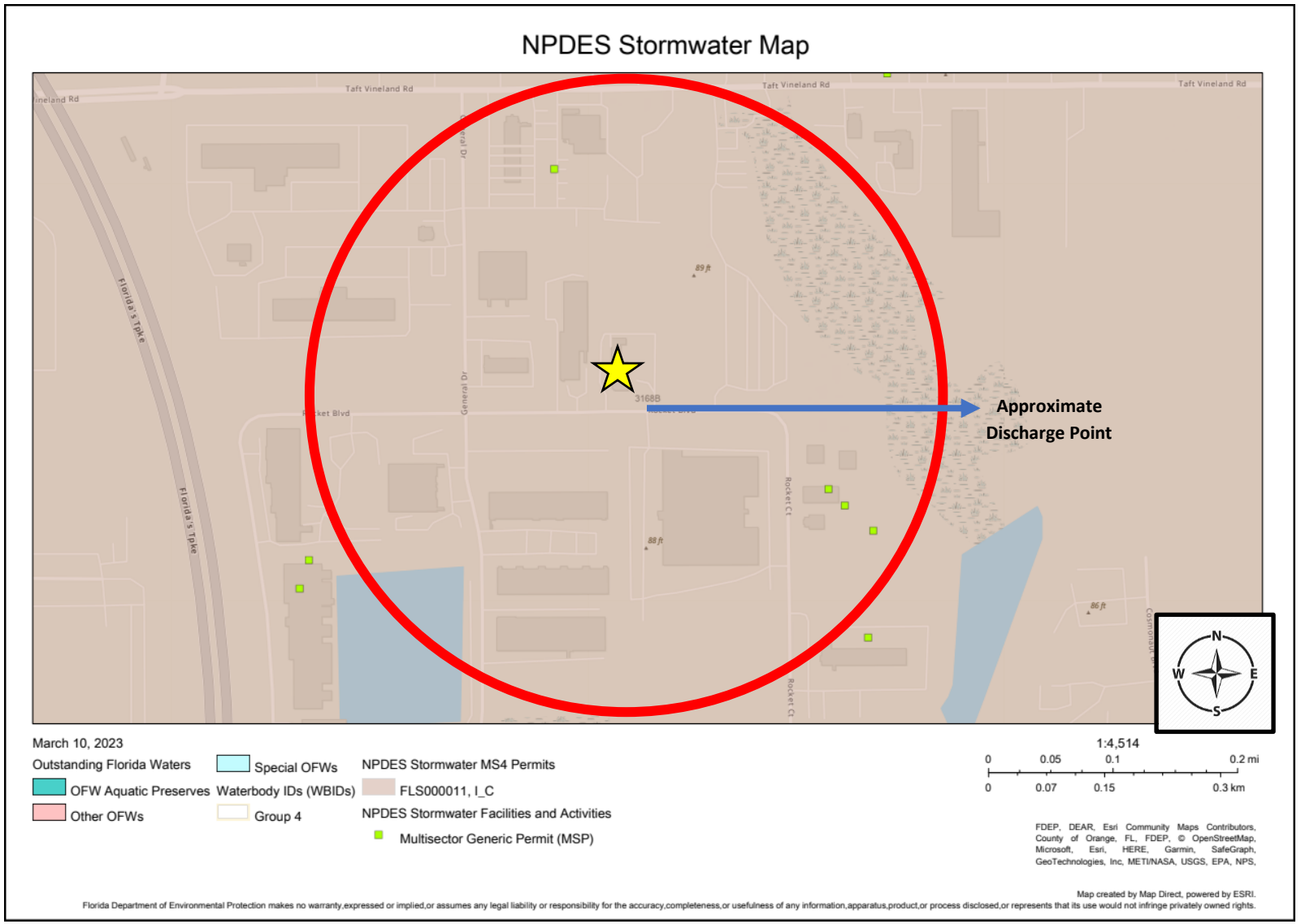
Figure II.A.I:
NPDES 0.25 Mile Radius Map

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

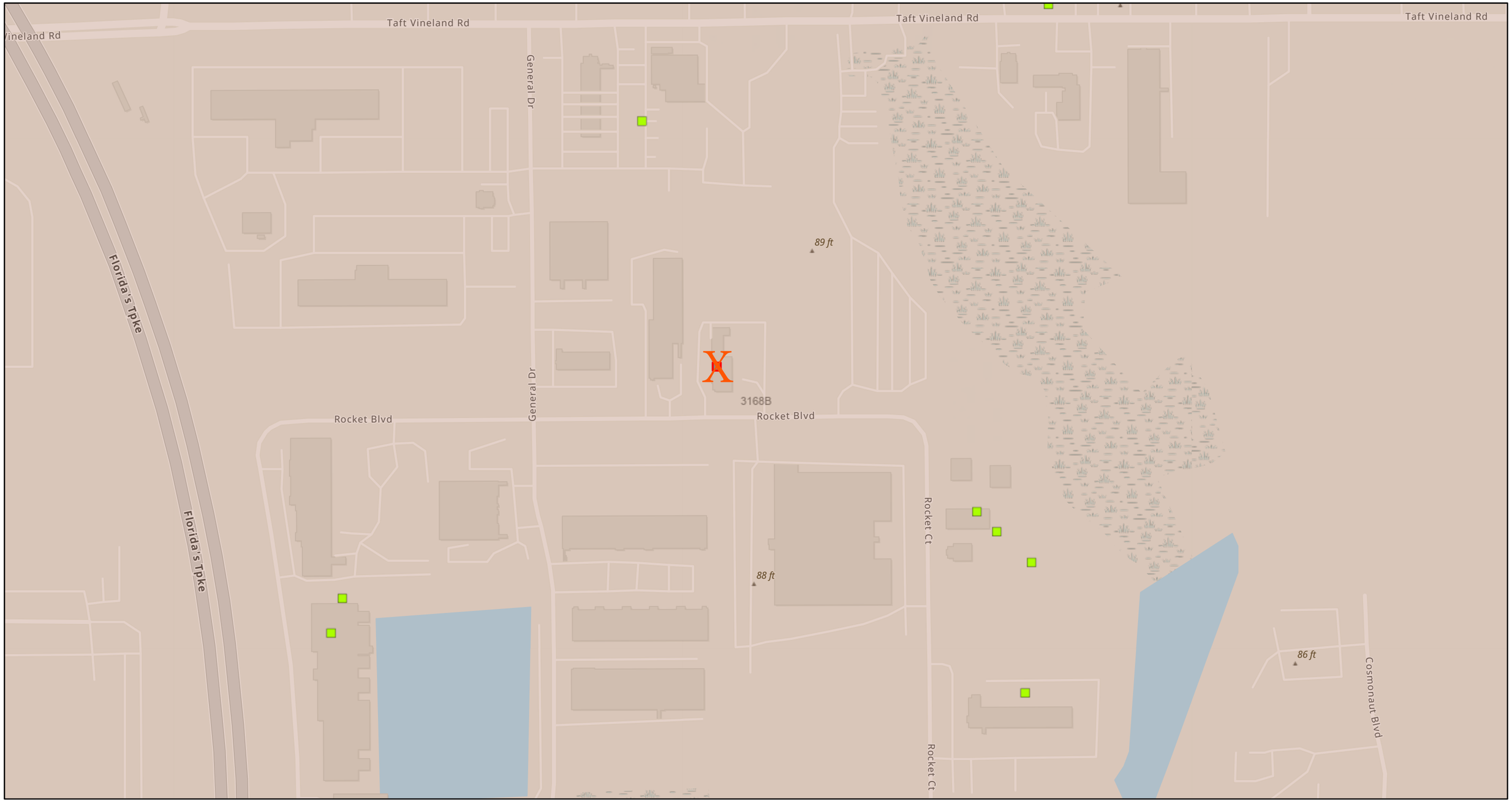
Application Date: May 1, 2023

Figure II.A.I: NPDES 0.25 Mile Radius Map



The map above was obtained from the Florida DEP website. Triumvirate operates under NPDES stormwater permit #FLR05H221-003 and has an associated Stormwater Pollution Prevention Plan (SWPPP). **Figure II.A.1a** shows a higher detail view of the map shown above. **Figure II.A.1b** shows the 2018 version of a similar map that was submitted with the 2018 permit application; it is shown for reference.

Figure II.A.1a: NPDES Stormwater Map (Permit FLR05H221-003)



March 10, 2023

Outstanding Florida Waters
- OFW Aquatic Preserves
- Other OFWs
- Special OFWs

Waterbody IDs (WBIDs)
- Group 4

NPDES Stormwater MS4 Permits
- FLS000011, I_C

NPDES Stormwater Facilities and Activities
- Multisector Generic Permit (MSP)

X = Triumvirate Site Location (NPDES Permit FLR05H221-003)

1:4,514

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

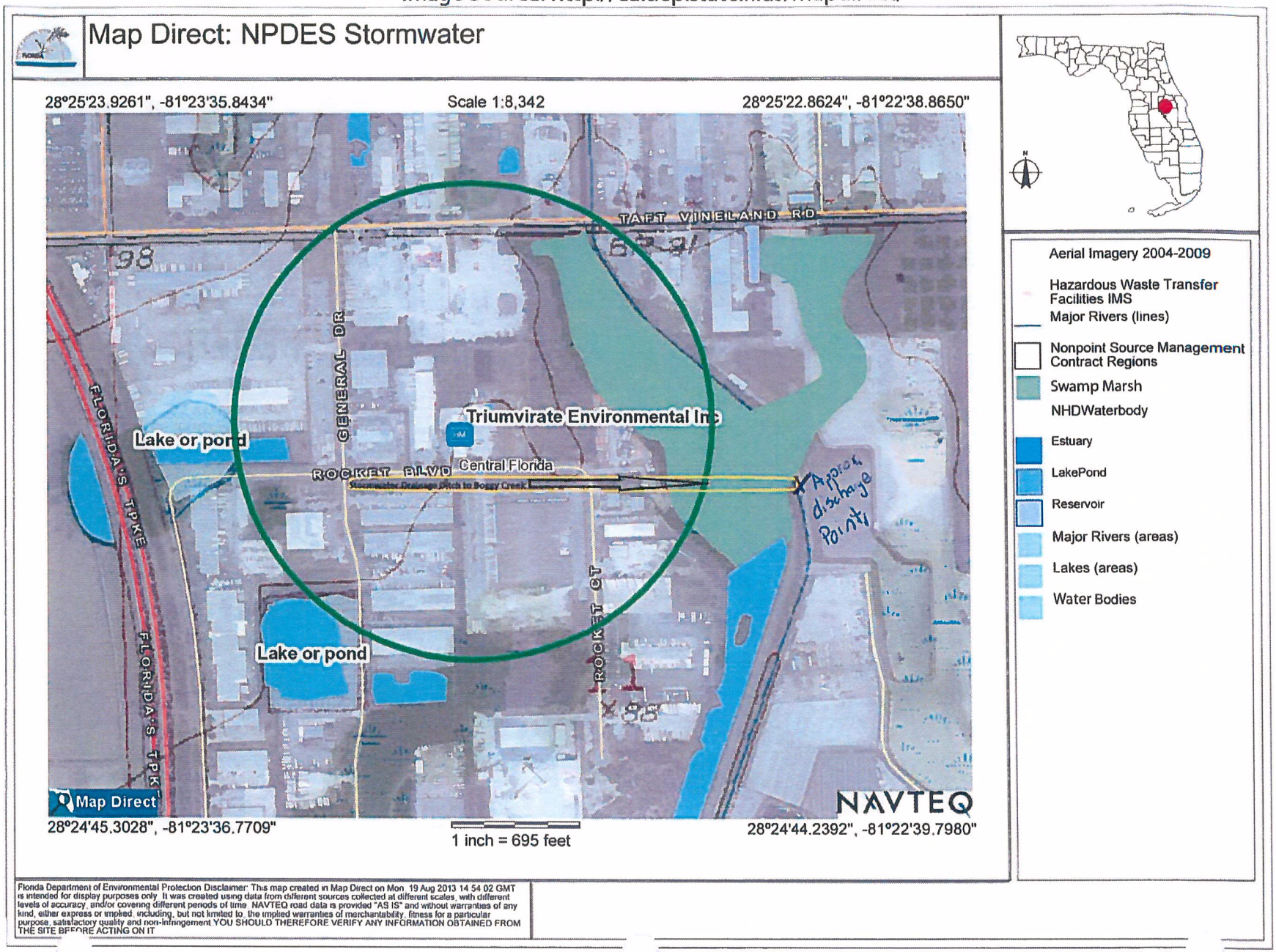
FDEP, DEAR, Esri Community Maps Contributors, County of Orange, FL, FDEP, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS,

Map created by Map Direct, powered by ESRI.

Identification of Surface Waste Features within 1/4 miles of 10100 Rocket Blvd, Orlando Florida

Figure II A 1b: NPDES 0.25 Mile Radius (2018 Application Version for Reference)

Image Source: http://ca.dep.state.fl.us/mapdirect/



Supporting Attachments

Facility Maps

- Figure II.A.2: Boundary and Topographic Survey
- Figure II.A.5: Existing Facility Site Plan
- Figure II.A.5-1: Modified Facility Site Plan
- Figure I.B.3: Facility Topographic with 1-mile radius
- Figure I.D.1: Existing Container Storage Layout
- Figure I.D.1.a: Container Storage Unit (informal purposes, not to scale)
- Figure I.D.1-1: Flammable Containers Storage Layout
- Figure II.K.1: Closure Sampling Location Map with SWMUs
- Figure II.A.9: Evacuation Routes
- Figure II.A.3-1: Wind Rose

F.A.C Chapter 62-730 Permit Renewal Application

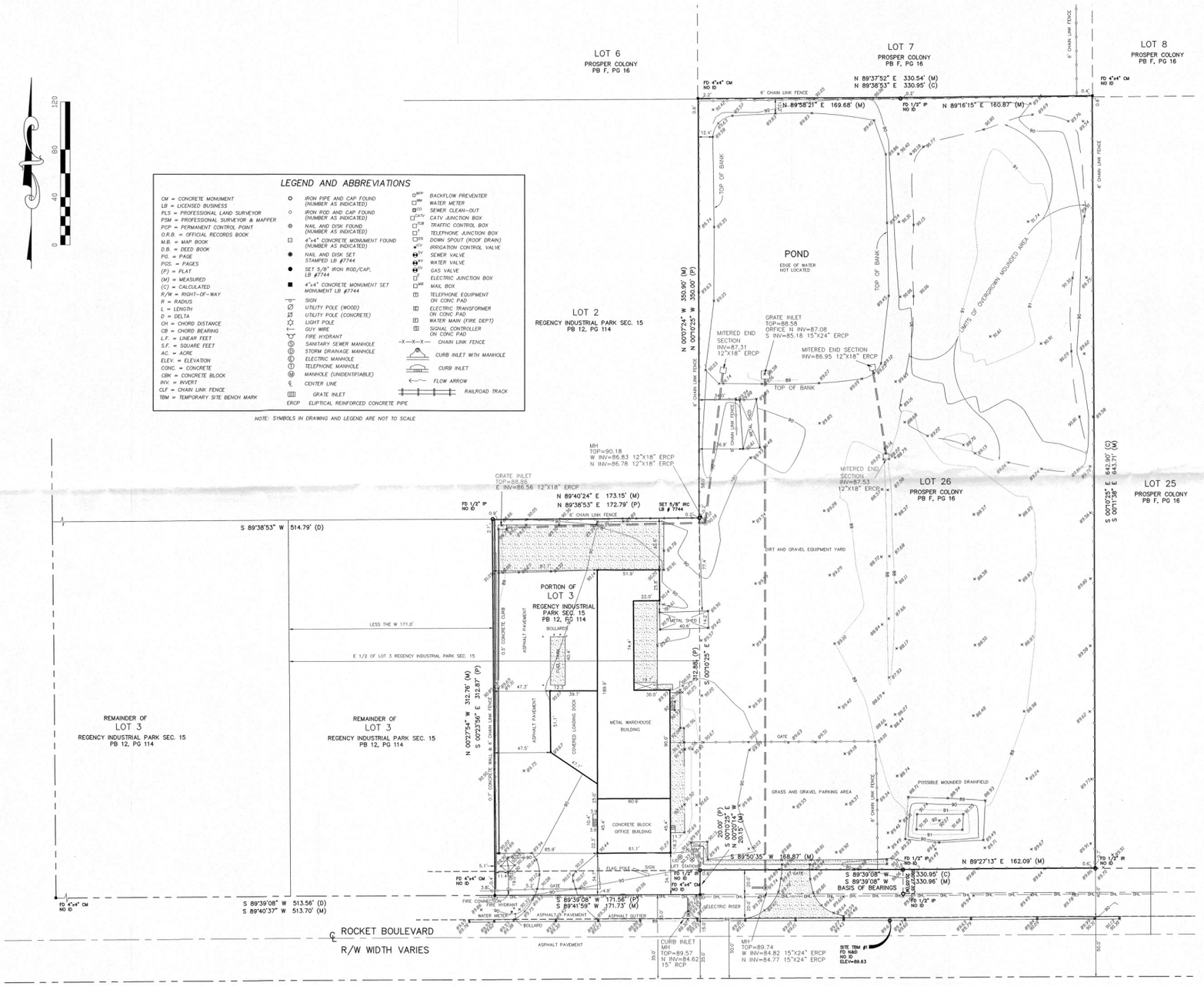
Current FDEP Permit No. 26916-009-HO

Figure II.A.2:
Boundary and Topographic Map

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023



LEGEND AND ABBREVIATIONS

CM = CONCRETE MONUMENT	IRON PIPE AND CAP FOUND (NUMBER AS INDICATED)	BACKFLOW PREVENTER
LB = LICENSED BUSINESS	IRON ROD AND CAP FOUND (NUMBER AS INDICATED)	WATER METER
PLS = PROFESSIONAL LAND SURVEYOR	NAIL AND DISK FOUND (NUMBER AS INDICATED)	SEWER CLEAN-OUT
PSM = PROFESSIONAL SURVEYOR & MAPPER	4"x4" CONCRETE MONUMENT FOUND (NUMBER AS INDICATED)	CATV JUNCTION BOX
PCP = PERMANENT CONTROL POINT	NAIL AND DISK SET STAMPED LB #7744	TRAFFIC CONTROL BOX
O.R.B. = OFFICIAL RECORDS BOOK	SET 5/8" IRON ROD/CAP, LB #7744	TELEPHONE JUNCTION BOX
M.B. = MAP BOOK	4"x4" CONCRETE MONUMENT SET MONUMENT LB #7744	DOWN SPOUT (ROOF DRAIN)
D.B. = DEED BOOK	SIGN	IRRIGATION CONTROL VALVE
PG. = PAGE	UTILITY POLE (WOOD)	SEWER VALVE
PGS. = PAGES	UTILITY POLE (CONCRETE)	WATER VALVE
(P) = PLAT	LIGHT POLE	GAS VALVE
(M) = MEASURED	GUY WIRE	ELECTRIC JUNCTION BOX
(C) = CALCULATED	FIRE HYDRANT	MAIL BOX
R/W = RIGHT-OF-WAY	SANITARY SEWER MANHOLE	TELEPHONE EQUIPMENT ON CONC PAD
R = RADIUS	STORM DRAINAGE MANHOLE	ELECTRIC TRANSFORMER ON CONC PAD
L = LENGTH	ELECTRIC MANHOLE	WATER MAIN (FIRE DEPT)
D = DELTA	TELEPHONE MANHOLE	SIGNAL CONTROLLER ON CONC PAD
CH = CHORD DISTANCE	MANHOLE (UNIDENTIFIABLE)	CHAIN LINK FENCE
CB = CHORD BEARING	CENTER LINE	CURB INLET WITH MANHOLE
L.F. = LINEAR FEET	GRATE INLET	CURB INLET
S.F. = SQUARE FEET	ELIPTICAL REINFORCED CONCRETE PIPE	FLOW ARROW
AC. = ACRE		RAILROAD TRACK
ELEV. = ELEVATION		
CONC. = CONCRETE		
CBK = CONCRETE BLOCK		
INV. = INVERT		
CLF = CHAIN LINK FENCE		
TBM = TEMPORARY SITE BENCH MARK		

NOTE: SYMBOLS IN DRAWING AND LEGEND ARE NOT TO SCALE

Figure II.A.2

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 ½" 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
562 W. Springtree Way, Lake Mary, FL 32746
PH: (407) 484-0103 Fax: (407) 302-6776
LB No. 7744

FIELD BY: DLW	DRAWN BY: RN	SCALE: 1"=40'	DATE: 6/14/2013
			ORDER NO.: NW13-197
			SHEET 1 OF 1

NO.	DATE	REVISIONS	BY

PREPARED FOR:

TRIUMVIRATE ENVIRONMENTAL
BOUNDARY AND TOPOGRAPHIC SURVEY
10100 ROCKET BOULEVARD, ORLAND, FLORIDA

0 55 ft

SCALE

N

LEGEND:

- Danger Authorized Personnel Only
- Emergency Equipment Cabinet
- All Visitors Must Check In
- Fire Extinguisher, 5 lbs
- Fire Extinguisher, 20 lbs
- Fire Extinguisher, 150 lbs
- Spill Control Station
- No Smoking
- Emergency Eye Wash
- Safety Shower
- Stretcher
- Fire Alarm
- Stop
- Fire Hydrant
- Fire Dept Connection
- Traffic Flow

TRIUMVIRATE ENVIRONMENTAL SERVICES, INC.
10100 Rocket Blvd, Orlando, FL 32824

Existing Facility Site Plan

PROJECT NO.: 1008

DATE: Mar 24, 2023

FIGURE II.A.5

M&D ENVIRONMENTAL SERVICES, LLC.
5896 Azalea Street
Port Orange, FL 32127
email - vsanagustin@mdenv.com
tel. 813-842-5520

0 55 ft

SCALE

N

LEGEND:

- Danger Authorized Personnel Only Sign
- Emergency Equipment Cabinet
- All Visitors Must Check In Sign
- Fire Extinguisher, 5 lbs
- Fire Extinguisher, 20 lbs
- Fire Extinguisher, 150 lbs
- Spill Control Station
- No Smoking Sign
- Emergency Eye Wash
- Safety Shower
- Stretcher
- Fire Alarm
- Stop
- Fire Hydrant
- Fire Dept Connection
- Traffic Flow

TRIUMVIRATE ENVIRONMENTAL SERVICES, INC.
10100 Rocket Blvd, Orlando, FL 32824

Modified Facility Site Plan

PROJECT NO.: 1008

DATE: Mar 24, 2023

FIGURE II.A.5-1

M&D ENVIRONMENTAL SERVICES, LLC.
5896 Azalea Street
Port Orange, FL 32127
email - vsanagustin@mdenv.com
tel. 813-842-5520

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

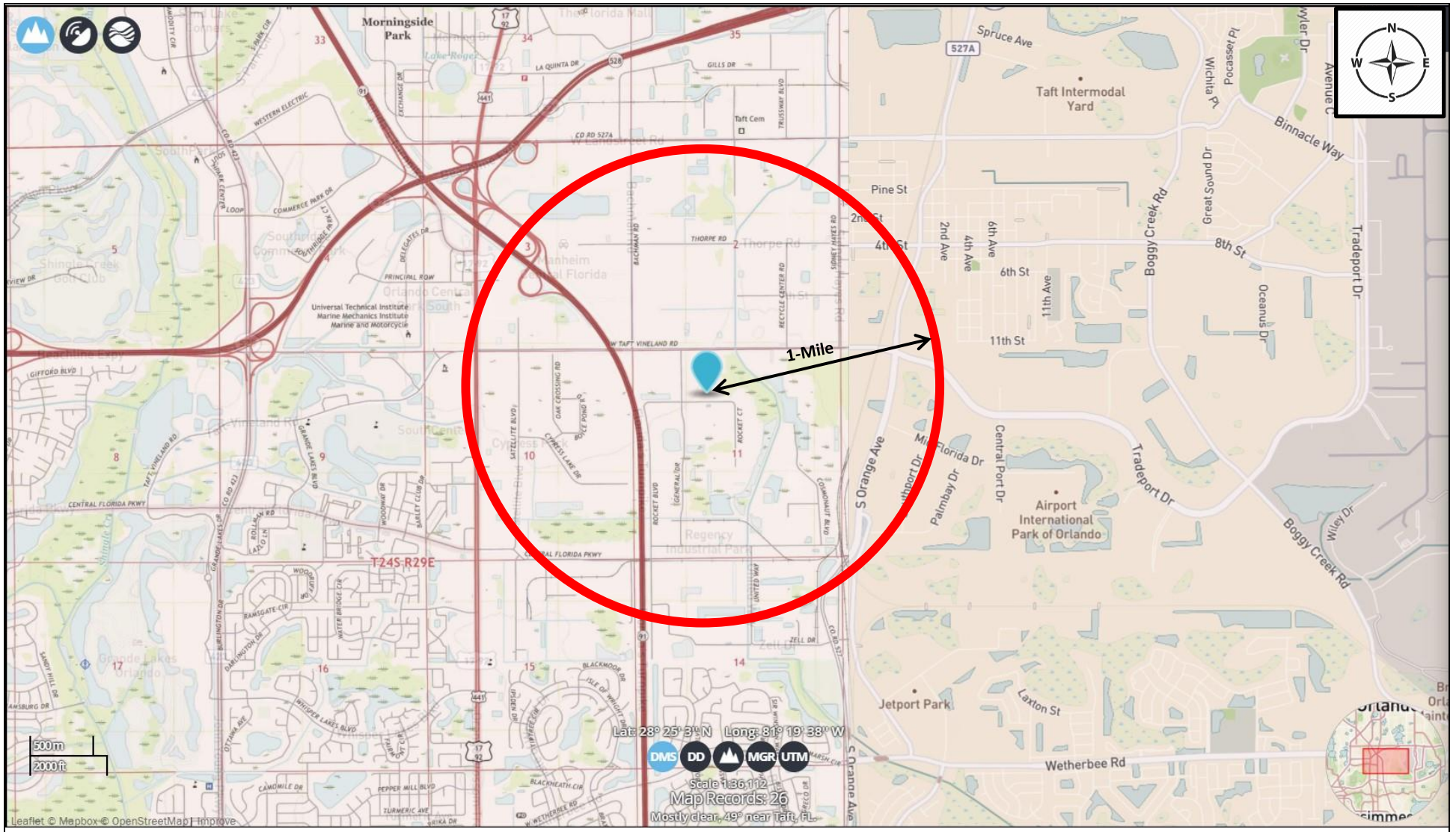
Figure I.B.3:
Topographic Map with 1-Mile Radius

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

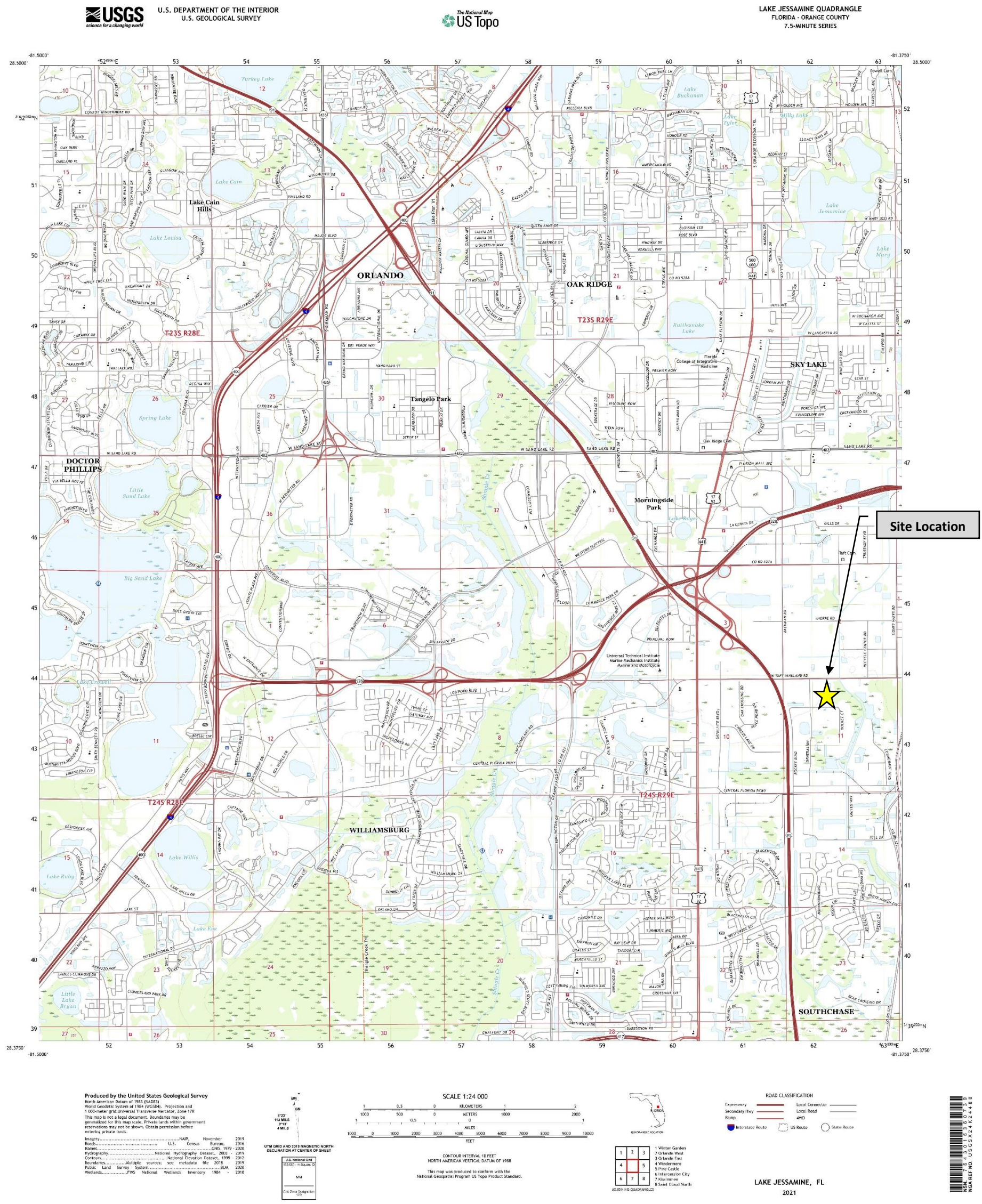
Application Date: May 1, 2023

Figure I.B.3: Topographic Map with 1-Mile Radius

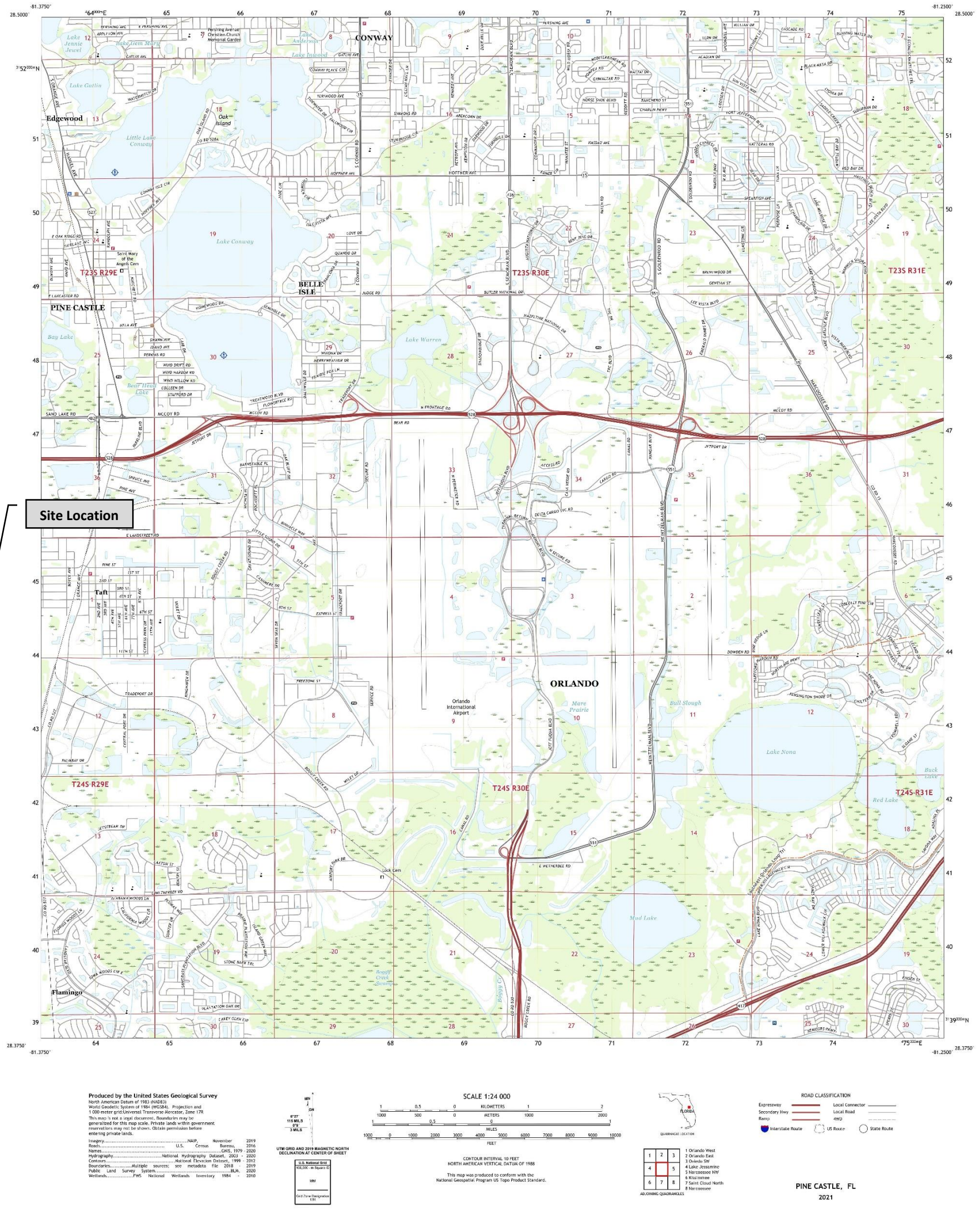


Site location denoted by blue pin. Image shown is an excerpt from the combined USGS Lake Jessamine Quadrangle and USGS Pine Castle Quadrangle maps dated 2021 from https://ngmdb.usgs.gov/topoview/viewer/#15/28.4157/-81.3856. The full USGS map for each quadrangle is provided below.

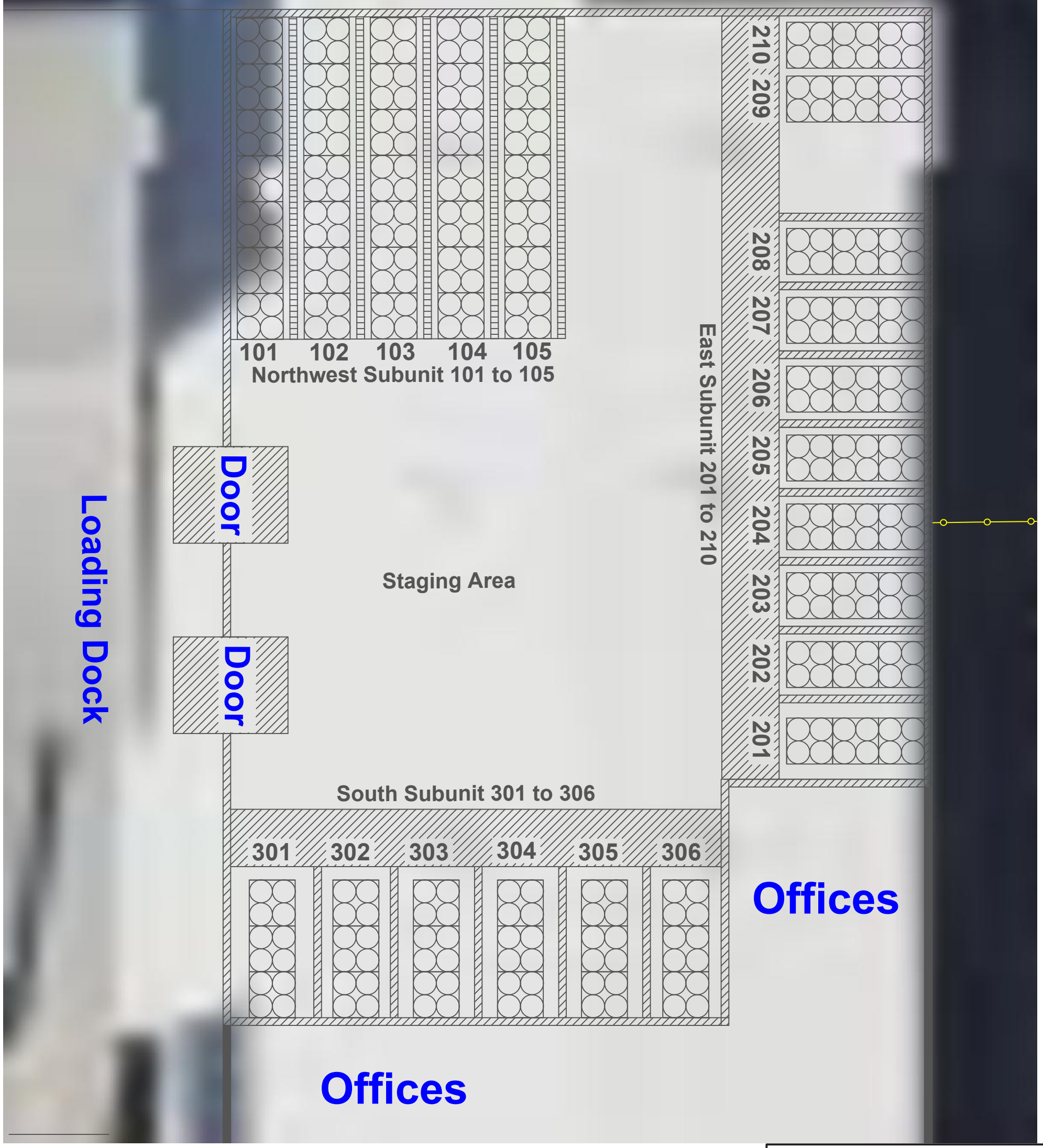
USGS Lake Jessamine Quadrangle (2021)



USGS Pine Castle Quadrangle (2021)



Waste Consolidation & Stabilization



0 SCALE 9 ft

N

LEGEND:

- Concrete Curbing
- Typical 4 - 55 gal drums on a pallet
- Painted Line on Floor

TRIUMVIRATE ENVIRONMENTAL SERVICES, INC.
10100 Rocket Blvd, Orlando, FL 32824

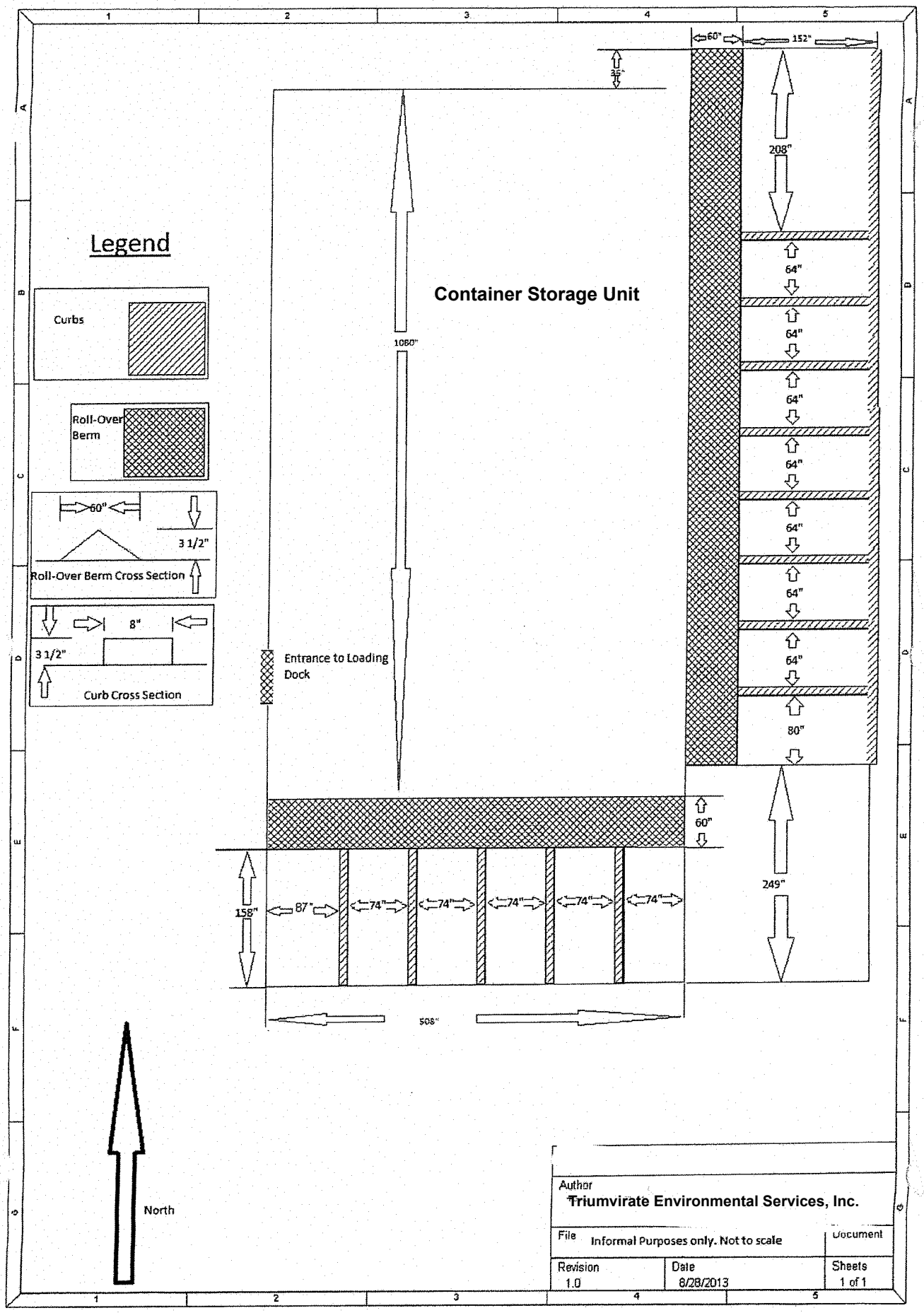
Existing Container Storage Layout

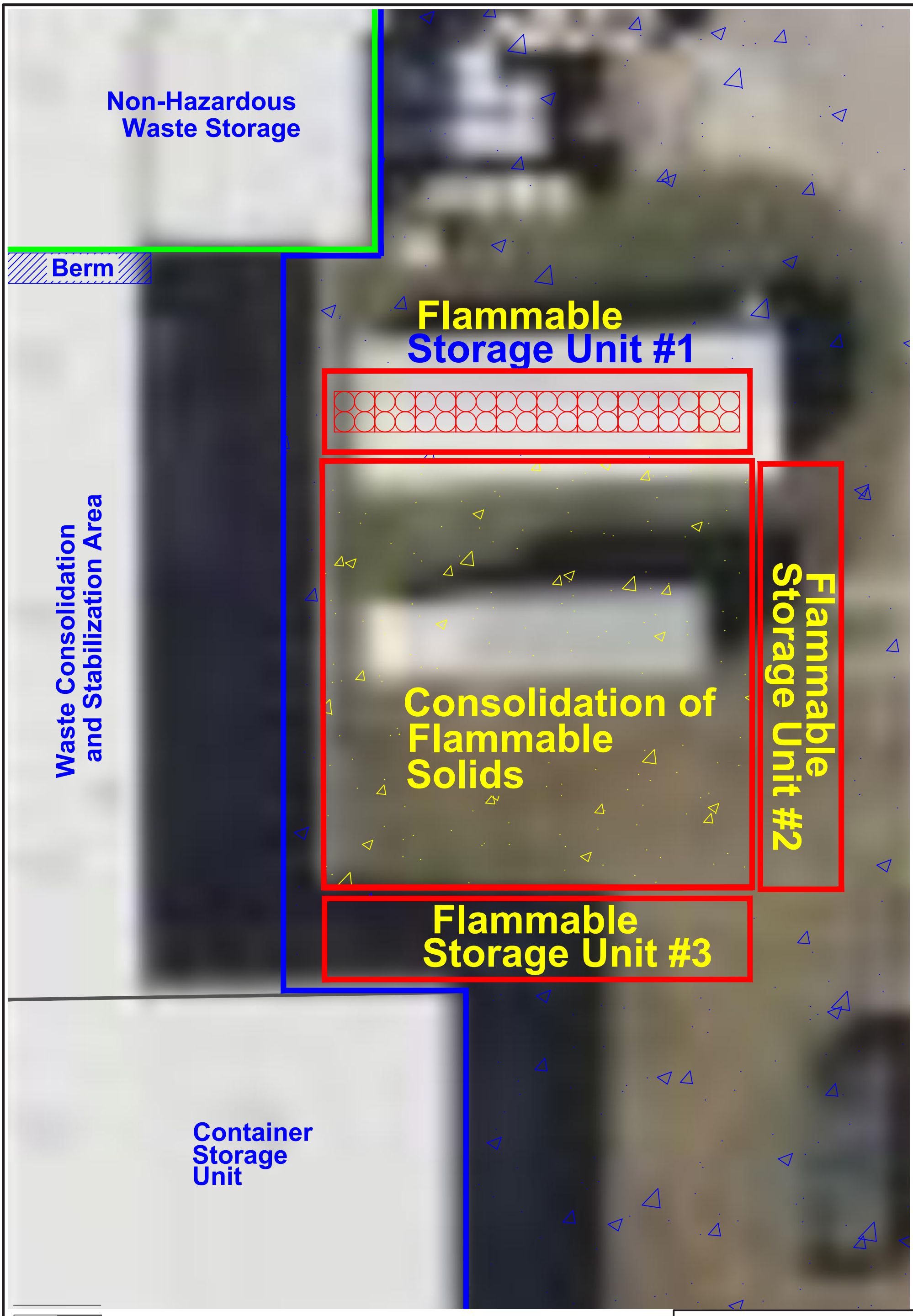
PROJECT NO.: 1008

DATE: Mar 24, 2023

FIGURE I.D.1.

M&D ENVIRONMENTAL SERVICES, LLC.
5896 Azalea Street
Port Orange, FL 32127
email - vsanagustin@mdenv.com
tel. 813-842-5520


Legend
Curbs
Roll-Over Berm
60"
3 1/2"
Roll-Over Berm Cross Section
8"
3 1/2"
Curb Cross Section
Container Storage Unit
1080"
Entrance to Loading Dock
60"
152"
35"
208"
64"
64"
64"
64"
64"
64"
64"
80"
60"
249"
158"
87"
74"
74"
74"
74"
74"
508"
North
Author
Triumvirate Environmental Services, Inc.
File
Informal Purposes only. Not to scale
Document
Revision
1.0
Date
8/28/2013
Sheets
1 of 1



0 9 ft

SCALE

N

NOTES / LEGEND:

- Typical 4 - 55 gal drums on a pallet.

1. Max flammable drum storage per unit is 80 - 55 gal drums or 4,400 gallons.
2. Maximum total flammable drum storage is 240 - 55 gal drums or 13,200 gallons.

TRIUMVIRATE ENVIRONMENTAL SERVICES, INC.
10100 Rocket Blvd, Orlando, FL 32824

Flammable Containers Storage Layout

PROJECT NO.: 1008

DATE: Apr 7, 2023

FIGURE I.D.1.-1

M&D ENVIRONMENTAL SERVICES, LLC.
5896 Azalea Street
Port Orange, FL 32127
email - vsanagustin@mdenv.com
tel. 813-842-5520

0 59 ft

SCALE

N

LEGEND:

⊗ - sample point (planned closure soil sample point)

1. SWMUs with a yellow text are for a closed SWMU.
2. SWMUs with a blue text are for an active SWMU.

TRIUMVIRATE ENVIRONMENTAL SERVICES, INC.
10100 Rocket Blvd, Orlando, FL 32824

Facility Closure Sampling Locations and SWMUs

PROJECT NO.:	FIGURE II.K.1
1008	
DATE: Mar 30, 2023	

M&D ENVIRONMENTAL SERVICES, LLC.
5896 Azalea Street
Port Orange, FL 32127
email - vsanagustin@mdenv.com
tel. 813-842-5520

0 55 ft

SCALE

N

LEGEND:

- Danger Authorized Personnel Only Sign
- Emergency Equipment Cabinet
- All Visitors Must Check In Sign
- Fire Extinguisher, 5 lbs
- Fire Extinguisher, 20 lbs
- Fire Extinguisher, 150 lbs
- Spill Control Station
- No Smoking
- Emergency Eye Wash
- Safety Shower
- Stretcher
- Fire Alarm
- Stop
- Fire Hydrant
- Fire Dept Connection
- Evacuation Route

TRIUMVIRATE ENVIRONMENTAL SERVICES, INC.
10100 Rocket Blvd, Orlando, FL 32824

Evacuation Map

PROJECT NO.: 1008

DATE: Mar 24, 2023

FIGURE II.A.9

M&D ENVIRONMENTAL SERVICES, LLC.
5896 Azalea Street
Port Orange, FL 32127
email - vsanagustin@mdenv.com
tel. 813-842-5520

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

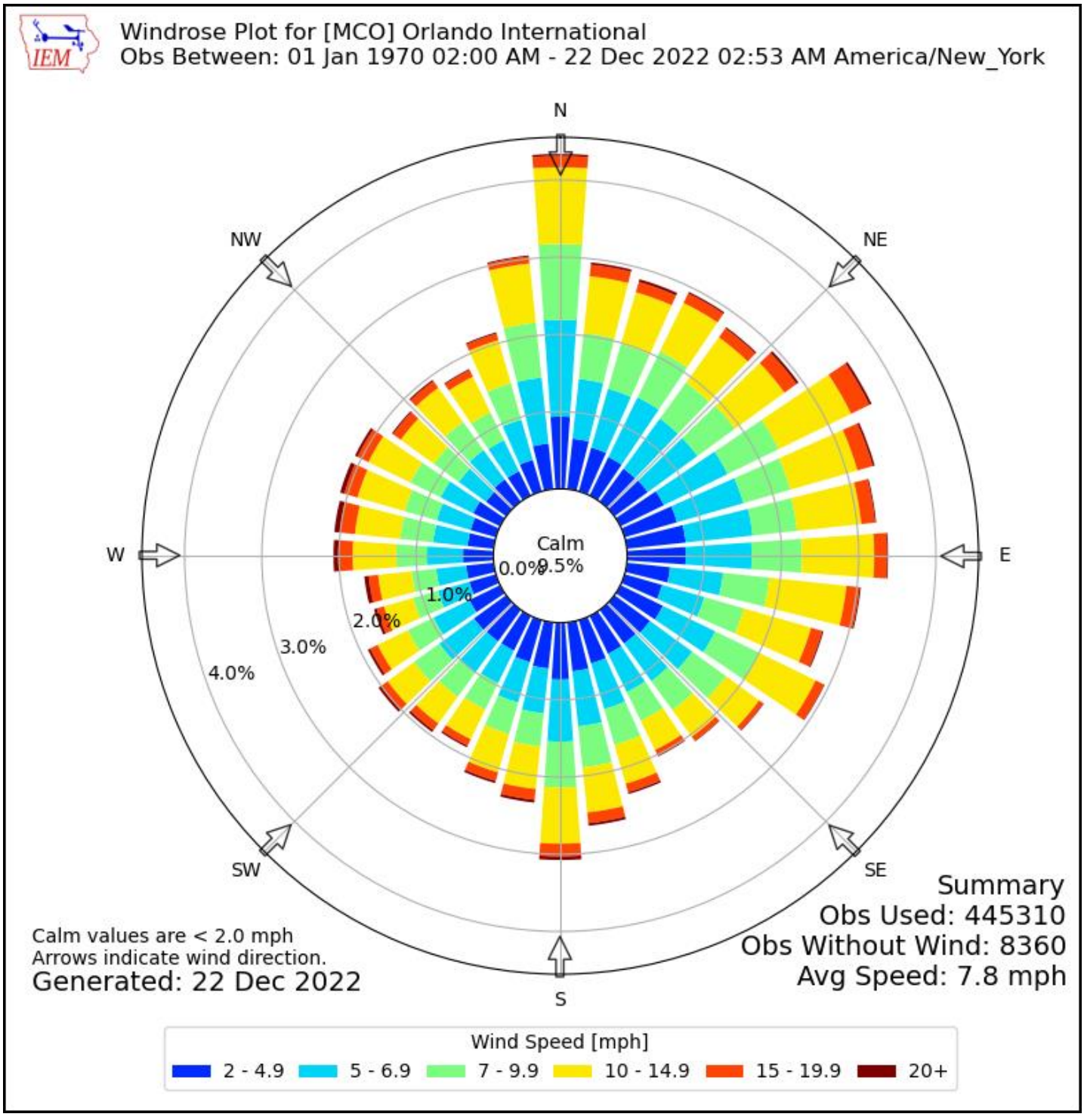
Figure II.A.3-1: Wind Rose

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Wind Rose Plot



Source: NOAA climate.gov link to Iowa Environmental Mesonet
https://mesonet.agron.iastate.edu/sites/windrose.phtml?station=MCO&network=FL_ASOS

Supporting Attachments

Financial Assurance

- Exhibit II.A.2.a-1: Surety Bond
- Exhibit II.A.4: Liability Insurance (62-730.900(4)(k))

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Exhibit II.A.2.a-1: Surety Bond

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

Mail this and supporting documents to:
Solid Waste Financial Coordinator
Florida Department of Environmental Protection
2600 Blair Stone Road MS 4548
Tallahassee, Florida 32399-2400

SURETY BOND RIDER

Reference: Facility name: Triumvirate Environmental Services, Inc. FDEP I.D. Number: 980559728

To be attached to and form part of financial guarantee ("performance" or "financial guarantee") bond number 1001066444, originally effective on May 8, 2019, for Triumvirate Environmental Services, Inc., as Principal, and U.S. Specialty Insurance Company, as Surety(ies), in favor of the Florida Department of Environmental Protection (FDEP), as Obligee. It is understood and agreed that the bond is amended as follows:

(Check appropriate boxes below and complete.)

☑ Increase Penal Sum from $179,380.36 to $181,532.92.

☐ Decrease* Penal Sum, as authorized by letter dated _____, from $_____ to $_____.

☐ Change facility amounts* – (use this section only when bond covers multiple facilities) _____ (Facility name): $_____ (New facility amount)

_____ (Facility name (use 'Other' section for additional facilities)): $_____ (New facility amount)

*** - Reductions of Penal Sum or Facility Amounts, in accordance with the terms of the bond and FDEP regulations, require prior written permission from the FDEP Tallahassee office. Authorization will be addressed to Surety or Surety's representative and will specify bond to be changed.**

☐ Change _____ ("principal" or "facility") name from _____ to _____.

☐ Change Co-surety Liability Limits to $_____ for _____ (Surety Company) and $_____ for _____ (Surety Company (use 'Other' section for additional Sureties)).

☐ Other: _____

Said Bond shall be subject to all its terms, conditions and limitations, except as herein expressly amended. This rider shall become effective on February 9, 2022. This rider is executed on February 8, 2022. IN WITNESS WHEREOF, U.S. Specialty Insurance Company (Surety Company(ies)) has caused its corporate seal to be hereunto affixed.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond rider on behalf of the Principal and Surety(ies).

Triumvirate Environmental Services, Inc.

_____
Signature of Authorized Representative of Principal

Emily Duquette, Asst Secretary
Type Name and Title

U.S. Specialty Insurance Company

_____
Signature of Authorized Representative of Surety (Affix Surety Seal and Attach Power of Attorney)

Gentry Stewart
Type Name

Willis Towers Watson Northeast, Inc
75 Arlington Street, Floor 10
Boston, MA 02116
Address of Authorized Representative (including Agency Name)

(860) 756-7308
Telephone Number

Kristopher.Pisano@willistowerswatson.com
E-mail Address

TOKIO MARINE HCC

POWER OF ATTORNEY

AMERICAN CONTRACTORS INDEMNITY COMPANY TEXAS BONDING COMPANY
UNITED STATES SURETY COMPANY U.S. SPECIALTY INSURANCE COMPANY

KNOW ALL MEN BY THESE PRESENTS: That American Contractors Indemnity Company, a California corporation, Texas Bonding Company, an assumed name of American Contractors Indemnity Company, United States Surety Company, a Maryland corporation and U.S. Specialty Insurance Company, a Texas corporation (collectively, the "Companies"), do by these presents make, constitute and appoint:

Donna M. Planeta, Joshua Sanford, Aimee R. Perondine, Michelle Anne McMahon, Jennifer Gail Godere, Eric Strba, Kathryn Pryor, Amanda Pierina D'Angelo, Nicholas Turecamo, Rebecca M. Josephson, Alexis R. Apostolidis, Cassandra Baez, Gentry Stewart, Jacqueline Rose Susco

its true and lawful Attorney(s)-in-fact, each in their separate capacity if more than one is named above, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver **any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include riders, amendments, and consents of surety, providing the bond penalty does not exceed** _____ ******Unlimited****** _____ Dollars (____***unlimited***____). This Power of Attorney shall expire without further action on January 31st, 2024. This Power of Attorney is granted under and by authority of the following resolutions adopted by the Boards of Directors of the Companies:

Be it Resolved, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

Attorney-in-Fact may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings, including any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts, and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

Be it Resolved, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached.

IN WITNESS WHEREOF, The Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 23rd day of September, 2021.

AMERICAN CONTRACTORS INDEMNITY COMPANY TEXAS BONDING COMPANY
UNITED STATES SURETY COMPANY U.S. SPECIALTY INSURANCE COMPANY

State of California

County of Los Angeles

By: _____
Daniel P. Aguilar, Vice President

A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

On this 23rd day of September, 2021, before me, D. Littlefield, a notary public, personally appeared Daniel P. Aguilar, Vice President of American Contractors Indemnity Company, Texas Bonding Company, United States Surety Company and U.S. Specialty Insurance Company who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

D. LITTLEFIELD
Notary Public - California
Los Angeles County
Commission # 2320307
My Comm. Expires Jan 31, 2024

Signature _____ (seal)

I, Kio Lo, Assistant Secretary of American Contractors Indemnity Company, Texas Bonding Company, United States Surety Company and U.S. Specialty Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; furthermore, the resolutions of the Boards of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Los Angeles, California this 8th day of FEBRUARY, 2022.

Corporate Seals
Bond No. 10010060444

Agency No. 16584

Kio Lo, Assistant Secretary

HCCSMANPOA09/2021

visit tmhcc.com/surety for more information

This bond supersedes and replaces U.S. Specialty Insurance Company Bond number 1001066444

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: April 13, 2023

Effective date: December 28, 2022

Principal: Triumvirate Environmental Services, 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: Florida

Surety(ies): Atlantic Specialty Insurance Company
605 Highway 169 North, Suite 800
Plymouth, MN 55441
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 Services, Inc.	10100 Rocket Blvd. Orlando, FL 32834

Total penal sum of bond: $ 181,532.92

Surety's bond number: 800113469

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.

PRINCIPAL

Triumvirate Environmental Services, Inc.

Signature

Doug Yaeger, President

Type Name and Title

Corporate Seal

Bond premium: $ 5,446.00

CORPORATE SURETY(IES)

For each co-surety provide the following

Atlantic Specialty Insurance Company

Name and address

605 Highway 169 North, Suite 800, Plymouth, MN 55441

New York

State of Incorporation

Liability Limit $ $181,532.92

Signature

Donna M Planeta, Attorney-in-Fact

Type Name and Title

Corporate Seal

intact INSURANCE

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Michelle Anne McMahon, Donna M Planeta, Joshua Sanford, Bethany Stevenson, Eric Strba, Rebecca Josephson, Melissa Stanton, Alexis Apostolidis, Brendan Fletcher, Cassandra Baez, Jacqueline Rose Susco, Kathryn Pryor, Nicholas Turecamo, Aimee R Perondine, Gentry Stewart, Jennifer Godere, Amanda D'Angelo**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

By _____
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.

ALISON DWAN NASH-TROUT
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2025

_____
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 13th day of April, 2023.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
January 31, 2025

_____
Kara Barrow, Secretary

Please direct bond verifications to surety@intactinsurance.com

Mail this and supporting documents to:
Solid Waste Financial Coordinator
Florida Department of Environmental Protection
2600 Blairstone Road MS 4548
Tallahassee, Florida 32399-2400

SURETY BOND RIDER

Facility name: Triumvirate Environmental Services, Inc. FDEP I.D. Number: 980559728

To be attached to and form part of guarantee ("performance" or "guarantee") bond number 80113469, originally effective on December 28,2022, for Triumvirate Environmental Services, Inc., as Principal, and Atlantic Specialty Insurance Company, as Surety(ies), in favor of the Florida Department of Environmental Protection (FDEP), as Obligee. It is understood and agreed that the bond is amended as follows:

(Check appropriate boxes below and complete.)

☑ Increase ("Increase" or "Decrease"*) Penal Sum from $181,532.92 to $188,975.77. Required Action amounts are merged and related requirements of Rule 62-701.630(6), F.A.C., as amended, shall apply.

☐ Change facility amounts* – (use this section only when bond covers multiple facilities) _____ (Facility name): $_____ (New facility amount)

_____ (Facility name (use 'Other' section for additional facilities)): $_____ (New facility amount)

* - **Reductions of Penal Sum or Facility Amounts, in accordance with the terms of the bond and FDEP regulations, require prior written permission from the FDEP Tallahassee office. Authorization will be addressed to Surety or Surety's representative and will specify bond to be changed.**

☐ Change _____ ("principal" or "facility") name from _____

to _____.

☐ Change Co-surety Liability Limits to $_____ for _____ (Surety Company)

and $_____ for _____ (Surety Company (use 'Other' section for additional Sureties)).

☑ Other: Change expiration date from December 28, 2023 to May 8, 2024

Said Bond shall be subject to all its terms, conditions and limitations, except as herein expressly amended. This rider shall become effective on 12/28/2022. This rider is executed on April 13, 2023. IN WITNESS WHEREOF, Atlantic Specialty Insurance Company (Surety Company(ies)) has caused its corporate seal to be hereunto affixed.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond rider on behalf of the Principal and Surety(ies).

Triumvirate Environmental Services, Inc.

Signature of Authorized Representative of Principal

Doug Yarwood, President

Type Name and Title

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

Signature of Authorized Representative of Surety
Affix Surety Seal and Attach Power of Attorney

Donna M Planeta, Attorney-in-Fact

Type Name

10 State House Sq., Fl. 11, Hartford, CT 06103

Address of Authorized Representative

(860) 241-4441 Telephone Number

donna.planeta@wtwco.com E-mail Address

intact INSURANCE

Power of Attorney

KNOW ALL MEN BY THESE PRESENTS, that ATLANTIC SPECIALTY INSURANCE COMPANY, a New York corporation with its principal office in Plymouth, Minnesota, does hereby constitute and appoint: **Michelle Anne McMahon, Donna M Planeta, Joshua Sanford, Bethany Stevenson, Eric Strba, Rebecca Josephson, Melissa Stanton, Alexis Apostolidis, Brendan Fletcher, Cassandra Baez, Jacqueline Rose Susco, Kathryn Pryor, Nicholas Turecamo, Aimee R Perondine, Gentry Stewart, Jennifer Godere, Amanda D'Angelo**, each individually if there be more than one named, its true and lawful Attorney-in-Fact, to make, execute, seal and deliver, for and on its behalf as surety, any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof; provided that no bond or undertaking executed under this authority shall exceed in amount the sum of: **unlimited** and the execution of such bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof in pursuance of these presents, shall be as binding upon said Company as if they had been fully signed by an authorized officer of the Company and sealed with the Company seal. This Power of Attorney is made and executed by authority of the following resolutions adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the President, any Senior Vice President or Vice-President (each an "Authorized Officer") may execute for and in behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and affix the seal of the Company thereto; and that the Authorized Officer may appoint and authorize an Attorney-in-Fact to execute on behalf of the Company any and all such instruments and to affix the Company seal thereto; and that the Authorized Officer may at any time remove any such Attorney-in-Fact and revoke all power and authority given to any such Attorney-in-Fact.

Resolved: That the Attorney-in-Fact may be given full power and authority to execute for and in the name and on behalf of the Company any and all bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof, and any such instrument executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed and sealed by an Authorized Officer and, further, the Attorney-in-Fact is hereby authorized to verify any affidavit required to be attached to bonds, recognizances, contracts of indemnity, and all other writings obligatory in the nature thereof.

This power of attorney is signed and sealed by facsimile under the authority of the following Resolution adopted by the Board of Directors of ATLANTIC SPECIALTY INSURANCE COMPANY on the twenty-fifth day of September, 2012:

Resolved: That the signature of an Authorized Officer, the signature of the Secretary or the Assistant Secretary, and the Company seal may be affixed by facsimile to any power of attorney or to any certificate relating thereto appointing an Attorney-in-Fact for purposes only of executing and sealing any bond, undertaking, recognizance or other written obligation in the nature thereof, and any such signature and seal where so used, being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, ATLANTIC SPECIALTY INSURANCE COMPANY has caused these presents to be signed by an Authorized Officer and the seal of the Company to be affixed this twenty-seventh day of April, 2020.

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

By _____
Paul J. Brehm, Senior Vice President

STATE OF MINNESOTA
HENNEPIN COUNTY

On this twenty-seventh day of April, 2020, before me personally came Paul J. Brehm, Senior Vice President of ATLANTIC SPECIALTY INSURANCE COMPANY, to me personally known to be the individual and officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, that he is the said officer of the Company aforesaid, and that the seal affixed to the preceding instrument is the seal of said Company and that the said seal and the signature as such officer was duly affixed and subscribed to the said instrument by the authority and at the direction of the Company.

ALISON DWAN NASH-TROUT
NOTARY PUBLIC - MINNESOTA
My Commission Expires
January 31, 2025

_____
Notary Public

I, the undersigned, Secretary of ATLANTIC SPECIALTY INSURANCE COMPANY, a New York Corporation, do hereby certify that the foregoing power of attorney is in full force and has not been revoked, and the resolutions set forth above are now in force.

Signed and sealed. Dated 13th day of April, 2023

ATLANTIC SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1986 NEW YORK

This Power of Attorney expires
January 31, 2025

_____
Kara Barrow, Secretary

Please direct bond verifications to surety@intactinsurance.com

F.A.C Chapter 62-730 Permit Renewal Application

Current FDEP Permit No. 26916-009-HO

Exhibit II.A.4:
Liability Insurance (DEP Form 62-730.900(4)(k))

Triumvirate Environmental Services, Inc.
10100 Rocket Blvd
Orlando, FL 32824

EPA ID No. FLD980559728

Application Date: May 1, 2023

DEP Form # 62-730.900(4)(k)
Form Title HW Certificate of Liability Insurance
Effective Date January 5, 1995
DEP Application No.

STATE OF FLORIDA
HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE
(Primary Policy)

1. Ironshore Specialty Insurance Company ,(the "Insurer"),
Name of Insurer

of 175 Berkeley St, Boston MA 02116
Address of Insurer

hereby certifies that it has issued liability insurance covering bodily injury and property damage to

Triumvirate Environmental Services, Inc. , (the "Insured"), of
Name of Insured

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
FLD980559728	Triumvirate Environmental Services, Inc.	10100 Rocket Boulevard, Orlando, FL 32824

for:

- [ ] **sudden accidental occurrences**
- [ ] **nonsudden accidental occurrences**
- [X] **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 $ 4,000,000 **each occurrence and $** 8,000,000 **annual aggregate, exclusive of legal defense costs. The coverage is provided under policy number** IEPICB5ZC6003 **, issued on** 12/31/2022 **. The effective date of said policy is** 12/31/2022 .
Date 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

Jeffrey Duca

Type name

Vice President

Title

Authorized Representative of

Ironshore Specialty Insurance Company

Name of Insurer

175 Berkeley St, Boston MA 02116

Address of Representative

Supporting Attachments

Container Management Information

- Exhibit II.B-2: Floor Coating Sika Sikafloor SDS

Sikafloor® 107/203/207/215 Part A

1. Identification

Product name	:	Sikafloor® 107/203/207/215 Part A
Supplier	:	Sika Corporation
Address	:	201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com
Telephone	:	(201) 933-8800
Telefax	:	(201) 804-1076
Emergency telephone	:	CHEMTREC: 800-424-9300 INTERNATIONAL: 703-527-3887 ehs@sika-corp.com
Recommended use of the chemical and restrictions on use	:	For further information, refer to the product technical data sheet.

2. Hazards identification

GHS Classification

Skin irritation, Category 2	H315: Causes skin irritation.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitization, Category 1	H317: May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351: Suspected of causing cancer.
Reproductive toxicity, Category 2	H361: Suspected of damaging fertility or the unborn child.

GHS Label element

Hazard pictograms :

Signal Word : Danger

Hazard Statements :
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.

Precautionary Statements :
Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P310 Immediately call a POISON CENTER or doctor/ physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
Storage:
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Warning : Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain,liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

See Section 11 for more detailed information on health effects and symptoms.

3. Composition/information on ingredients

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
bisphenol-A-(epichlorhydrin) epoxy resin	25068-38-6	>= 50 - <= 100 %
oxirane, mono[(C12-14-alkyloxy)methyl]derivatives	68609-97-2	>= 10 - < 20 %
titanium dioxide	13463-67-7	>= 5 - < 10 %
Phenol, 4-nonyl, branched	84852-15-3	>= 5 - < 10 %
bisphenol A-(epichlorhydrin), homopolymer	25085-99-8	>= 5 - < 10 %
Benzyl alcohol	100-51-6	>= 1 - < 2 %
Carbon black	1333-86-4	>= 0 - < 1 %

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact	:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.
In case of eye contact	:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing.
If swallowed	:	Clean mouth with water and drink afterwards plenty of water. Induce vomiting immediately and call a physician. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	:	irritant effects sensitizing effects Allergic reactions Excessive lachrymation Erythema Dermatitis See Section 11 for more detailed information on health effects and symptoms.
Protection of first-aiders	:	Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance.
Notes to physician	:	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific extinguishing methods	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Deny access to unprotected persons.

Environmental precautions	:	Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. Handling and storage

Advice on safe handling	:	Do not breathe vapors or spray mist. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products.
Conditions for safe storage	:	Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Store in accordance with local regulations.
Materials to avoid	:	no data available

8. Exposure controls/personal protection

Component	CAS-No.	Basis **	Value	Exposure limit(s)* / Form of exposure
titanium dioxide	13463-67-7	ACGIH	TWA	10 mg/m3
		OSHA P0	TWA	10 mg/m3 Total
		OSHA Z-1	TWA	15 mg/m3 total dust
Carbon black	1333-86-4	ACGIH	TWA	3.5 mg/m3
		OSHA Z-1	TWA	3.5 mg/m3
		OSHA P0	TWA	3.5 mg/m3

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

****Basis**
ACGIH. Threshold Limit Values (TLV)
OSHA P0. Table Z-1, Limit for Air Contaminat (1989 Vacated Values)
OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant
OSHA P2. Permissible Exposure Limits (PEL), Table Z-2
OSHA Z3. Table Z-3, Mineral Dust

Engineering measures : Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protective equipment

Respiratory protection : Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection
Remarks : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Hygiene measures : Avoid contact with skin, eyes and clothing.
Wash hands before breaks and immediately after handling the product.
Remove contaminated clothing and protective equipment before entering eating areas.
Wash thoroughly after handling.

9. Physical and chemical properties

Appearance : liquid

Color	:	various
Odor	:	characteristic
Odor Threshold	:	no data available
Flash point	:	201 °F (94 °C)
Ignition temperature	:	not applicable
Decomposition temperature	:	no data available
Lower explosion limit (Vol%)	:	no data available
Upper explosion limit (Vol%)	:	no data available
Flammability (solid, gas)	:	no data available
Oxidizing properties	:	no data available
Autoignition temperature	:	no data available
pH	:	Note: not applicable
Melting point/range / Freezing point	:	no data available
Boiling point/boiling range	:	no data available
Vapor pressure	:	no data available
Density	:	ca.1.09 g/cm3 at 73 °F (23 °C)
Water solubility	:	Note: insoluble
Partition coefficient: n-octanol/water	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	ca.> 20.5 mm2/s at 104 °F (40 °C)
Relative vapor density	:	no data available
Evaporation rate	:	no data available
Burning rate	:	no data available
Volatile organic compounds (VOC) content	:	34 g/l A+B Combined

10. Stability and reactivity

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	The product is chemically stable.

Possibility of hazardous reactions	:	Stable under recommended storage conditions.
Conditions to avoid	:	no data available
Incompatible materials	:	no data available

11. Toxicological information

Acute toxicity

Product

Acute oral toxicity	:	no data available
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available

Ingredients:

bisphenol-A-(epichlorhydrin) epoxy resin :

Acute oral toxicity	:	LD50 Oral rat: > 5,000 mg/kg
Acute dermal toxicity	:	LD50 Dermal rabbit: > 20,000 mg/kg

Phenol, 4-nonyl, branched :

Acute dermal toxicity	:	LD50 Dermal rabbit: 3,160 mg/kg

Benzyl alcohol :

Acute oral toxicity	:	LD50 Oral rat: 1,230 mg/kg
Acute inhalation toxicity	:	LC50 rat: 4.178 mg/l Exposure time: 4 h Test atmosphere: dust/mist

Carbon black :

Acute oral toxicity	:	LD50 Oral rat: > 8,000 mg/kg

Skin corrosion/irritation

Product

Result: Skin irritation

Causes skin irritation.

Serious eye damage/eye irritation

Product

Causes serious eye damage.

Respiratory or skin sensitization

Product

May cause an allergic skin reaction.

Germ cell mutagenicity

Product

Mutagenicity : no data available

Carcinogenicity

Product

Carcinogenicity : Suspected of causing cancer.

IARC	Group 2B: Possibly carcinogenic to humans	
	titanium dioxide	13463-67-7
	Carbon black	1333-86-4
NTP	not applicable	

Reproductive Toxicity/Fertility

Product

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Reproductive Toxicity/Development/Teratogenicity

Product

Teratogenicity : no data available

STOT-single exposure

Product

Assessment: no data available

STOT-repeated exposure

Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain,liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Product

Assessment: no data available

Aspiration toxicity

Product

no data available

12. Ecological information

Other information	Do not empty into drains; dispose of this material and its container in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May be harmful to the environment if released in large quantities. Water polluting material.

Component:

Carbon black	1333-86-4	Toxicity to fish: LC50 Species: Brachydanio rerio (zebrafish) Dose: > 1,000 mg/l Exposure time: 96 h

13. Disposal considerations

Disposal methods

Waste from residues	:	Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT
Not regulated

IATA

UN number	3082
Description of the goods	Environmentally hazardous substance, liquid, n.o.s. (bisphenol-A-(epichlorhydrin) epoxy resin, Phenol, 4-nonyl, branched)
Class	9
Packing group	III
Labels	9
Packing instruction (cargo aircraft)	964
Packing instruction (passenger aircraft)	964
Packing instruction (passenger aircraft)	Y964

IMDG

UN number	3082

Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (bisphenol-A-(epichlorhydrin) epoxy resin, Phenol, 4-nonyl, branched)
Class	9
Packing group	III
Labels	9
EmS Number 1	F-A
EmS Number 2	S-F
Marine pollutant	yes

IMDG: For Limited Quantity special provisions reference IMDG Code Chapter 3.4

Special precautions for user
no data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

15. Regulatory information

TSCA list : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

Ozone-Depletion Potential This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.
WARNING! This product contains a chemical known in the State of California to cause cancer.

16. Other information

HMIS Classification

Health	*	3
Flammability		1
Physical Hazard		0
Personal Protection		X

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

Notes to Reader

The information contained in this Safety Data Sheet applies only to the actual Sika Corporation ("Sika") product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Sika product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Sika believes to be reliable as of the date hereof. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Safety Data Sheet for each Sika product, which are available at web site and/or telephone number listed in Section 1 of this SDS.

SIKA MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO LIABILITY ARISING FROM THIS INFORMATION OR ITS USE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES AND SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

All sales of Sika products are subject to its current terms and conditions of sale available at www.sikausa.com or 201-933-8800.

Revision Date 06/02/2014

Material number: 173230

1. Identification

Product name	:	Sikafloor® 107 Part B
Supplier	:	Sika Corporation
Address	:	201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com
Telephone	:	(201) 933-8800
Telefax	:	(201) 804-1076
Emergency telephone	:	CHEMTREC: 800-424-9300 INTERNATIONAL: 703-527-3887 ehs@sika-corp.com
Recommended use of the chemical and restrictions on use	:	For further information, refer to the product technical data sheet.

2. Hazards identification

GHS Classification

Skin corrosion , Category 1A	H314: Causes severe skin burns and eye damage.
Serious eye damage , Category 1	H318: Causes serious eye damage.
Skin sensitization , Category 1	H317: May cause an allergic skin reaction.
Reproductive toxicity , Category 2	H361: Suspected of damaging fertility or the unborn child.
Specific target organ systemic toxicity - single exposure , Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ systemic toxicity - repeated exposure , Category 2 (Oral)	H373: May cause damage to organs through prolonged or repeated exposure if swallowed.

GHS Label element

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

Precautionary Statements : **Prevention:**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P281 Use personal protective equipment as required.
Response:
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P310 Immediately call a POISON CENTER or doctor/ physician.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P363 Wash contaminated clothing before reuse.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

See Section 11 for more detailed information on health effects and symptoms.

3. Composition/information on ingredients

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Fatty acids, tall-oil, reaction products with tetraethylenepentamine	68953-36-6	>= 25 - < 50 %
P-tert-butylphenol (PTBP)	98-54-4	>= 20 - < 25 %
m-phenylenebis(methylamine)	1477-55-0	>= 5 - < 10 %
1,3-Cyclohexanedimethanamine	2579-20-6	>= 5 - < 10 %
Phenol, 4-nonyl, branched	84852-15-3	>= 5 - < 10 %
3,6,9-triazaundecamethylenediamine	112-57-2	>= 5 - < 10 %
Isophoronediamine	2855-13-2	>= 2 - < 5 %
amines, coco alkyl	61788-46-3	>= 2 - < 5 %
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	>= 1 - < 2 %

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If inhaled	:	Move to fresh air. Consult a physician after significant exposure.
In case of skin contact	:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
In case of eye contact	:	Small amounts splashed into eyes can cause irreversible tissue damage and blindness. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Continue rinsing eyes during transport to hospital. Remove contact lenses. Keep eye wide open while rinsing.
If swallowed	:	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	:	Cough Respiratory disorder Allergic reactions Dermatitis See Section 11 for more detailed information on health effects and symptoms. Health injuries may be delayed. corrosive effects irritant effects sensitizing effects
Protection of first-aiders	:	Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance.
Notes to physician	:	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific extinguishing methods	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Deny access to unprotected persons.
Environmental precautions	:	Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. Handling and storage

Advice on safe handling	:	Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products.
Conditions for safe storage	:	Store in original container. Keep in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Store in accordance with local regulations.
Materials to avoid	:	no data available

8. Exposure controls/personal protection

Component	CAS-No.	Basis **	Value	Exposure limit(s)* / Form of exposure
m-phenylenebis(methylamine)	1477-55-0	ACGIH	C	0.1 mg/m3

		OSHA P0	C	0.1 mg/m3

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**__Basis__
ACGIH. Threshold Limit Values (TLV)
OSHA P0. Table Z-1, Limit for Air Contaminat (1989 Vacated Values)
OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant
OSHA P2. Permissible Exposure Limits (PEL), Table Z-2
OSHA Z3. Table Z-3, Mineral Dust

Engineering measures : Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protective equipment

Respiratory protection : Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection
Remarks : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Hygiene measures : Avoid contact with skin, eyes and clothing.
Wash hands before breaks and immediately after handling the product.
Remove contaminated clothing and protective equipment before entering eating areas.
Wash thoroughly after handling.

9. Physical and chemical properties

Appearance	:	liquid
Color	:	various
Odor	:	characteristic
Odor Threshold	:	no data available
Flash point	:	201 °F (94 °C)
Ignition temperature	:	not applicable
Decomposition temperature	:	no data available
Lower explosion limit (Vol%)	:	no data available
Upper explosion limit (Vol%)	:	no data available
Flammability (solid, gas)	:	no data available
Oxidizing properties	:	no data available
Autoignition temperature	:	no data available
pH	:	Note: not applicable
Melting point/range / Freezing point	:	no data available
Boiling point/boiling range	:	no data available
Vapor pressure	:	no data available
Density	:	ca.0.96 g/cm3 at 73 °F (23 °C)
Water solubility	:	Note: insoluble
Partition coefficient: n-octanol/water	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	ca.> 20.5 mm2/s at 104 °F (40 °C)
Relative vapor density	:	no data available
Evaporation rate	:	no data available
Burning rate	:	no data available
Volatile organic compounds (VOC) content	:	34 g/l A+B Combined

10. Stability and reactivity

Reactivity	:	No dangerous reaction known under conditions of normal use.

Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	Stable under recommended storage conditions.
Conditions to avoid	:	no data available
Incompatible materials	:	no data available

11. Toxicological information

Acute toxicity

Product

Acute oral toxicity	:	no data available
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available

Ingredients:

m-phenylenebis(methylamine) :

Acute oral toxicity	:	LD50 Oral rat: 930 mg/kg
Acute inhalation toxicity	:	LC50 rat: 1.34 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 Dermal rat: > 3,100 mg/kg

1,3-Cyclohexanedimethanamine :

Acute oral toxicity	:	LD50 Oral rat: 700 mg/kg
Acute dermal toxicity	:	LD50 Dermal rat: 1,700 mg/kg

Phenol, 4-nonyl, branched :

Acute dermal toxicity	:	LD50 Dermal rabbit: 3,160 mg/kg

3,6,9-triazaundecamethylenediamine :

Acute oral toxicity	:	LD50 Oral rat: 1,716.2 mg/kg
Acute dermal toxicity	:	LD50 Dermal rat: 1,260 mg/kg

Isophoronediamine :

Acute oral toxicity	:	LD50 Oral rat: 1,030 mg/kg

Skin corrosion/irritation

Product

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Product

no data available

Respiratory or skin sensitization

Product

May cause an allergic skin reaction.

Germ cell mutagenicity

Product

Mutagenicity : no data available

Carcinogenicity

Product

Carcinogenicity : no data available

IARC not applicable
NTP not applicable

Reproductive Toxicity/Fertility

Product

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

Reproductive Toxicity/Development/Teratogenicity

Product

Teratogenicity : no data available

STOT-single exposure

Product

Assessment: May cause respiratory irritation.

STOT-repeated exposure

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Product

Assessment: May cause damage to organs through prolonged or repeated exposure if swallowed.

Aspiration toxicity

Product

no data available

12. Ecological information

Other information	Do not empty into drains; dispose of this material and its container in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May be harmful to the environment if released in large quantities. Water polluting material.

13. Disposal considerations

Disposal methods

Waste from residues	:	Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	3066
Description of the goods	Paint
Class	8
Packing group	II
Labels	8
Emergency Response Guidebook Number	153

IATA

UN number	3066
Description of the goods	Paint (Phenol, 4-nonyl, branched)
Class	8
Packing group	II
Labels	8
Packing instruction (cargo aircraft)	855
Packing instruction (passenger aircraft)	851
Packing instruction (passenger aircraft)	Y840

IMDG

UN number	3066
Description of the goods	PAINT (Phenol, 4-nonyl, branched)
Class	8
Packing group	II
Labels	8
EmS Number 1	F-A
EmS Number 2	S-B
Marine pollutant	yes

DOT: For Limited Quantity exceptions reference 49 CFR 173.154 (b)
IMDG: For Limited Quantity special provisions reference IMDG Code Chapter 3.4

Special precautions for user
no data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

15. Regulatory information

TSCA list : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

Ozone-Depletion Potential This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65 This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

16. Other information

HMIS Classification

Health	*	3
Flammability		1
Physical Hazard		0
Personal Protection		X

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

Notes to Reader

The information contained in this Safety Data Sheet applies only to the actual Sika Corporation ("Sika") product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Sika product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Sika believes to be reliable as of the date hereof. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Safety Data Sheet for each Sika product, which are available at web site and/or telephone number listed in Section 1 of this SDS.

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All sales of Sika products are subject to its current terms and conditions of sale available at www.sikausa.com or 201-933-8800.

Revision Date 04/07/2014

Material number: 188234

SECTION 1. IDENTIFICATION

Product name	:	Sikafloor® 700 Part B
Company name	:	Sika Corporation 201 Polito Avenue Lyndhurst, NJ 07071 USA www.sikausa.com
Telephone	:	(201) 933-8800
Telefax	:	(201) 804-1076
E-mail address	:	ehs@sika-corp.com
Emergency telephone	:	CHEMTREC: 800-424-9300 INTERNATIONAL: +1-703-527-3887
Recommended use of the chemical and restrictions on use	:	For further information, refer to product data sheet.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity (Oral)	:	Category 4
Skin corrosion	:	Category 1B
Serious eye damage	:	Category 1
Skin sensitization	:	Category 1
Reproductive toxicity	:	Category 2
Specific target organ toxicity - repeated exposure (Oral)	:	Category 2 (Kidney)

GHS label elements

Hazard pictograms :

Signal Word	:	Danger
Hazard Statements	:	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist or vapors.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Additional Labeling

There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

Other hazards

Intentional misuse by deliberate concentration and inhalation of vapor may be harmful or fatal.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
benzyl alcohol	100-51-6	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Irrit. 2A; H319	>= 30 - < 50
Methyleneoxide, polymer with benzenamine, hydrogenated	135108-88-2	Acute Tox. 3; H301 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 STOT RE 2; H373	>= 30 - < 50
m-phenylenebis(methylamine)	1477-55-0	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1B; H314 Skin Sens. 1; H317	>= 5 - < 10
Salicylic acid, o-hydroxybenzoic acid	69-72-7	Acute Tox. 4; H302 Eye Dam. 1; H318 Repr. 2; H361	>= 1 - < 5
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane, reaction products with ethylenediamine	72480-18-3	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1; H317	>= 1 - < 5

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this material safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.
Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Keep eye wide open while rinsing.

If swallowed	:	Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	:	Health injuries may be delayed. corrosive effects sensitizing effects Gastrointestinal discomfort Allergic reactions Dermatitis Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure if swallowed. Causes severe burns.
Notes to physician	:	Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Deny access to unprotected persons.
Environmental precautions	:	Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see section 8).
Do not get in eyes, on skin, or on clothing.
For personal protection see section 8.
Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
Smoking, eating and drinking should be prohibited in the application area.
Follow standard hygiene measures when handling chemical products.

Conditions for safe storage : Store in original container.
Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Store in accordance with local regulations.

Materials to avoid : Explosives
Oxidizing agents
Poisonous gases
Dangerous when wet
Flammable solids
Organic peroxides
Poisonous liquids
Spontaneously Combustible Substances

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
m-phenylenebis(methylamine)	1477-55-0	C	0.018 ppm	ACGIH
		C	0.1 mg/m3	OSHA P0

The above constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Engineering measures : Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineer-

ing controls to keep worker exposure below any recommended or statutory limits.

Personal protective equipment

Respiratory protection	:	Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Hygiene measures	:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	colorless
Odor	:	characteristic
Odor Threshold	:	No data available
pH	:	Not applicable
Melting point/range / Freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	219 °F / 104 °C (Method: closed cup)
Evaporation rate	:	No data available

Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	0.07 hpa
Relative vapor density	:	No data available
Density	:	ca. 1.07 g/cm3 (73 °F / 23 °C)
Solubility(ies)		
Water solubility	:	soluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	ca. > 20.5 mm2/s (104 °F / 40 °C)
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Volatile organic compounds (VOC) content	:	62 g/l A+B Combined

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	Stable under recommended storage conditions.
Conditions to avoid	:	No data available
Incompatible materials	:	No data available
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed.

Components:

benzyl alcohol:

Acute oral toxicity	:	LD50 Oral (Rat): 1,620 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 4.178 mg/l Exposure time: 4 h Test atmosphere: dust/mist

Methyleneoxide, polymer with benzenamine, hydrogenated:

Acute oral toxicity	:	LD50 Oral (Rat): 300 mg/kg

m-phenylenebis(methylamine):

Acute oral toxicity	:	LD50 Oral (Rat): 930 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 1.34 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: Corrosive to the respiratory tract.
Acute dermal toxicity	:	LD50 Dermal (Rat): > 3,100 mg/kg

Salicylic acid, o-hydroxybenzoic acid:

Acute oral toxicity	:	LD50 Oral (Rat): 891 mg/kg
Acute dermal toxicity	:	LD50 Dermal (Rat): > 2,000 mg/kg

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC Not applicable

OSHA Not applicable

NTP Not applicable

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

benzyl alcohol:

Toxicity to fish	:	LC50 (Fish): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h

m-phenylenebis(methylamine):

Toxicity to fish	:	LC50 (Oryzias latipes (Japanese medaka)): > 10 - 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l Exposure time: 48 h

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information	:	Do not empty into drains; dispose of this material and its container in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May be harmful to the environment if released in large quantities. Water polluting material.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	:	UN 3066
Proper shipping name	:	Paint (Formaldehyde, polymer with 1,3-benzenedimethanamine and phenol)
Class	:	8
Packing group	:	II
Labels	:	Corrosive
Packing instruction (cargo aircraft)	:	855
Packing instruction (passenger aircraft)	:	851

IMDG-Code

UN number	:	UN 3066
Proper shipping name	:	PAINT (Formaldehyde, polymer with 1,3-benzenedimethanamine and phenol)
Class	:	8
Packing group	:	II
Labels	:	8
EmS Code	:	F-A, S-B
Marine pollutant	:	yes

Domestic regulation

49 CFR

UN/ID/NA number	:	UN 3066
Proper shipping name	:	Paint
Class	:	8
Packing group	:	II
Labels	:	CORROSIVE
ERG Code	:	153
Marine pollutant	:	no

DOT: For Limited Quantity exceptions reference 49 CFR 173.154 (b)
IMDG: For Limited Quantity special provisions reference IMDG Code Chapter 3.4

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

TSCA list : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 304 Extremely Hazardous Substances Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Acute toxicity (any route of exposure)
Respiratory or skin sensitization
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

California Prop. 65

⚠ **WARNING:** This product can expose you to chemicals including 4,4'-diaminodiphenylmethane, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
OSHA P0	:	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
ACGIH / C	:	Ceiling limit
OSHA P0 / C	:	Ceiling limit

Notes to Reader

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Supporting Attachments

Facility Inspection Forms

- Attachment II.B.4: Weekly Inspection Log
- Attachment II.B.5: Emergency Equipment and Personnel Safety Cabinet

Attachment II.B.4: Weekly Inspection Log

Inspector Name		**Date**		**Time**	

Deficiency Description	**Lower Warehouse**		**Loading Dock**		**Upper Warehouse**		**Flam Bldg 1**		**Flam Bldg 2**		**Flam Bldg 3**	
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Secondary Containment in poor condition												
Waste or debris on floor												
Obstructed aisle space												
Materials and/or equipment littering floor												
Storage capacity exceeded												
Incompatible waste in cell												
Waste not permitted in area												
Open container												
Container in unstable position												
Leaking/damaged/non-DOT container												
Storage date not on container												
Waste code not on label												
Drum ID # not on drum												
Label not facing aisle side												
Fire Extinguisher missing or inoperable												
Spill control kit missing or not complete												
First aid kit missing or not complete	N/A				N/A							
Safety shower and eye wash inoperable			N/A									
Emergency and safety cabinet not sealed	N/A				N/A							

Describe Problems and Date Corrected for any item marked "Yes":

Attachment II.B.4: Weekly Inspection Log			
Outdoor Areas			
	Yes	**No**	**Describe Problems and Date Corrected**
Waste or debris on ground outside of building:			
If yes, waste or debris removed?			
Standing liquid in parking lot?			
If yes, standing liquid shows contamination?			
Stormwater drain valve closed?			
Integrity of perimeter fence intact?			

Inspector Signature: _____

Date of Inspection: _____

Attachment II.B.5
Emergency Equipment and Personnel Safety Cabinet Inspection Form

Inspector Name:		**Date & Time:**		
Qty	**Description**	**Yes**	**No***	**Comments**
2	Empty 55-gallon, 17-H, lined drums			
2	Salvage drums (lined or poly)			
4	8-inch diameter, 10-foot-long sorbent booms			
2	Spark-resistant safety shovels			
2	Crowbars (non-sparking)			
2	18-inch pipe wrenches (non-sparking)			
2	Drum plug wrenches (non-sparking)			
4	Explosion proof flashlights			
1	Megaphone or Air Horn			
2	Nylon ropes (each 50 feet long, ½ inch thick)			
1	Oxygen kit			
5	Safety glasses			
10	Safety goggles			
5	Face shield/hard hat combination			
2	Emergency eye/face/body wash			
20	Tyveks (or equivalent) total body coverage			
4	Duct Tape Rolls			
10	Rubber boots			
10	Rubber gloves			
5	Corrosive-resistant aprons			
2	Corrosive-resistant suits			
5	Leather gloves			
10	Half-face respirators			
5	Full-face respirators			
1	Box of respirator cartridges (OV and AG)			

*Describe measure taken or planned to restore, repair, decontaminate, or clean equipment for which a check mark has been placed in the “No” column above: