



Solid Waste Mix Tub Permit Modification

Clean Harbors Florida LLC
EPA ID # FLD 980729610

Existing Hazardous Waste Permit # 64247-HO-011



Clean Harbors Florida
170 Bartow Municipal Airport
Bartow, FL 33830
863-533-6111
www.cleanharbors.com

April 23, 2013

Environmental Administrator
Hazardous Waste Regulation Section, MS 4560
Bureau of Solid and Hazardous Waste
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: RCRA Part B Permit Modification Submission Fee
Clean Harbors Florida LLC
170 Bartow Municipal Airport
Bartow, FL 33830
EPA ID# FLD980729610

Please find attached check (# 1145997) for the amount of \$1,000.00 payable to FDEP for the minor modification of permit fee required as part of the modification submission.

The submittal was done electronically on April 23, 2013 and notice of submittal provided to both the permitting section at Tallahassee and the enforcement section at the SW District for subsequent uploading into OCULUS and use in the modification review.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Bosek".

John Bosek
Facility General Manager
863-519-6331
bosek.john@cleanharbors.com

Attachment
CHECK 1145997

Check Date: 15.Mar.2013

Vendor Number: 0000073474

Check No. 1145997

Invoice Number	Invoice Date	Voucher ID	Gross Amount	Discount Taken	Paid Amount
73474031313	13.Mar.2013	00008040	\$1,000.00	\$0.00	\$1,000.00

Check Number	Date	Total Gross Amount	Total Discounts	Total Paid Amount
1145997	15.Mar.2013	\$1,000.00	\$0.00	\$1,000.00

THE BACK OF THIS CHECK CONTAINS A SECURITY MARK® - DO NOT ACCEPT WITHOUT HOLDING AT AN ANGLE TO VERIFY SECURITY MARK®

CleanHarbor's
ENVIRONMENTAL SERVICES

421 Longwell Drive
Norwell, MA 01946-1440

Bank of America

\$1,000.00

Date 15-Mar-2013

1145997

Pay TO THE ORDER OF FOUR THOUSAND AND NO/100 DOLLARS

Pay Amount \$1,000.00

To the Order Of
FLORIDA DEPARTMENT OF ENVIRONMENTAL
NATURAL RESOURCES
3000 GULF BLVD, SUITE 1000
TALLAHASSEE, FL 32309-2000

⑈ 1145997⑈ ⑆ 011900445⑆

68490⑈



MODIFICATION SUMMARY

Chapter One Part I

- **Appendix A** **Plot Plan**
- **Chapter 1 Appendix C** **Description of Operation**
Added quantity information for Mix tub solidification
I-C-1.6
- **Appendix D.1** **Known Water Wells**
Updated map 2013

Chapter 2 Part II

- **Appendix II-C** **Traffic Patterns**
Updated Drawing
Figure C-1.1
- **Appendix II-D** **Financial Responsibility Information**
Updated Cost estimate and Financial Assurance
Current Financial Responsibility Compliance for 2013
- Updated Figure 3.1 Location of "Danger Unauthorized Personnel signs, Figure 3.1
- **Appendix II-F.2** **Contingency Plan**
Added information on Mix tub
Updated Locations of Fire Response Equipment, Figure 6.6
Updated Evacuation Routes, Figure 6.8
Updated Contingency Plan Revisions and Amendments Figure 6.9
- **Appendix II-F.6** **Inspections**
Updated adding in inspections for Mix tub
- **Section B**
Updated Figure 18.5.3 Locations of Designated Roll-off Areas
- **Section K** **Closure Plan**
Updated to include mix tub area
Updated Figure 9.1 Maximum Waste Inventory at Closure
- **Section Q** **Solid Waste Management Units**
Updated to include SMWU # 16 Solidification area
- **Section R**
Updated Figure 13.1 Locations of Process Vents
- **Section S**
Updated Figure 14.1 Facility Plot Plan and locations of hazardous waste units



Changes on Permit

- Attachment A Facility Map
- Page 4 Add SWMU-16 to list of SWMU and AOC
- Page 5 Update Document used list
- Page 38 Insert SWMU # 16

SWMU -16*	Mix Tub Solidification Area	Production Area part of solid waste permitted unit	2013 to Present
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Solid Waste Mix Tub Permit Modification

Clean Harbors Florida LLC
EPA ID # FLD 980729610

Existing Hazardous Waste Permit # 64247-HO-011

March 2013

APPLICATION FOR A HAZARDOUS WASTE FACILITY PERMIT

PART I - GENERAL

TO BE COMPLETED BY ALL APPLICANTS

Please Type or Print

A. General Information

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

- ☐ Disposal
- ☐ Landfill ☐ Land treatment ☐ Surface Impoundment
- ☐ Miscellaneous Units Type of Unit _____
- ☒ Storage
- ☒ Containers ☒ Tanks ☐ Piles
- ☐ Surface Impoundment ☐ Containment Building
- ☐ Miscellaneous Unit Type of Unit _____
- ☒ Treatment
- ☒ Tanks ☐ Piles ☐ Surface Impoundment
- ☐ Incineration ☐ Containment Building
- ☐ Boiler/Industrial Furnace Type of Unit _____
- ☒ Miscellaneous Units Type of unit solids filter

2. Type of application:

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

3. Revision Number: 0

4. Date current operation began (or is expected to begin): March 10, 1987

5. Facility name: Clean Harbors Florida, LLC

6. EPA/DEP I.D. No.: FLD 980 729 610

7. Facility location or street address: 170 Bartow Municipal Airport

8. Facility mailing address: 170 Bartow Municipal Airport
Street or P.O. Box
Bartow FL 33830
City State Zip
9. Contact person: John Bosek Telephone: (863) 533-6111
 Title: General Manager

Mailing Address: 170 Bartow Municipal Airport
Street or P.O. Box
Bartow FL 33830
City State Zip

Email Address Bosekj@cleanharbors.com

10. Operator's name: Clean Harbors Florida, LLC Telephone (863) 533-6111

Mailing Address: 170 Bartow Municipal Airport
Street or P.O. Box
Bartow FL 33830
City State Zip

11. Facility owner's name: Clean Harbors Florida, LLC Telephone (863) 533-6111

Mailing Address: 170 Bartow Municipal Airport
Street or P.O. Box
Bartow FL 33830
City State Zip

12. Legal structure:
☐ Corporation ☐ Non-profit Corporation ☐ Partnership ☐ Individual
☐ Local Government ☐ State Government ☐ Federal Government ☒ Other Limited Liability Corp.

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

County: _____ State: _____

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

State of incorporation: _____

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

16. Site ownership status:

[] owned [] to be purchased [] to be leased _____ years

[X] presently leased; the expiration date of the lease is: 07/31/2016

If leased, indicate land owner's name: Bartow Municipal Airport

Address: PO Box 650 Bartow FL 33830
 Street or P.O. Box City State Zip

17. Name of engineer: _____ Registration no. _____

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

Associated with: _____

18. Facility located on Indian land: [] yes [X] no

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

NAME OF PERMIT	AGENCY	PERMIT NUMBER	DATE ISSUED	EXPIRATION DATE
RCRA	FDEP	64247-HO-009	01/19/2007	12/10/2011
Solid Waste	FDEP	Pending	Pending	Pending
Air	FDEP	1050167-009-AF		11/02/2014
HSWA	FDEP	64247-HO-010	01/19/2007	12/10/2011
Southwest Florida Water Management	SWFWMD	401359	Pending	NA
APHIS	USDA	P330-09-00007		01/18/2012
TSCA	USEPA	FLD980729610	05/21/1998	05/21/2008 (renewal submitted)
Used Oil	FDEP	FLD980729610	03/28/2011	06/30/2012
Universal Waste Lamps	FDEP	FLD980729610	03/29/2011	03/01/2012
Storage Tanks	FDEP	9602192	05/28/2010	06/30/2011
Transporter & Transfer	FDEP	FLD980729610	11/01/2010	01/10/2011
Transporter	USDOT	052505 551 054NP	06/13/2008	06/30/2011

B. Site Information

- Facility is located in: Polk County
 The nearest community to the facility is: Eagle Lake
 Latitude: 27° 57' 05" Longitude: 81° 47' 09"
 Section: 14 Township: 29S Range: 25E UTM #: 17 / 422700 / 3091890
- Area of facility site is: 10.2 acres
- Attach a scale drawing and photographs of the facility showing the location of all past, present, and future treatment, storage and disposal areas. Also show the hazardous wastes traffic pattern including estimated volume and control. See Appendix A for drawing, Appendix B for photographs, Appendix C for traffic patterns.

4. Attach topographic map which show all the features indicated in the instruction sheet for this part.
See Appendix D
5. Is the site located in a 100-year flood plain? ☐ yes ☒ no
See Appendix E for 100 year flood plan map
6. The facility complies with the wellhead protection requirements of Rule 62-730-521, F.A.C.
☒ Yes ☐ No

C. Land Use Information

1. The present zoning of the site Industrial
2. If a zoning change is needed, what should the new zoning be? NA

D. Operating Information

1. Is waste generated on site? ☒ yes ☐ no
2. List the NAICS codes (5 to 6 digits) 56221
3. Using the codes and units provided in the instructions to complete the following table.
Specify:
 - a. Each process used for treating, storing or disposing of hazardous waste (including design capacities) at the facility, and
 - b. The hazardous waste(s) listed or designated in 40 CFR Part 261, including the annual quantities to be treated, stored or disposed by each process at the facility,

PROCESS CODE	PROCESS DESIGN CAPACITY AND UNITS OF MEASURE	HAZARDOUS WASTE CODE	ANNUAL QUANTITY OF HAZARDOUS WASTE AND UNITS OF MEASURE
S01	275,640 G	See Appendix G	See Appendix G
S02	72,600 G	See Appendix G	See Appendix G
T50	12,000 U (GPD)	See Appendix G	See Appendix G
T63	10,000 U (GPD)	See Appendix G	See Appendix G
T40	20,000 U (GPD)	See Appendix G	See Appendix G
T31	20,000 U (GPD)	See Appendix G	See Appendix G
T47	32,320 G	See Appendix G	See Appendix G

S01: 106,920 G – South Bld
136,400 G – North Bld
32,320 G – 4 rollofs

S02: 60,000 G T101-T110
12,600 G R202-203

MGT CODES: H-141 (Repackaging/Bulking/Consolidation – No treatment or recovery on site),
H-121 (Neutralization), H-129 (Solidification), H-061(Fuel Blending), H-039 (Filtration),
H-020 (Solvent Recovery)

Revision Number	
Date	
Page	of

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

Signature and Certification

Facility Name Clean Harbors Florida LLC
EPA/DEP I.D. No. FLD 980 729 610

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

1. Facility Operator

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

Michael Criskeny
Signature of the Operator or Authorized Representative*
Michael Criskeny VP-Environmental Compliance
Name and Title (Please type or print)
Date 3/11/13

Telephone (573) 823-2280

- Attach a letter of authorization

Revision Number	
Date	
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2. Facility Owner

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


 Signature of the Facility Owner or Authorized Representative*

John Bosek Facility GM
 Name and Title (Please type or print)

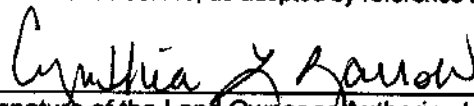
Date 03/12/13

Telephone (863) 519-6331

* Attach a letter of authorization

3. Land Owner

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


 Signature of the Land Owner or Authorized Representative*

CYNTHIA L. BARROW Executive Director
 Name and Title (Please type or print)

Date April 17, 2013

Telephone (863) 533-1195

* Attach a letter of authorization

Revision Number	
Date	
Page	of

4. Professional Engineer Registered in Florida

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

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

Signature _____

Name (please type) _____

Florida Registration Number _____

Mailing Address _____
street or P.O. Box

city state zip

Date _____

Telephone (____) _____

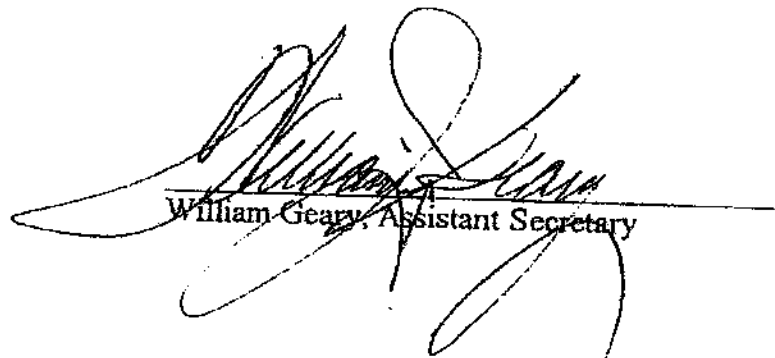
(PLEASE AFFIX SEAL)

Assistant Secretary's Certificate

I, William Geary, Assistant Secretary of Clean Harbors, Inc. and all of its subsidiaries listed on Exhibit A, certify that each corporate compliance and corporate health & safety person with the title of Vice President has the authority to sign and certify environmental documents, including but not limited to environmental reports, related to the operation of any and all of the subsidiaries listed on Exhibit A. I further certify, that each corporate compliance and corporate health & safety person with the title of Vice President has the authority to sign and certify permit applications related to the operation of any facility with more than 250 people or having gross annual sales or expenditures in excess of \$25 million dollars.

Witness the execution hereof under seal.

November 6, 2002


William Geary, Assistant Secretary

10
Assistant Secretary's Certification
11-06-02

Company
Aitair Disposal Services, LLC
Baton Rouge Disposal, LLC
Bridgeport Disposal, LLC
Clean Harbors Andover, LLC
Clean Harbors Antioch, LLC
Clean Harbors Aragonite, LLC
Clean Harbors Arizona, LLC
Clean Harbors Baton Rouge, LLC
Clean Harbors BDT, LLC
Clean Harbors Buttonwillow, LLC
Clean Harbors Canada, Inc.
Clean Harbors Chattanooga, LLC
Clean Harbors Chemical Sales, LLC
Clean Harbors Coffeyville, LLC
Clean Harbors Colfax, LLC
Clean Harbors Deer Park, LP
Clean Harbors Deer Trail, LLC
Clean Harbors Environmental Services, Inc.
Clean Harbors Florida, LLC
Clean Harbors Grassy Mountain, LLC
Clean Harbors Kansas, LLC
Clean Harbors LaPorte, LP
Clean Harbors Laurel, LLC
Clean Harbors Lone Mountain, LLC
Clean Harbors Los Angeles, LLC
Clean Harbors Mercer, Inc.
Clean Harbors of Baltimore, Inc.
Clean Harbors of Braintree, Inc.
Clean Harbors of Connecticut, Inc.
Clean Harbors of Mexico, LLC
Clean Harbors of Texas, LLC
Clean Harbors Pecatonica, LLC
Clean Harbors Plaquemine, LLC
Clean Harbors PPM, LLC
Clean Harbors Quebec, Inc.
Clean Harbors Reidsville, LLC
Clean Harbors San Jose, LLC
Clean Harbors Tennessee, LLC
Clean Harbors Westmorland, LLC
Clean Harbors White Castle, LLC
Crowley Disposal, LLC
Disposal Properties, LLC
GSX Disposal, LLC
Harbor Industrial Services Texas, LP
Hillard Disposal, LLC
Laidlaw Environmental Services de Mexico, S.A. de C.V.
Northeast Casualty Real Property, LLC
Roebuck Disposal, LLC
Sawyer Disposal Services, LLC
Tulsa Disposal, LLC
510127 N.B. Inc.
Clean Harbors Lone Star Corp.



Bartow Municipal Airport and Industrial Park

September 20, 2006

To Whom It May Concern:

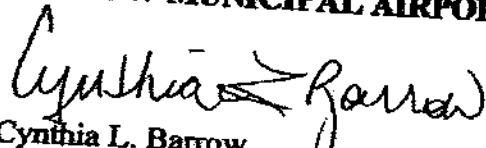
The Bartow Municipal Airport Development Authority was created by Legislation in 1967. The airport property is owned by the city of Bartow and per an agreement with the city and by city Ordinance (Section 203.1), the Airport Authority has exclusive rights to lease and develop the property, etc. I answer to an Airport Authority Board, which consists of the same five City Commissioners that were elected to the city of Bartow. When they meet on behalf of the Airport, they are considered Airport Authority Board members and when they meet to conduct city business, they meet as City Commissioners.

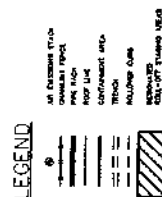
I personally was hired in 1976 and appointed as Executive Director in 1994. I have authorization to conduct and manage the Airport operations, including aviation and industrial park and more specifically with Clean Harbors -- Bartow, Florida.

If additional information or verification is needed, please contact me or the Airport/City Attorney, Mr. George T. Dunlap, III, at 863/533-3146.

Very truly yours,

BARTOW MUNICIPAL AIRPORT DEVELOPMENT AUTHORITY


Cynthia L. Barrow
Executive Director

[illegible]

CHAPTER 1
APPENDIX C

DESCRIPTION OF OPERATION

I-C-1.1 Introduction

I-C-1.1.1 Process Summary

Clean Harbors Florida LLC (CHF) is in the business of storing and treating hazardous waste.

CHF stores waste in containers and tanks prior to shipment offsite for final treatment or disposal. Organic liquids as well as sludges and solids are blended into hazardous waste fuels. For this process, agitated mix tanks are used to develop the blends as shown in the fuels blending flowsheet provided as Figure F-1.2.

CHF uses a can crusher to transfer hazardous waste from smaller containers to larger ones. The can crusher is located in the fuels blending area of the South Container Storage Building (see Figure F-1.5). The waste is transferred from the smaller cans when placed into a can crusher which;

- 1) breaches the cans and crushes them, forcing the material from the cans into a receiving container or;
- 2) by opening the cans and pouring the liquid out, and subsequently placing the can on the can crusher, crushing it so the remaining contents are forced from the can. Generally the cans range in size from one-half pint to five gallon.

The material in the paint cans is analyzed (see Chapter 2) to determine if it can be managed as a fuel grade material. If the material is not a fuel grade material it will be shipped off-site or possibly reclaimed. The can crusher is located within the same secondary containment structure as the fuels blending equipment and is cleaned after each calendar day of use. The crushed empty cans are properly disposed of off-site based on generator knowledge. A process flowsheet for the can crusher is shown in Figure F-1.3.

CHF performs bulking operations of solids. These solids are typically bulked into larger containers (typically a roll-off) from smaller containers, typically 55-gallon drums or cubic yard boxes.

Solids filtering is conducted at CHF. This operation is simple in nature and involves a pump (typically portable), and a solids filter system (typically a basket filter).

Sometimes CHF receives containers of wastes, which have two phases of materials in them (solids and liquids). These solids and liquids are separated using a sludge box type or a roll-off

with a screen near the bottom of the roll-off. The screen is elevated enough for the void beneath it to contain the liquids which flow to the bottom due to gravitational forces. The accumulated liquid is then transferred to a separate container.

CHF also performs consolidation of gases. These gases are typically bulked into larger cylinders from smaller cylinders. The gases managed will have a primary hazard class of flammable gas, 2.1, or nonflammable gas, 2.2. Containers received into the facility are sorted into groups according to their properties and compatibility. The consolidation operations will typically occur in the North Container Storage Building in a well-vented area or on the grounds within the facility's boundary. A log will be kept with the identity of the source containers that have been consolidated into each larger container.

I-C-1.1.2 Description of Wastes

CHF receives three general classifications of wastes (RCRA and non-RCRA):

- 1) Processable (On site treatment or management – off site disposal; IE: Fuel Blend, Filtration, Bulking, Consolidation, and Repackaging)
- 2) Non Processable (IE: Storage only, CICO-Container In/ Container Out)
- 3) 10 Day Transfer while enroute to designated facility. (Material not manifested to this facility)

These wastes are listed by EPA Hazardous Waste Code in Appendix II.G.

I-C-1.2 Waste Receiving

I-C-1.2.1 In-Processing of Wastes

Hazardous wastes delivered to the facility will be sampled and analyzed according to the Waste Analysis Plan (refer to Chapter 2) prior to acceptance for storage and/or treatment on-site. For waste sampled in accordance with Chapter 2, CHF attempts to verify the contents of containerized shipments within 5 working days after arrival, and bulk trucks within four work hours after arrival. For bulk shipments, the manifest is signed and entered into the operating record when the analysis demonstrates its acceptability. For containerized shipments the manifest is signed and entered into the operating record when the containers are unloaded into the staging area and piece count has been verified.

I-C-1.2.2 Non-Bulk and Small Bulk Containerized Shipments

Non-bulk containers and smaller bulk containers (such as a tote) will be off-loaded at a Container Storage Building. The containers will be removed from the truck and moved into a drum unloading staging area of a Container Storage Building (see Chapter 2 Section B for designated staging areas). There the containers will be inspected for deterioration and leakage, sampled and

analyzed. Following verification of the contents of the shipment with the manifest information, the containers will be moved from the staging area and placed into the storage area designated for safe storage of that particular type of waste (refer to Section B for a description of the system to be used by CHF to segregate incompatible wastes). Incompatible materials will be isolated during staging and analysis. The isolation will be accomplished by placing the wastes in a compatible cell or by only placing wastes in the same compatibility group in the staging area at a particular time.

I-C-1.2.3 Large Bulk Shipments

Upon arrival, the contents of these larger bulk containers will be sampled and analyzed in accordance with the Waste Analysis Plan (see Chapter 2, Section A, Appendix H). Following verification of the acceptability of the material, the contents of the bulk container will be transferred into the appropriate storage tank (as described below), another container, or shipped off-site in the container in which it arrived to the facility. Compatibility between wastes introduced into and combined in tanks will be ensured according to CHF's waste classification scheme (refer to Section B). Incoming waste will be placed into a tank, which contains compatible waste and will not be placed into a tank containing incompatible waste. Furthermore, waste will not be placed in a tank, which previously held incompatible waste unless that tank has been properly cleaned.

I-C-1.2.4 Management of Empty Containers

Containers with less than one inch of residue (as well as meeting other 40 CFR 261.7 requirements to qualify as an empty container) will typically be sent off-site to a reclaimer, scrap metal or disposal facility.

Containers with more than one inch of residue (or otherwise not classified as empty) will be shipped off-site to a permitted facility or opened and emptied. If opened and emptied, the remaining sludge residue will be poured or scraped from the container into an accumulation container or directly to a sludge mix tank (T-112 or T-114). Accumulation containers will be in containers meeting DOT performance packaging standards. After emptying the containers in this fashion, they will be reused or loaded on a transport vehicle for shipment to a reclaimer, scrap metal dealer or disposal facility. (The sludge in the accumulation containers will be managed as described in Section I-C-1.7).

I-C-1.3 Fuel Blending

I-C-1.3.1 Wastes Amendable to Fuel Blending

Wastes that are blended into hazardous waste fuel are those that are not reclaimed because they are either too viscous or contaminated to be reclaimed off-site, or they have a low recyclable

value. Fuel-grade wastes may include any of those deemed such by the waste analysis.

In 48 FR 11157, published on March 16, 1983, the EPA indicated, as policy, that hazardous waste fuel sent to an industrial furnace to be burned for energy recovery should have at least 5000 BTUs per pound, as generated. In the "BIF Rule" (56 FR 7134, published on February 21, 1991 (Section VII.D.)), the EPA rescinded this policy due to the fact that BIFs are now required to meet very stringent emissions control requirements. Based on this ruling, CHF will now be able to blend, as fuel, material that may have less than 5000 BTUs per pound.

I-C-1.3.2 Process Description

Hazardous waste fuel is developed on-site by blending fuel-grade waste from tanks in the South Tank Farm and containerized waste. The fuel is processed by blending to meet hazardous waste fuel specifications for items such as; BTU, water content, and chlorine content. The resulting fuel is pumped to the South Tank Farm or tank trucks for shipment off site.

I-C-1.3.3 Containerized Shipments

When adequate storage capacity is available in the South Tank Farm, containers of fuel-grade waste will be moved from their storage area to a containers unloading station. These fuel containers will be opened with spark-proof tools. Containers of fuel bearing mostly liquid wastes will be dumped or pumped to tank T-112, or T-114, blended, and then transferred to the South Tank Farm. In some cases the contents of the containers and contents of T-112 or T-114, may be transferred directly to tankers.

Containers with materials which are too viscous or have too high a solids content and cannot be processed in T-112, or T-114 may be placed in a drum-scraping machine which will loosen the material and reduce solids to a size which will allow the drum to be emptied. The waste may then be placed into T-112 or T-114 or a segregation tray may also be used to reduce waste particle size (refer to Figure F-1.5). Following this, the waste will be transferred to the South Tank Farm or to a tanker. Additionally, the solids may be transferred to an accumulation container for shipment off-site.

I-C-1.3.4 Tank Truck Shipments

Tank trucks will be unloaded into tanks after sampling and analysis according to the Waste Analysis Plan. Waste fuels will be segregated into tanks according to degree of chlorination and BTU value.

I-C-1.4 Corrosives and Alkalines

The contents of bulk shipments arriving in tank trucks will be sampled and analyzed according to

the Waste Analysis Plan. After confirming the identity of the waste, acidic and alkaline waste will be transferred off-site to a permitted TSDF.

Containerized wastes will be stored in the North Container Storage Building prior to shipment off-site.

The neutralization of containers of these wastes will be conducted inside the curbed portions of the facility. The materials will be neutralized by adding an appropriate neutralizing agent at a rate determined in the compatibility testing described in Chapter Two. Once a waste is neutralized, the LDR status of the waste may be affected.

I-C-1.5 Waste Filtering

CHF also receives waste, which is contaminated only with solids. These wastes can be treated by a simple filtering process and then returned to the original generator or re-sold as a product. The process involves transferring the liquid through a filter, which is small enough to retain the solids in the waste. The liquid will be transferred to the intermediate storage tanks, the product storage tanks or a different container. The solids generated by the filtering process will be treated as a hazardous waste and managed on-site as a fuel material or shipped off-site to a permitted TSDF.

The pump(s) and filter(s) will be operated only inside the curbed area of the plant (typically the driveway area), therefore secondary containment will be provided for the process.

I-C-1.6 Storage of Waste

All incoming wastes from generators will be stored in either the North or South Container Storage Building, one of eight roll-off boxes, the mix tub or the Tank Farm (unless it is shipped off-site in the transport vehicle in which it was shipped to CHF). The capacities of these areas are:

72,600 gallons -- T-101 to T-110, R202 & R203 (12 tanks) **
106,920 gallons -- South Container Storage Building
136,400 gallons -- North Container Storage Building
32,320 gallons -- Four 40 yd³ roll-off boxes
348,240 gallons -- Total capacity for hazardous waste storage

Note: Four roll-offs and mix tub are used for non-hazardous waste

** Total capacity retained but actual authorized utilization reduced by 6,200 gallons for removed T-106. Utilization of full capacity will resume upon DEP approval and tank replacement.

I-C-1.7 Sludge Management

Sludges from the container unloading stations and storage tanks will be accumulated in containers for disposal off-site. Sludge will also be generated from the waste filtering system.

All sludges to be disposed of will be analyzed (if necessary) and properly manifested to an EPA-permitted facility. If the sludges are amenable as a fuel additive for use in rotary kilns (e.g., chlorine, water content, and BTU value within acceptable limits) they will be manifested to such a facility for that purpose. If needed, absorbent will be added to containers of these sludges to absorb any free liquids, which may be present before being shipped off-site.

I-C-1.8 Storage Only Waste

The waste received at CHF often contains solids that cannot be processed such as pieces of metal, wood, plastic, personal protective equipment (PPE), soil, etc. These items are not processable in the fuels blending equipment. These items are collected and shipped off-site for disposal at a permitted facility. This collected waste material is placed into DOT approved containers such as a drum or a roll-off container before it is shipped off-site.

Waste to be placed into the roll-off container is held in smaller containers, typically 55-gallon drums before it is placed into the roll-off.

CHF generated solids such as pieces of metal, wood, plastic; PPE clothing, soil, etc. are also placed into the roll-off. The waste codes and LDR information applicable to the waste placed into the roll-off are tracked and included on the outgoing manifest and LDR forms.

The roll-off is loaded within the concrete driveway area. This ensures that the driveway contains any accidental spills and its surrounding curb. Should a spill occur, it would be cleaned up as soon as possible. Since the wastes of concern are not liquid in nature, such spills would present only minimal run-off potential. Should solids consolidated into roll offs be in a form of sludge with any free liquids, absorbent may be added as stated in sludge management section above.

LIST OF FIGURES

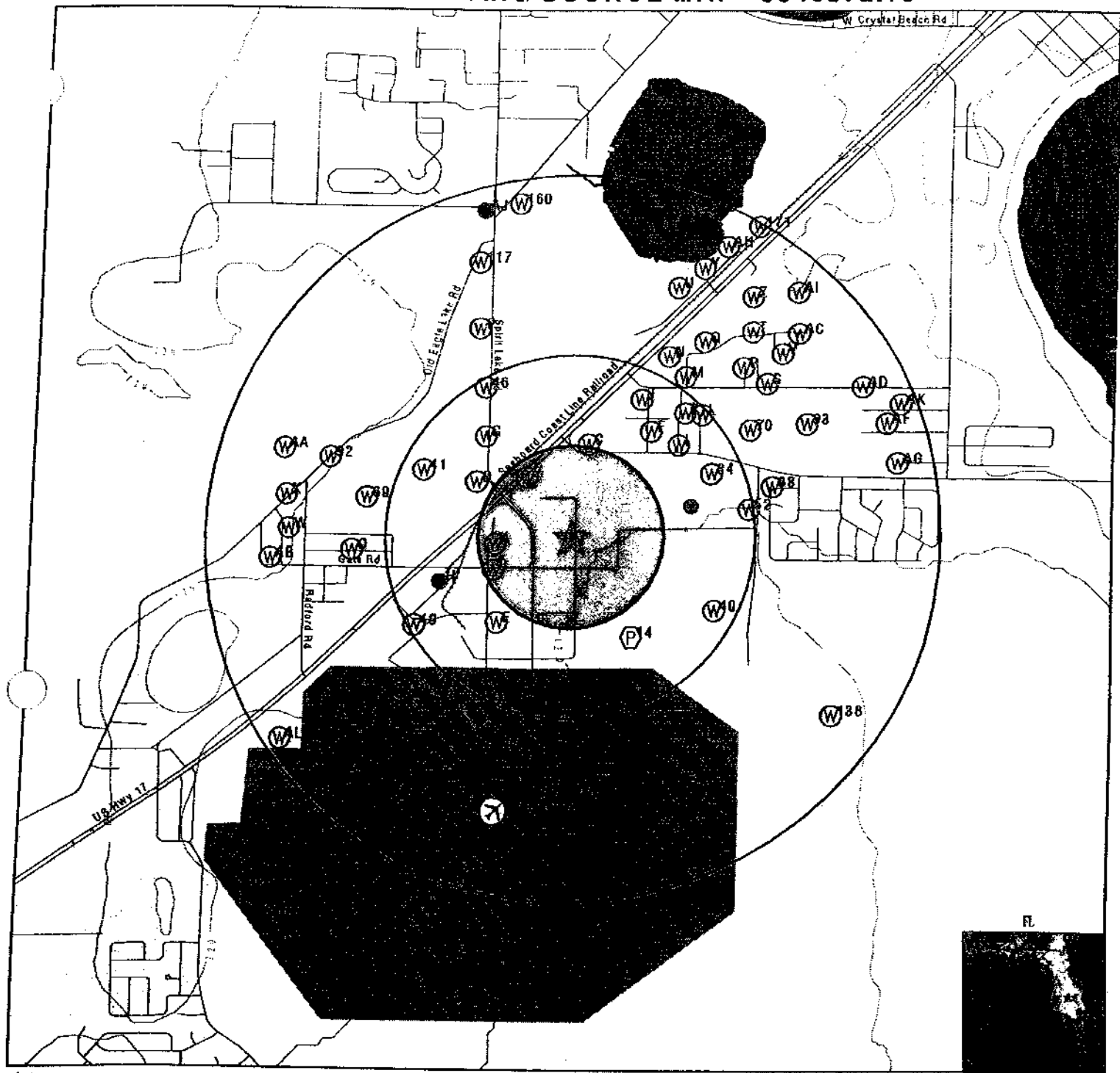
1. Figure F-1.2 Fuels Blending Process Flowsheet
2. Figure F-1.3 Can Crusher Process Flowsheet
3. Figure F-1.5 South Container Storage Building

Revision: 1
Date: 03/18/13

CHAPTER 1

APPENDIX D.1

PHYSICAL SETTING SOURCE MAP - 3546372.1s



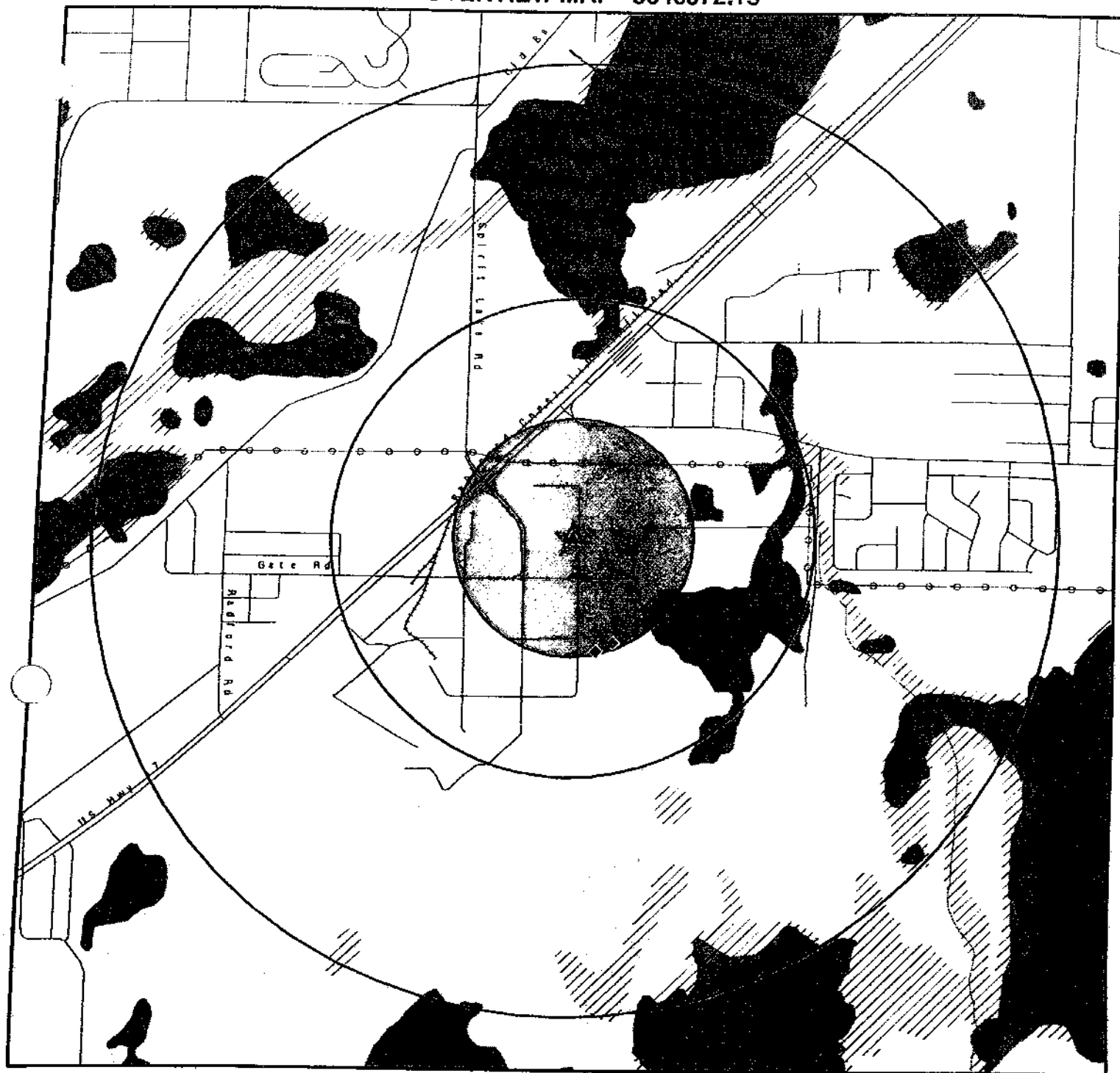
- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 6 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells
- Sink holes

SITE NAME: Clean Harbors Bartow Facility
ADDRESS: 170 Bartow Municipal Airport
 Bartow FL 33830
LAT/LONG: 27.9543 / 81.7803

CLIENT: SCS Engineers
CONTACT: Orion Holley
INQUIRY #: 3546372.1s
DATE: March 18, 2013 10:53 am

OVERVIEW MAP - 3546372.1s



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Manufactured Gas Plants

■ National Priority List Sites

■ Dept. Defense Sites

■ Indian Reservations BIA

~ Power transmission lines

~ Oil & Gas pipelines from USGS

▨ 100-year flood zone

▨ 500-year flood zone

■ National Wetland Inventory

■ State Wetlands

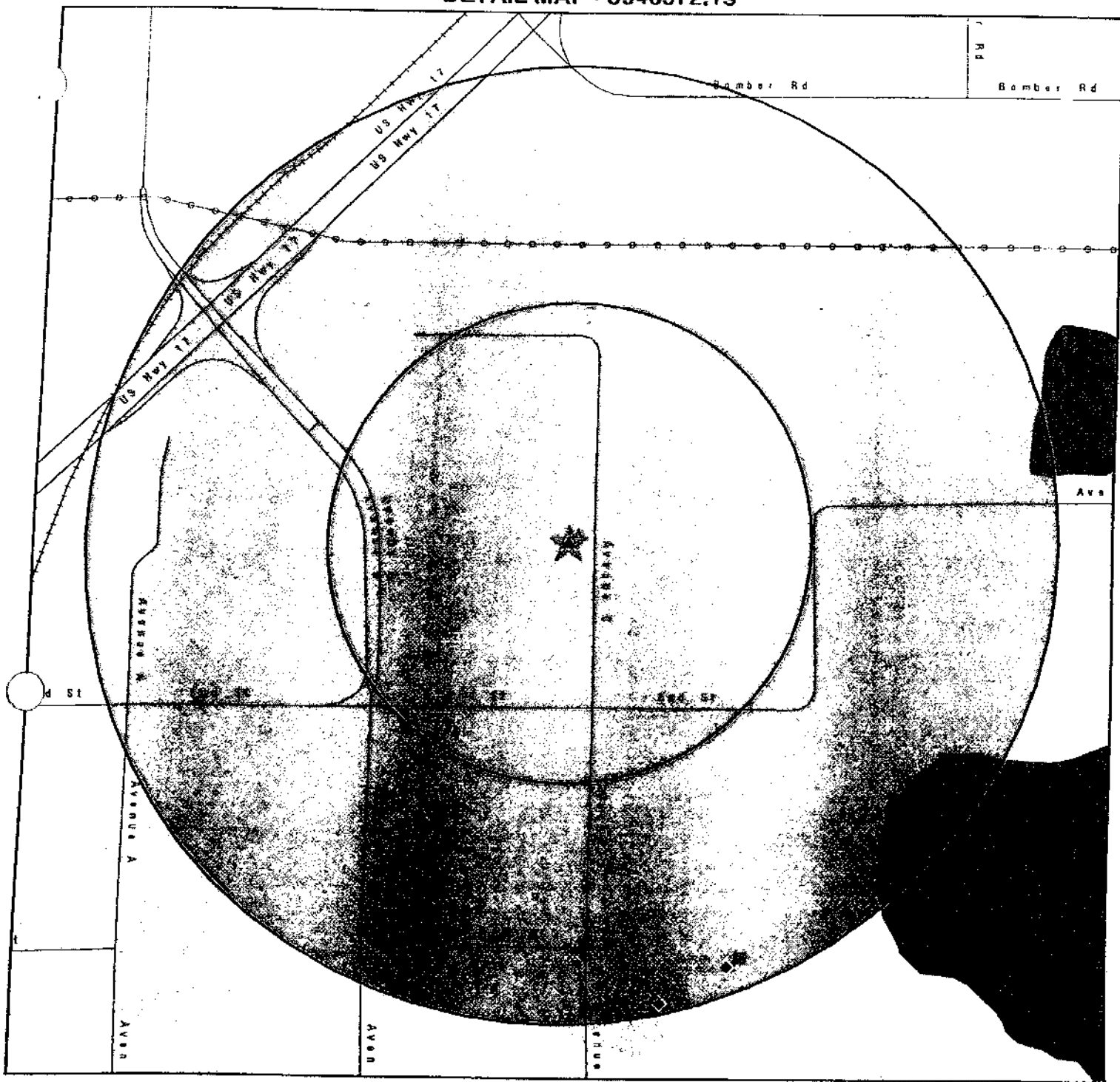
■ FL Brownfield

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Clean Harbors Bartow Facility
ADDRESS: 170 Bartow Municipal Airport
 Bartow FL 33830
LAT/LONG: 27.9543 / 81.7803

CLIENT: SCS Engineers
CONTACT: Orion Holley
INQUIRY #: 3546372.1s
DATE: March 18, 2013 10:50 am

DETAIL MAP - 3546372.1s



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Manufactured Gas Plants

▲ Sensitive Receptors

■ National Priority List Sites

■ Dept. Defense Sites

■ Indian Reservations BIA

~ Power transmission lines

~ Oil & Gas pipelines from USGS

■ 100-year flood zone

■ 500-year flood zone

■ National Wetland Inventory

■ State Wetlands

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SITE NAME: Clean Harbors Bartow Facility
ADDRESS: 170 Bartow Municipal Airport
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LAT/LONG: 27.9543 / 81.7803

CLIENT: SCS Engineers
CONTACT: Ordon Holtey
INQUIRY #: 3546372.1s
DATE: March 18, 2013 10:52 am

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
K47	FLSA70000029821	1/4 - 1/2 Mile NE
K48	FLSA70000029757	1/4 - 1/2 Mile NE
49	FLSA70000029273	1/4 - 1/2 Mile WSW
K50	FLSA70000029787	1/4 - 1/2 Mile NE
K51	FLSA70000029788	1/4 - 1/2 Mile NE
52	FLSA70000029567	1/4 - 1/2 Mile East
M53	FLSA70000029826	1/4 - 1/2 Mile NE
M54	FLSA70000029827	1/4 - 1/2 Mile NE
L55	FLSA70000029793	1/2 - 1 Mile NE
M56	FLSA70000029814	1/2 - 1 Mile NE
M57	FLSA70000029864	1/2 - 1 Mile NNE
M58	FLSA70000029865	1/2 - 1 Mile NNE
M59	FLSA70000029862	1/2 - 1 Mile NNE
M60	FLSA70000029848	1/2 - 1 Mile NE
M61	FLSA70000029858	1/2 - 1 Mile NE
M62	FLSA70000029859	1/2 - 1 Mile NE
M63	FLSA70000029885	1/2 - 1 Mile NNE
N64	FLSA70000029937	1/2 - 1 Mile NNE
M65	FLSA70000029896	1/2 - 1 Mile NNE
M66	FLSA70000029900	1/2 - 1 Mile NNE
M67	FLSA70000029854	1/2 - 1 Mile NE
68	FLSA70000029608	1/2 - 1 Mile ENE
69	FLSW60000015236	1/2 - 1 Mile West
70	FLSA70000029719	1/2 - 1 Mile ENE
N71	FLSA70000029930	1/2 - 1 Mile NNE
M72	FLSA70000029907	1/2 - 1 Mile NE
O73	FLSA70000029479	1/2 - 1 Mile West
O74	FLSW60000015179	1/2 - 1 Mile West
P75	FLSW60000015391	1/2 - 1 Mile NNW
76	FLSA70000029101	1/2 - 1 Mile SW
Q77	FLSA70000029959	1/2 - 1 Mile NNE
Q78	FLSA70000029961	1/2 - 1 Mile NNE
R79	FLSA70000029876	1/2 - 1 Mile NE
S80	FLSA70000029819	1/2 - 1 Mile NE
R81	FLSA70000029839	1/2 - 1 Mile NE
Q82	FLSA70000030007	1/2 - 1 Mile NNE
Q83	FLSA70000029946	1/2 - 1 Mile NE
S84	FLSA70000029837	1/2 - 1 Mile NE
R85	FLSA70000029880	1/2 - 1 Mile NE
Q86	FLSA70000029958	1/2 - 1 Mile NE
P87	FLSW60000015410	1/2 - 1 Mile NNW
Q88	FLSA70000030025	1/2 - 1 Mile NNE
R89	FLSA70000029957	1/2 - 1 Mile NE
R90	FLSA70000029913	1/2 - 1 Mile NE
S91	FLSA70000029855	1/2 - 1 Mile NE
92	FLSA70000029660	1/2 - 1 Mile WNW
93	FLSW60000015306	1/2 - 1 Mile ENE
S94	FLSA70000029853	1/2 - 1 Mile NE
T95	FLSA70000029975	1/2 - 1 Mile NE
U96	FLSA70000030095	1/2 - 1 Mile NNE
V97	FLSA70000029914	1/2 - 1 Mile NE
W98	FLSA70000029500	1/2 - 1 Mile West

CLOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
T99	FLSA70000030031	1/2 - 1 Mile NE
V100	FLSA70000029909	1/2 - 1 Mile NE
X101	FLSA70000029584	1/2 - 1 Mile West
T102	FLSA70000029973	1/2 - 1 Mile NE
U103	FLSA70000030125	1/2 - 1 Mile NNE
X104	FLSA70000029573	1/2 - 1 Mile West
U105	FLSA70000030110	1/2 - 1 Mile NNE
W106	FLSA70000029538	1/2 - 1 Mile West
V107	FLSA70000029942	1/2 - 1 Mile NE
V108	FLSA70000029954	1/2 - 1 Mile NE
X109	FLSA70000029620	1/2 - 1 Mile West
W110	FLSA70000029525	1/2 - 1 Mile West
T111	FLSA70000030038	1/2 - 1 Mile NE
V112	FLSA70000029976	1/2 - 1 Mile NE
Y113	FLSA70000030128	1/2 - 1 Mile NNE
Z114	FLSA70000030068	1/2 - 1 Mile NE
Z115	FLSA70000030058	1/2 - 1 Mile NE
X116	FLSA70000029601	1/2 - 1 Mile West
117	FLSA70000030157	1/2 - 1 Mile NNW
W118	FLSA70000029518	1/2 - 1 Mile West
Y119	FLSA70000030140	1/2 - 1 Mile NNE
Y120	FLSA70000030143	1/2 - 1 Mile NNE
Y121	FLSA70000030144	1/2 - 1 Mile NNE
X122	FLSA70000029581	1/2 - 1 Mile West
X123	FLSA70000029580	1/2 - 1 Mile West
X124	FLSA70000029577	1/2 - 1 Mile West
AA125	FLSW60000015273	1/2 - 1 Mile WNW
AB126	FLSA70000029461	1/2 - 1 Mile West
AB127	FLSA70000029459	1/2 - 1 Mile West
AC128	FLSA70000029992	1/2 - 1 Mile NE
Z129	FLSA70000030097	1/2 - 1 Mile NE
Y130	FLSA70000030148	1/2 - 1 Mile NNE
Z131	FLSA70000030112	1/2 - 1 Mile NNE
AA132	FLSW60000015284	1/2 - 1 Mile WNW
AC133	FLSA70000030014	1/2 - 1 Mile NE
Y134	FLSA70000030173	1/2 - 1 Mile NNE
Y135	FLSA70000030158	1/2 - 1 Mile NNE
AD136	FLSA70000029804	1/2 - 1 Mile ENE
AE137	FLSA70000030248	1/2 - 1 Mile NNE
138	FLSW60000015062	1/2 - 1 Mile SE
AF139	FLSA70000029695	1/2 - 1 Mile ENE
Z140	FLSW60000015441	1/2 - 1 Mile NE
AG141	FLSA70000029632	1/2 - 1 Mile ENE
AF142	FLSA70000029728	1/2 - 1 Mile ENE
AH143	FLSA70000030187	1/2 - 1 Mile NNE
AE144	FLSA70000030264	1/2 - 1 Mile NNE
AH145	FLSA70000030216	1/2 - 1 Mile NNE
AD146	FLSA70000029882	1/2 - 1 Mile ENE
AD147	FLSA70000029883	1/2 - 1 Mile ENE
AD148	FLSA70000029887	1/2 - 1 Mile ENE
AD149	FLSA70000029753	1/2 - 1 Mile ENE
AH150	FLSA70000030188	1/2 - 1 Mile NNE

GEOCHECK - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AI151	FLSA70000030093	1/2 - 1 Mile NE
AH152	FLSA70000030205	1/2 - 1 Mile NNE
AD153	FLSA70000029815	1/2 - 1 Mile ENE
AF154	FLSA70000029729	1/2 - 1 Mile ENE
AI155	FLSA70000030105	1/2 - 1 Mile NE
AF156	FLSA70000029754	1/2 - 1 Mile ENE
AF157	FLSA70000029745	1/2 - 1 Mile ENE
AJ158	FLSW60000015524	1/2 - 1 Mile NNW
159	FLSA70000030297	1/2 - 1 Mile NNE
160	FLSA70000030343	1/2 - 1 Mile North
AH161	FLSA70000030224	1/2 - 1 Mile NNE
AF162	FLSA70000029730	1/2 - 1 Mile ENE
AG163	FLSA70000029668	1/2 - 1 Mile ENE
AK164	FLSA70000029816	1/2 - 1 Mile ENE
AL165	FLSA70000029037	1/2 - 1 Mile SW
AK166	FLSA70000029746	1/2 - 1 Mile ENE
AL167	FLSA70000029061	1/2 - 1 Mile WSW
AL169	FLSA70000029036	1/2 - 1 Mile SW
AL170	FLSA70000028999	1/2 - 1 Mile SW
171	FLSA70000030274	1/2 - 1 Mile NNE
AK172	FLSA70000029796	1/2 - 1 Mile ENE

OTHER STATE DATABASE INFORMATION

STATE SINK HOLES INFORMATION

DIRECTION FROM TP	DISTANCE FROM TP
ENE	1/4 - 1/2 Mile

GEOCHECK® - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CLEAN HARBORS BARTOW FACILITY
170 BARTOW MUNICIPAL AIRPORT
BARTOW, FL 33830

TARGET PROPERTY COORDINATES

Latitude (North):	27.9543 - 27° 57' 15 48"
Longitude (West):	81.7803 - 81° 46' 49.08"
Universal Transverse Mercator:	Zone 17
UTM X (Meters):	423243.8
UTM Y (Meters):	3092213.5
Elevation:	123 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	27081-H7 BARTOW, FL
Most Recent Revision:	1987

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

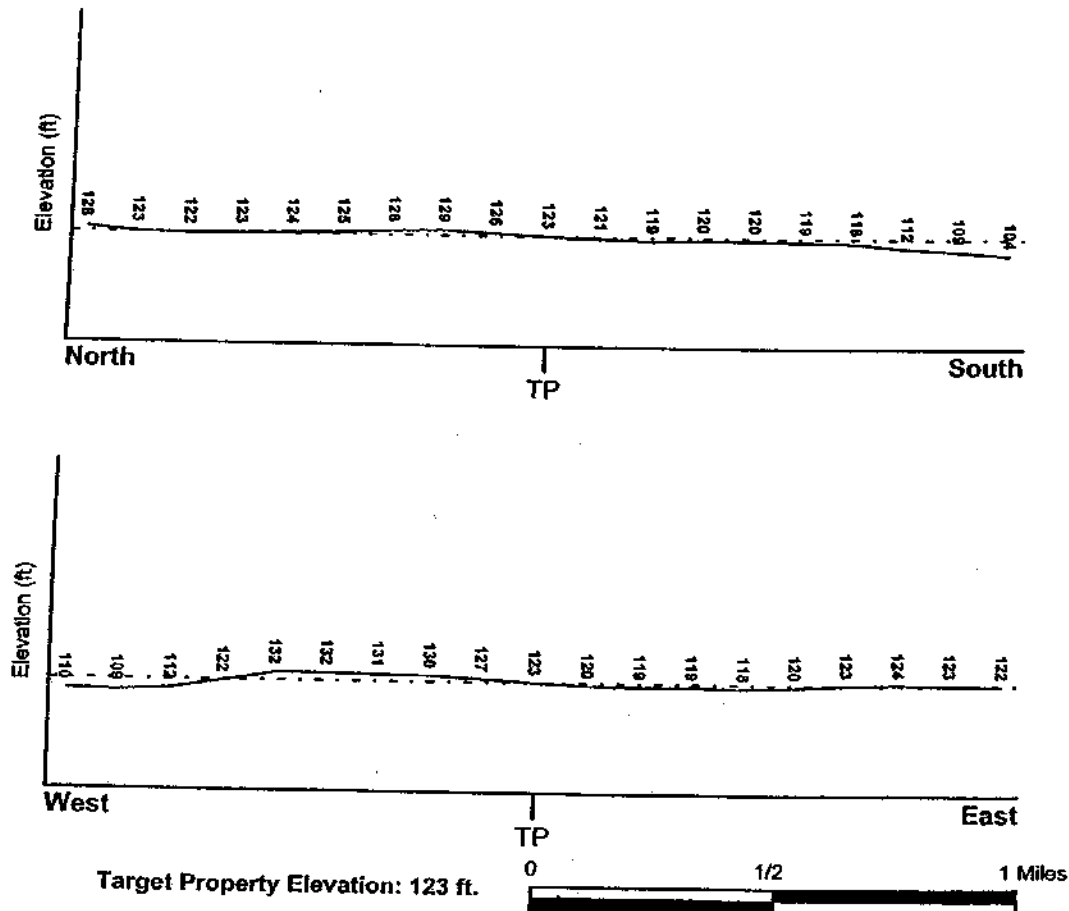
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County
POLK, FL

FEMA Flood
Electronic Data
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 1202610525B - FEMA Q3 Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property
BARTOW

NWI Electronic
Data Coverage
YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data:*

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID
Not Reported

LOCATION
FROM TP

GENERAL DIRECTION
GROUNDWATER FLOW

GEOCHECK - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Tertiary
Series:	Miocene
Code:	Tm (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

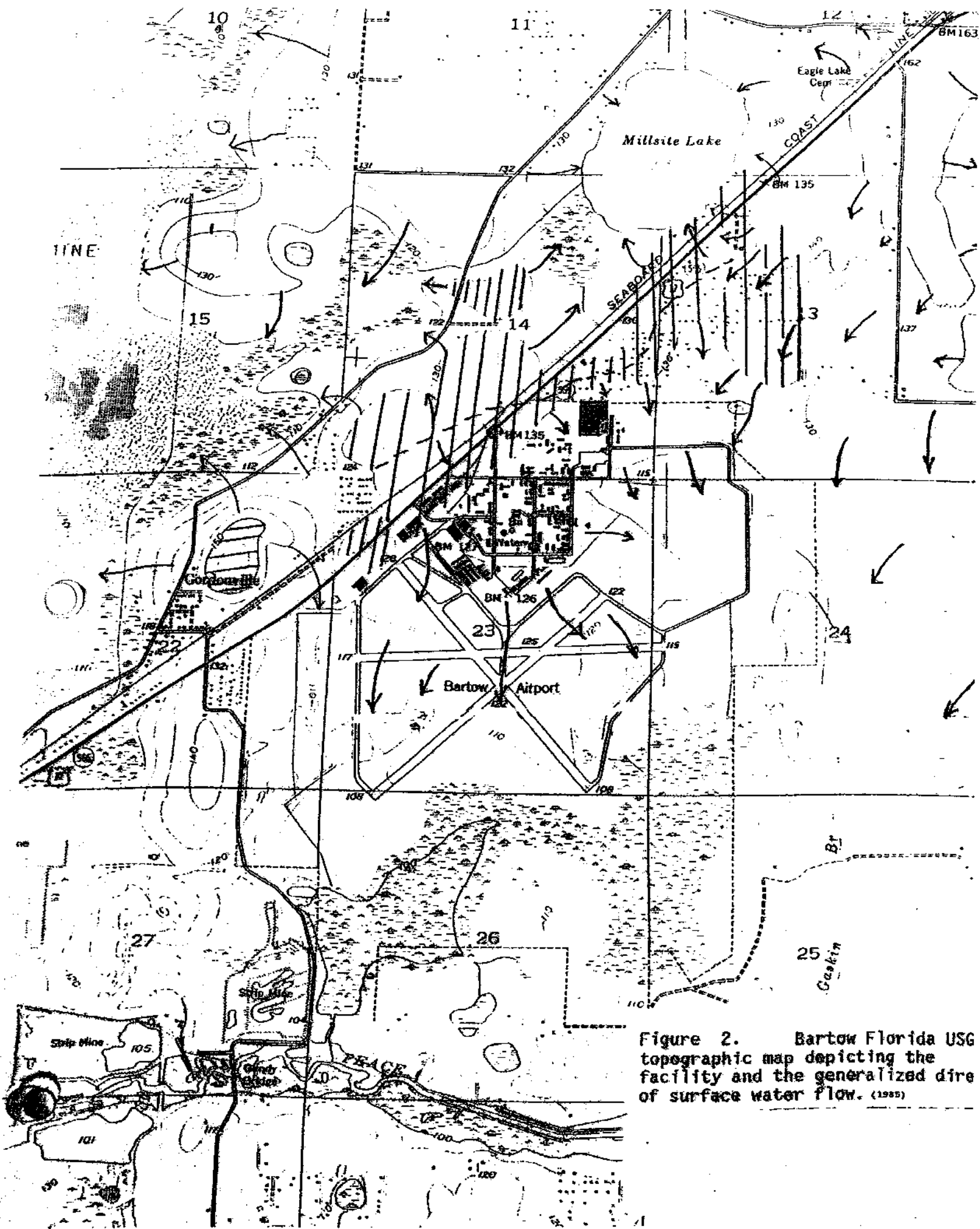
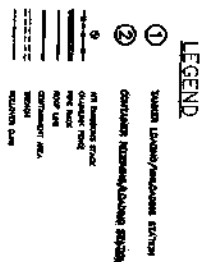


Figure 2. Bartow Florida USG topographic map depicting the facility and the generalized dire of surface water flow. (1985)



PRODUCT DESIGN

E	REPA PRIMER APPLICATION - APPROX 200 ml TUB
D	REPA PRIMER APPLICATION - PHOTOSED TANK T-1
C	REMOVED BOTTOM STORAGE TANKS & CRUDE STORAGE TANK T-108
B	REMOVED TANKS, HERE STILL TWO PROCESS AREAS
A	FOR APPROVAL

DATE	NAME	DATE	NAME
02/11/20	K.M.C.	02/12/20	K.M.C.
02/12/20	K.M.C.	02/06/11	K.M.C.
02/06/11	K.M.C.	02/06/11	K.M.C.

CleanHarbor

CLEAN HARBORS BARTON, INC.

●

Figure C-1.

APPENDIX II-D

COST ESTIMATE AND FINANCIAL ASSURANCE

1.0 Closure Cost Assumptions

This closure cost estimate is based on final closure occurring at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive. Costs are based on using a third party to close the facility and the expense of off-site treatment and disposal.

The permitted storage capacity is:

- 72,600 gallons in storage tanks;
- 243,320 gallons in containers in the Storage Buildings and/or 32,320 gallons in roll-offs, the total maximum container storage not to exceed 275,640 gallons
- Maximum permitted capacity RCRA waste is 348,240 gallons
- Non RCRA solidifies waste in roll-offs and mix tub is 39,794 gallons (four roll-offs and one mix tub)

Transportation and disposal costs are based on consolidating drums of waste into bulk transportation equipment per Section K. The following disposal facilities and respective costs are used throughout the closure costs:

Waste type	Technology	Facility	Trans	Disposal	T&D Total
Fuels/ Solvents	Cement Kiln	Geocycle Holly Hills SC	\$0.26/gal	\$0.18/gal	\$0.44/gal
Solids	RCRA landfill	CWM Emelle AL	\$79.10/T	\$93.00/T	\$172.10/T
Solids	Non RCRA landfill	WM Okeechobee	16.73/T	25.00/T	41.73/T
Aqueous	Wastewater Treat	Dupont Deepwater NJ	\$0.60/gal	\$0.25/gal	\$0.85/gal

Based on historical experience, the following inventory waste types are incorporated in this closure cost:

Containers

Waste type	Technology	Units	Total Gallons (or ton)
Fuels/ Solvents	Cement Kiln	3474 drums	191,070 gallons
Solids	RCRA landfill	950 drums	52,250 gallons (259 tons)

Solids	RCRA landfill	4 rolloffs	32,320 gallons (160 tons)
Solids	Non RCRA Landfill	4 rolloffs	39,794 gallons (197 tons)
Total			315,434 gallons

Tanks		
Fuels	Cement Kiln	72,600 gallons
Total		72,600 gallons

The following assumptions are used to calculate disposal costs:

- Tank solids and sludges will be slurried and disposed in bulk.
- Wastewater generated is assumed to be RCRA regulated.
- All drums are consolidated into bulk transporters for off-site shipments
- Empty drums will be shipped offsite for reclamation.
- Drums contain 55 gallons and weighs 545 lbs net weight.
- Bulks solid density is 2000 lbs/yd³
- Roll-offs contain 30 yd³
- Tankers contain 6000 gallons
- Wastewater will be loaded directly onto transporters.

Costs for decontamination and disposal of potentially contaminated equipment such as tanks, pipes, valves, pumps, filters, personal protective equipment, brooms, shovels, can crushers, drum scraper, compactor/drum crusher etc. are included in this estimate. Also included are costs for laboratory analyses, utilities, and an independent, registered professional engineer's certification of complete closure.

2.0 Closure Cost Calculation

Costs for each of the steps outlined in the Closure Plan are itemized below. References to section numbers correspond to those in Section K. (NOTE: the pressure washing activities will be done using a high pressure machine which conserves water and only 2 gallons per square foot are needed)

SOUTH CONTAINER STORAGE, STAGING, AND LOADING RAMP AREAS	
Steps 1 - 4, 6, & 8 Waste Removal and Disposal (This analysis assumes	

Step 5 is not possible, therefore Step 7 is not needed.)	
Skilled Laborer - 100 hours @ \$31.00/hour	\$3,100
Supervisor/Inspector - 50 hours @ \$51.50/hour	\$2,575
Off-site disposal - 1,544 fuel drums @ \$24.20/drum (55 gal @ \$0.44/gal)	\$37,365
Off-site disposal - 400 RCRA solids drums (109 ton) @ \$172.10/ton	\$18,759
Off-site disposal - 4 roll-off containers (40 tons each) @ \$172.10/ton	\$27,536
Steps 9-11; Building Decontamination	
Supervisor - 140 hours @ \$51.50/hour	\$7,210
Skilled Labor - 252 hours @ \$31.00/hour	\$7,812
Skilled Labor - 63 hours @ \$19.00/hour	\$1,197
Pressure washer rental - 252 hours \$860/month (160 hours/month)	\$1,355
Miscellaneous Equipment - \$20	\$20
Detergent - \$170	\$170
Wastewater Transport - 40,500 gallons @ \$0.60/gal	\$24,300
Wastewater Disposal - 40,500 gallons @ \$0.25/gallon (pressure wash 14,000 s.f. @ 2 gals/s.f. and triple rinse 12,500 s.f. @ 1 gal/s.f.)	\$10,125
PPE - \$10/day/person @ 42 days with 2 persons	\$840
Steps 12-14; Rinsate Sampling	
Skilled Labor - 13 samples @ \$22.50/sample	\$293
Sample Analysis - 13 samples @ \$475/sample	\$6,175
Miscellaneous Equipment - \$30	\$30
Sample Shipping - 13 samples @ \$20/sample	\$260
Steps 15-26; Soil Sampling	

Skilled Labor - 14 samples @ \$45/sample	\$630
Sample Drilling - 14 samples @ \$16.40/L.F. @ 1.5 L.F./sample	\$344
Split Spoon Sample Collection - 14 samples @ \$31.00/sample	\$434
Sample Analysis - 14 samples @ \$580/sample	\$8,120
Miscellaneous Equipment - \$40	\$40
Decontamination of Drilling Equipment - 2 days @ \$90/day	\$180
Sample Shipping - 14 samples @ \$20/sample	\$280
Disposal of Drill Cuttings - \$170	\$170
Step 27: Independent Florida PE	\$4,000
TOTAL FOR CLOSURE COST OF SOUTH CONTAINER STORAGE, STAGING, AND LOADING RAMP AREAS	\$163,320
FUELS BLENDING AREA	
Steps 5-6; Equipment Cleaning and Disposal	
Mobilization (included as part of Tanks costs)	\$0
Supervisor - 1 hour @ \$51.50/hour	\$52
Skilled Labor - 3 hours @ \$31/hour	\$93
Pressure Washer Rental - 3 hours @ \$860/month (160 hours/month)	\$16
Tank Removal - 2 tanks @ \$1,284/tank	\$2,568
Equipment Decontamination - 1 day @ \$247/day	\$247
Wastewater Transport - 568 gallons @ \$0.60/gal	\$341
Scrap Steel Transport - \$1.70/mile @ 100 miles/truck for 2 trucks	\$340

Wastewater Disposal - 568 gal @ \$0.25/gallon (pressure wash 284 s.f. @ 2 gals/s.f.)	\$142
Solid Waste/Carbon Steel Disposal (salvaged material)	\$0
PPE \$10/day/person @ 1 day with 3 persons and 1 day with 6 persons.	\$90
Steps 7-9; Fuels Blending Area Decontamination	
Supervisor - 104 hours @ \$51.50/hour	\$5,356
Skilled Labor - 180 hours @ \$31.00/hour	\$5,580
Skilled Labor - 48 hours @ \$19.00/hour	\$912
Pressure Washer Rental - 180 hours @ \$860/month (160 hours/month)	\$968
Miscellaneous Equipment - \$20	\$20
Detergent - \$130	\$130
Wastewater Transport - 28,420 gallons @ \$0.60/gal	\$17,052
Wastewater Disposal - 28,420 gallons @ \$0.25/gallon (pressure wash 9,472 s.f. @ 2 gals/s.f. and triple rinse 9,472 s.f. @ 1 gal/s.f.)	\$7,105
PPE - \$10/day/person @ 36 days with 2 persons	\$720
Steps 10-12; Rinsate Sampling	
Skilled Labor - 8 samples @ \$22.50/sample	\$180
Sample Analysis - 8 samples @ \$475/sample	\$3,800
Miscellaneous Equipment - \$30	\$30
Sample Shipping - 8 samples @ \$20/sample	\$160
Steps 13-23; Soil Sampling	
Skilled Labor - 4 samples @ \$45/sample	\$180
Sample Drilling - 4 samples @ \$16.40/L.F. @ 1.5 L.F./sample	\$98
Split Spoon Sample Collection - 4 samples @ \$31.00/sample	\$124

Sample Analysis - 4 samples @ \$580/sample	\$2,320
Miscellaneous Equipment - \$30	\$30
Decontamination of Drilling Equipment - 1 day @ \$90/day	\$90
Sample Shipping - 4 samples @ \$20/sample	\$80
Disposal of Drill Cuttings - \$170	\$170
Step 24: Independent Florida PE	\$4,000
TOTAL FOR CLOSURE OF THE FUELS BLENDING AREA	\$52,994
NORTH CONTAINER STORAGE, STAGING, AND LOADING RAMP AREAS	
Steps 1 - 4, 6, & 8 waste removal and disposal (This analysis assumes Step 5 is not possible, therefore Step 7 is not needed.)	
Skilled Laborer - 150 hours @ \$31.00/hour	\$4,650
Supervisor/Inspector - 75 hours @ \$51.50/hour	\$3,863
Off-site disposal - 1,930 fuel drums @ \$24.20/drum (55 gallon @ \$0.44/gal)	\$46,706
Off-site disposal - 550 RCRA solids drums (150 tons) @ \$172.10/drum	\$25,815
Steps 9-14; Building Decontamination	
Supervisor - 270 hours @ \$51.50/hour	\$13,905
Skilled labor - 457 hours @ \$31.00/hour	\$14,167
Skilled labor - 116 hours @ \$19.00/hour	\$2,204
Pressure washer rental - 457 hours @ \$860/month (160 hours/month)	\$2,456
Miscellaneous Equipment - \$50	\$50
Detergent - \$313	\$313
Wastewater Transport - 72,780 gallons @ \$0.60/gal	\$43,668
Wastewater Disposal - 72,780 gallons @ \$0.25/gallon (pressure wash 24,844 s.f. @ 2 gals/s.f. and triple rinse 23,100 s.f. @ 1	\$18,195

gal/s.f.)	
PPE - \$10/day/person @ 82 days with 2 people/day	\$1,640
Steps 12-14; Rinsate Sampling	
Skilled Labor - 21 samples @ \$22.50/sample	\$473
Sample Analysis - 21 samples @ \$475/sample	\$9,975
Miscellaneous Equipment - \$50	\$50
Sample Shipping - 21 samples @ \$20/sample	\$420
Steps 15-25; Soil Sampling	
Skilled Labor - 16 samples @ \$45/sample	\$720
Sample Drilling - 16 samples @ \$16.40/L.F. @ 4.5 L.F./sample	\$1,181
Split Spoon Sample Collection - 16 samples @ \$31.00/sample	\$496
Sample Analysis 16 samples @ \$580/sample	\$9,280
Miscellaneous Equipment - \$40	\$40
Decontamination of Drilling Equipment - 2 days @ \$90/day	\$180
Sample Shipping -16 samples @ \$20/sample	\$320
Disposal of Drill Cuttings - \$170	\$170
Step 25: Independent Florida PE	\$4,000
TOTAL FOR CLOSURE OF NORTH CONTAINER STORAGE, STAGING, AND LOADING RAMP AREAS	\$204,937
TANKS	
Steps 1-6; Waste Removal and Disposal	
Supervisor/Inspector - 100 hours @ \$51.50/hour	\$5,150
Skilled Laborers - 350 hours @ \$31.00/hour	\$10,850
Transportation & Disposal costs for liquids --72,600 gal @ \$0.44/gal (fuels blending)	\$31,944
Steps 7-8; Tank Cleaning and Disposal	

Mobilization - \$3,500	\$3,500
Supervisor - 36 hours @ \$51.50/hour	\$1,854
Skilled Labor - 71 hours @ \$31/hour	\$2,201
Pressure Washer Rental - 71 hours @ \$860/month (160 hours/month)	\$382
Tank Removal - 12 tanks @ \$1,284/tank	\$15,408
Equipment Decontamination - 6 days @ \$247/day	\$1,482
Wastewater Transport - 14,912 gallons @ \$0.60/gal	\$8,947
Scrap Steel Transport - \$1.70/mile @ 100 miles/truck and 12 trucks	\$2,040
Wastewater Disposal - 14,912 gal. @ \$0.25/gallon (pressure wash 7,456 s.f. @ 2 gals/s.f.)	\$3,728
Scrap Steel Disposal (salvaged material)	\$0
PPE - \$10/day/person @ 11 days with 2 persons and 6 days with 6 person	\$580
Steps 9-11; Containment Area Decontamination	
Supervisor - 40 hours @ \$51.50/hour	\$2,060
Skilled Labor - 68 hours @ \$31.00/hour	\$2,108
Skilled Labor - 18 hours @ \$19.00/hour	\$342
Pressure Washer Rental - 68 hours @ \$860/month (160 hours/month)	\$366
Miscellaneous Equipment - \$20	\$20
Detergent - \$50	\$50
Wastewater Transport - 10,776 gallons @ \$0.60/gal	\$6,466
Wastewater Disposal - 10,776 gallons @ \$0.25/gallon (pressure wash 3,592 s.f. @ 2 gals/s.f. and triple rinse 3,592 s.f.)	\$2,694
PPE - \$10/day/person @ 12 days with 2 people	\$240
Steps 12-14; Rinsate Sampling	

Skilled Labor - 16 samples @ \$22.50/sample	\$360
Sample Analysis - 16 samples @ \$475/sample	\$7,600
Miscellaneous Equipment - \$30	\$30
Sample Shipping - 16 samples @ \$20/sample	\$320
Steps 15-25; Soil Sampling	
Skilled Labor - 6 samples @ \$45/sample	\$270
Sample Drilling - 6 samples @ \$16.40/LF @ 1.5 L.F./sample	\$148
Split Spoon Sample Collection - 6 samples @ \$31.00/sample	\$186
Sample Analysis - 6 samples @ \$580/sample	\$3,480
Miscellaneous Equipment - \$30	\$30
Decontamination of Drilling Equipment - 1 day @ \$90/day	\$90
Sample shipping - 6 samples @ \$20/sample	\$120
Disposal of Drill Cuttings - \$170.00	\$170
Step 26; Independent Florida PE	\$4,000
TOTAL FOR CLOSURE OF THE TANKS	\$119,216
PERIMETER ROAD (STORAGE AREA)	
Steps 3-5; Decontamination	
Supervisor - 76 hours @ \$51.50/hour	\$3,914
Skilled Labor - 120 hours @ \$31.00/hour	\$3,720
Skilled Labor - 32 hours @ \$19.00/hour	\$608
Pressure Washer Rental - 120 hours @ \$860/month (160 hours/month)	\$645
Miscellaneous Equipment - \$20	\$20
Detergent - \$85	\$85
Wastewater Transport - 18,765 gallons @ \$0.60/gal	\$11,259
Wastewater Disposal - 18,765 gallons @ \$0.25/gallon (pressure wash 6,255 s.f. @ 2 gals/s.f. and triple rinse 6,255 s.f. @ 1	\$4,691

gal/s.f.)	
PPE - \$10/day/person @ 21 days with 2 people	\$420
Steps 6-8; Rinsate Sampling	
Skilled Labor - 5 samples @ \$22.50/sample	\$113
Sample Analysis - 5 samples @ \$475/sample	\$2,375
Miscellaneous Equipment - \$30	\$30
Sample Shipping - 5 samples @ \$20/sample	\$100
Steps 9-19; Soil Sampling	
Skilled Labor - 4 samples @ \$45/sample	\$180
Sample Drilling - 4 samples @ \$16.40/L.F. @ 1.5 L.F./sample	\$98
Split Spoon Sample Collection 4 samples @ \$31.00/sample	\$124
Sample Analysis - 4 samples @ \$580/sample	\$2,320
Miscellaneous Equipment - \$30	\$30
Decontamination of Drilling Equipment - 1 day @ \$90/day	\$90
Sample shipping - 4 samples @ \$20/sample	\$80
Disposal of Drill Cuttings - \$170.00	\$170
Step 20; Independent Florida PE	\$4,000

TOTAL FOR PERIMETER ROAD (STORAGE AREA) \$35,072

Mix Tub Area

Steps 1-4, 6 & 8 Waste Removal and Disposal (This analysis assumes Step 5 is not possible, therefore Step 7 is not needed.)

Skilled labor – 8 hours @ \$31.00/hour \$248

Supervisor/Inspector – 8 hours @ \$51.50/hour	\$412
Off-site disposal – 5 roll-off containers (40 tons each) @ \$41.73/ton	\$8346
Steps 3-5 Decontamination	

Supervisor – 16 hours @ \$51.50/hour	\$824
Skilled Labor - 32 hours @ \$19.00/hour	\$608
Pressure Washer Rental – 16 hours @ \$860/month (160 hours /month)	\$86
Miscellaneous Equipment - \$20	\$20
Detergent - \$30	\$30
Wastewater Transport – 6,750 gallons @ \$0.60/gal	\$3,942
Wastewater Disposal -6,750 gallons @ \$0.25/gal (pressure wash 2,250 ft ² @ 2 gals/ft ² and triple rinse 6,255 ft ² @ 1 gal/ft ²)	\$1642
PPE - \$10/day/person @ 2 days with 2 people	\$40
Steps 6-8; Rinsate Sampling	
Skilled Labor - 4 samples @ \$22.50/sample	\$90
Sample Analysis - 4 samples @ \$475/sample	\$1900
Miscellaneous Equipment - \$30	\$30
Sample Shipping - 4 samples @ \$20/sample	\$80
Steps 9-19; Soil Sampling	
Skilled Labor – 4 samples @ \$45/sample	\$180
Sample Drilling – 4 samples @ \$16.40/L.F. @ 1.5 L.F./sample	\$98
Split Spoon Sample Collection 4 samples @ \$31.00/sample	\$124
Sample Analysis – 4 samples @ \$580/sample	\$2,320
Miscellaneous Equipment - \$30	\$30
Decontamination of Drilling Equipment – 1 day @ \$90/day	\$90
Sample shipping – 4 samples @ \$20/sample	\$80

Disposal of Drill Cuttings - \$170.00	\$170
Step 20; Independent Florida PE (cost included in perimeter road)	
TOTAL FOR MIX TUB AREA	\$21,390
PERIMETER ROAD (NON-STORAGE AREA)	
Non-Staging Area Decontamination	
Supervisor - 16 hour @ \$51.50/hour	\$824
Skilled Labor - 29 hours @ \$31.00/hour	\$899
Pressure Washer Rental - 29 hours @ \$860/month (160 hours/month)	\$156
Wastewater Transport - 6,000 gallons @ \$0.60/gal	\$3,600
Wastewater Disposal - 6,000 gallons @ \$0.25/gallon (pressure wash 3,000 s.f. @ 2 gal./s.f.)	\$1,500
PPE 10/day/person @ 5 days with 2 persons	\$100
Non-staging Area Rinsate Sampling	
Skilled labor - 2 samples @ \$22.50/sample	\$45
Sample Analysis - 2 samples @ \$475/sample	\$950
Miscellaneous Equipment - \$30	\$30
Sample Shipping - 2 samples @ \$20/sample	\$40
Independent Florida PE	\$1,500
TOTAL FOR PERIMETER ROAD (NON-STORAGE AREA)	\$9,644
MISCELLANEOUS EQUIPMENT	
Decontamination Skilled Labor - 45 hours @ \$31.00/hour	\$1,395
Supervisor - 20 hours @ \$51.50	\$1,030
Solvent cleaning - 125 gallons of solvent @ \$1.03/gallon	\$129
Disposal of solvent - 125 gallons @ \$24.20/drum (3 drums)	\$73
Disposal of expendable equipment, personal protective	

equipment, etc. - 100 drums (27 tons) @ \$172.10/ton	\$4,647
Independent Florida PE	\$1,500
TOTAL FOR MISCELLANEOUS EQUIPMENT	\$8,774
TOTAL CLOSURE COST ESTIMATE	\$615,347**

**** FOR THE PURPOSE OF CROSS CHECKING, AND STANDARDIZATION WE HAVE TAKEN OUR ESTIMATES AND RUN THEM THROUGH THE COST PRO PROGRAM AS REQUESTED BY DEP AND BECAUSE IT IS GENERALLY ACCEPTED AS A USEFUL TOOL TO USE AS SUPPORTING DOCUMENTATION FOR ESTIMATED CLOSURE COSTS.**

TOTAL CLOSURE COST ESTIMATE USING COST PRO	\$839,675
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The estimated cost derived from COST PRO will be used for closure cost estimate and certification upon approval.

COST PRO supporting file is presented in Attachment 2 to this section.

3.0 Amendment of the Closure Cost Estimate

By August 31 of each year, the closure cost estimate will be adjusted using the inflation factor derived from the annual Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its "Survey of Current Business". In addition, a new closure estimate will be prepared whenever a change in the closure plan affects the cost of such closure.

4.0 Financial Mechanism for Closure

A copy of CLHB's current (prior to approval of the estimate reflected in this submission) financial instrument for closure (Certificate of Insurance) is presented in Attachment 1 and complies with 40 CFR Part 264.143 (d). A new one will be submitted upon approval of new closure cost amount.

5.0 Liability Requirements

CLHB has liability insurance for sudden occurrences in the amount of one million dollars per occurrence with an annual aggregate of at least two million dollars. An originally signed duplicate of the agreement and appropriate insurance forms provided by the Florida Department of Environmental Protection (FDEP), have been completed and submitted back to the FDEP office in Tallahassee. The wording of the endorsement is identical to that specified in 40 CFR 264.151(g). A copy of DEP's receipt and approval of CLHB's liability insurance document submission is enclosed as part of Attachment 1.

ATTACHMENT 1

CURRENT FINANCIAL ASSURANCE

ATTACHMENT 2

COST PRO FILE



Florida Department of Environmental Protection

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

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Sent Via E-Mail
Riffel.Bruce@CleanHarbors.com

January 15, 2013

Mr. Bruce Riffel
Clean Harbors of Florida, LLC
170 Bartow Municipal Airport
Bartow, Florida 33830-9572

Re: FLD 980 729 610
Clean Harbors of Florida, LLC
170 Bartow Municipal Airport
Bartow, Florida 33830-9572

Subject: Financial Responsibility Compliance for 2013

Dear Mr. Riffel:

The Department has received the documentation submitted to demonstrate financial responsibility for the above referenced facility. The Steadfast Insurance Company certificate of insurance policy number ENC-5254338-02 effective September 6, 2006 indicates an amount of \$857,652 to cover the inflation adjusted closure cost. In addition, the Steadfast Insurance Company certificate of liability insurance policy number PLC-5834364-00 effective November 1, 2012 demonstrates the required coverage for sudden and nonsudden accidental occurrences.

Therefore, Clean Harbors of Florida is in compliance with the hazardous waste facility financial responsibility requirements of 40 CFR Part 264 Subpart H as adopted by reference in Rule 62-730.180 of the Florida Administrative Code.

If you have any questions, please contact me at 850-245-8793.

Sincerely,

Edgar Echevarría

Edgar Echevarría
Environmental Specialist II
Hazardous Waste Regulation Section

EE

Copy: Stewart.RobertG@EPAMail.EPA.gov
Sean.McGinnis@DEP.State.FI.US
FDEP File

APPENDIX II-F.6

INSPECTIONS

1.0 General Inspection Requirements

CHF will conduct regular inspections to detect malfunctions, deterioration, operator errors, or discharges which may be causing or may lead to a release of hazardous waste constituents to the environment or a threat to human health. The schedule for inspections as well as all equipment, structures and devices to be inspected is described below. The frequency of inspections is based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident. Unless otherwise indicated, all inspection records (which include the remedial actions) will be maintained electronically and/or on-site for at least three years. (Examples of the Facility Inspection Forms used to document the inspections conducted along with findings is shown in Figure 4.1)

2.0 Daily Inspections

The following items will be visually inspected and findings documented on a daily basis:

- above ground portions of the tank systems to detect corrosion or releases of waste;
- construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system to detect erosion or signs of releases of hazardous waste;
- areas subject to spills, such as loading and unloading areas;

3.0 Weekly Inspections

On a weekly basis, areas where containers are stored (Container Storage Buildings, Mix Tub Area and perimeter road for roll-offs) will be inspected for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

The can crusher is also inspected on a weekly basis for deteriorating or malfunctioning equipment.

The bermed perimeter road which serves as containment of the active portion of the facility is inspected on a weekly basis for integrity, cracks, etc.

Safety and emergency equipment will be inspected on a weekly basis.

All pumps in service which comes in contact with hazardous waste, will be visually inspected on a weekly basis for indications of leaks.

4.0 Monthly Inspection

Each valve and pump at CHF which comes into contact with hazardous waste will be monitored monthly for leaks according to the applicable requirements of 40 CFR Part 264, Subpart BB. Included in this monthly monitoring are all the non welded fittings, connectors and flanges which come in contact with hazardous waste. As provided for in 40 CFR 264.1062, CHF may elect to use one of the alternate monitoring periods for pumps and valves. If an alternate method is chosen, the appropriate notification required by 264.1062(a)(2) will be made. Example of monthly subpart BB monitoring form is found in section 2S – figure 14.2

5.0 Annual Inspections

Each permitted tank will be inspected annually for shell thickness. The results of this inspection will be recorded on the Annual Tank Shell Thickness Inspection Log (see example Figure 4.2).

6.0 Schedule of Remedial Action

Any deterioration or malfunction of equipment, structures or devices which an inspection reveals, will be remedied on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action would be taken immediately. Any item noted during an inspection will be noted on the inspection form and forwarded to the person(s) assigned to conduct the remedial action.

LIST OF FIGURES

1. Figure 4.1 Example of Facility Inspection Form
2. Figure 4.2 Example of an Annual Tank Shell Thickness
Inspection Log

SECTION B

CONTAINERS AND CONTAINMENT STRUCTURES FOR THE STORAGE OF HAZARDOUS WASTE

1.0 South Container Storage Building

1.1 Design of Aisle Space, Capacity, and Containment Volume

The South Container Storage Building consists of a graded 6-inch thick reinforced concrete slab with a dike beginning flush with the highest point of the slab and extending around the perimeter of the building, maintaining the same elevation as the highest point of the slab. The reinforced concrete foundation is enclosed with a structural steel super structure and a metal roof. The 6-inch reinforced concrete slab provides an effective impermeable base due to the rapid removal of any standing liquids. At the time of construction, the floor was sealed with a concrete curing agent and sealer making it impervious. All joints in the building have stainless steel troughs to direct any leakage to the building center trench for collection and removal. The building is not totally enclosed, but has the south, east and west sides closed, and the north side fully open. This configuration reduces the amount of rainfall which can blow into the building. In addition to providing shelter from the rain, these sides add structural support. The roof is equipped with several vents and skylights. The open air nature of this storage area is deemed to be the safest design in that it provides:

1. Shelter from the sun, which could otherwise cause problems with confined flammable liquids.
2. Shelter from rain, which could otherwise cause deterioration of the drums.
3. Will not allow a potentially explosive vapor buildup in the building in the case of a spill.
4. Allows access to control fires.

The South Container Storage Building will typically be used to store 55-gallon containers. Other types of containers stored are totes, cubic yard boxes, etc. The containers will be stored on pallets 42" X 42" or 48" X 48" with typically 4 drums placed on each pallet, and stacked two pallets high. The drums, with a 2' diameter, will extend over the sides of the pallets in some cases.

(NOTE: Stacking configuration of containers smaller than 55 gallon drums may vary based on stability considerations for stacking; such as weight and container strength but, shall not exceed the permit condition limitation of 255 gallons per pallet for non bulk containers).

The pallets used for this operation are designed to hold the weight of 8 drums. The maximum weight that could be supported is 9,500 lbs. The pallets constructed for this purpose are typically manufactured from oak or plywood. Figure 11.1 illustrates the typical arrangement of pallets in the building. However, any alternate arrangement which may be used will not allow more than the maximum of 106,920 gallons in the storage building. Thirty-inch spacing will be provided as aisle space between each row of pallets. Eighteen (18) rows will be the maximum number of rows south of the collection trench and these 18 rows will have no more than 26 pallets (13 double Stacked) per row. Therefore, each row on Figure 11.1 represents a maximum of 104 55-gallon drums stored. There will be one row of nine pallets north of the collection trench located immediately behind the fuels blending area wall.

The building has the capacity to hold the volume equivalent of 1944 55-gallon drums (i.e. 106,920 gallons). CHF will store wastes in portions of the building which are protected by a low expansion foam fire protection system. All storage will conform to NFPA-30 requirements. Wastes to be stored in the South Container Storage Building are compatible with each other and will be at least 50 feet from the fence which is the facility boundary.

The South Container Storage Building is designed with a secondary containment volume of 16,852 gallons (10% of 106,920 gallons of storage requires 10,692 gallons of containment capacity). The building has an approximate slope of 1/8" per foot to allow for the drainage of any spills or rainwater. Since most of the liquids handled have viscosities very similar to water, and are not highly viscous wastes, the 1/8" per foot slope is considered to be adequate. This results in a 7 1/4" drop across the building. In addition, the drums will be resting on pallets, so they will not rest in standing liquids even if a removal system were not in place. The system for removal of standing liquids is the sloped floor provided by the concrete slab base. The calculation of design containment is very conservative because the pallets will allow liquids to collect within the volume they occupy. The volumes calculated were determined by the open area on the building floor, the allowable height of accumulated liquids prior to contacting the drums (5" at the drum locations), the containment volume of drainage ditch and slope of the floor. The containment volume calculations are as follows:

At 1/8" per foot slope, liquid (at a depth of 5") will accumulate at a distance of 40' on each side of the centerline containment trench.

The volume of this triangle shaped containment on each side of the trench is:

$$\frac{1}{2}bhl = \frac{1}{2}(40')(4167')(125') = 1041 \text{ ft}^3$$

where: b = base
h = height

l = length

volume of the centerline trench is 171 ft³ (20.125" deep on the east end, 4.5" deep on the west end, (for an average depth of 12.3125"), 16" wide and 125' long).

$$\begin{aligned}\text{Total containment volume} &= 2(1041 \text{ ft}^3) + 171 \text{ ft}^3 \\ &= 2253 \text{ ft}^3 \\ &= 16,852 \text{ gal (@ 7.48 gal/ft}^3\text{)}\end{aligned}$$

1.2 Containment System Run-on

The containment system (building concrete pad) is constructed 6 inches above the surrounding grade. Therefore, run-on into the building is precluded. Some rainwater, however, could be trapped in the drainage system because of rain blowing it. This amount would be minimal, and as seen by the containment volume calculations, which is a very conservative figure, any rain blown into the building would be easily contained in addition to the 10% of the total volume of wastes.

Also the capacity allows for the volume occupied by the 8" concrete wall in back of, and on the west end of the fuels blending area. The wall is .67' wide; 102' in length (62' on back, 40' on west end); and 5" deep for a total volume of 28 ft³ (213 gallons). It also leaves plenty of secondary containment volume for the fuels blending tanks (largest is 780 gallons of working volume).

Design Containment Volume	16,852 gallons
Volume occupied by fuel blend wall	213 gallons
Volume of fuels blending tank	780 gallons
<u>10% of drums capacity*</u>	<u>10,692 gallons</u>
Additional available containment	5,167 gallons

- * This number will actually be less because solids which contain no liquids will also be stored in this building.

Accumulated precipitation will be removed within 24 hours of discovery (unless additional time is needed for identification, and/or additional equipment is needed) to assure that the collection trench will not overflow. Since the system is designed to drain the liquids away from the drums it is not critical that the liquids be removed immediately. Figure 11.1 depicts the drainage pattern in the building. Should waste accumulate in the trench, it will be collected in containers and managed in accordance with regulatory requirements immediately. Water collected in the drainage ditch will be removed from the collection trench, analyzed and the analysis will define the handling procedures. If determined to be acceptable for discharge, it will be discharged to the P.O.T.W.

Access to remove the liquids can be accomplished without entering the building since the trench extends outside of the building approximately 12 inches and can be directly pumped out from there using a vacuum hose. The trench which extends outside for access is always covered (no rain water exposure) and is higher than the low point slope of the trench middle to prevent any overflow out from the extension portion. Any over flow of the trench will only occur in the contained warehouse.

2.0 North Container Storage Building

2.1 Design of Aisle Space, Capacity, and Containment Volume

The North Container Storage Building consists of a graded reinforced concrete slab 8" thick. The floor is divided into 17 separate cells which allow segregated storage of incompatible wastes. The reinforced concrete foundation is enclosed with a structural steel super structure and a metal roof. The concrete floor is sealed with a concrete sealer and curing agent which makes it impervious. All joints in the containment cells have been sealed and are equipped with water stops to prevent migration from the containment area to the environment. The building is totally enclosed, except for the loading dock areas which are open. This configuration reduces the amount of rainfall which can blow into the building. In addition to providing shelter from the rain, these sides add structural support. The roof is also equipped with vents. The nature of this storage area is deemed to be the safest design because it provides:

1. Shelter from the sun, which could otherwise cause problems with confined flammable liquids.
2. Shelter from rain, which could otherwise cause deterioration of the drums.
3. Will not allow a potentially explosive vapor buildup in the building in the case of a spill.
4. Allows access to control fires.

The North Container Storage Building is typically used to store 55-gallon containers. Examples of other types of containers stored are totes, cubic yard boxes, 5-gallon containers, 30-gallon containers, etc. The containers will be stored on pallets 42" X 42" or 48" X 48" with typically 4 drums placed on each pallet, and stacked two pallets high. The drums, with a 2' diameter, will extend over the sides of the pallets in some cases.

(NOTE: Stacking configuration of containers smaller than 55 gallon drums may vary based on stability considerations for stacking; such as weight and container strength but, shall not exceed the permit condition limitation of 255 gallons per pallet for non bulk containers).

The pallets used for this operation are designed to hold the weight of 8 drums. The maximum weight that could be supported is 9,500 lbs. The pallets constructed for this purpose are typically manufactured from oak or plywood. Figure 11.2 illustrates the typical arrangement of pallets in the building. However, any alternate arrangement which may be used will not allow more than the maximum of 136,400 gallons in the storage building. Thirty-inch spacing will be provided as aisle space between each row of pallets.

The building has the capacity to hold the volume equivalent of 2480 55-gallon drums (i.e. 136,400 gallons). The building will be protected by a foam fire protection system. All storage will conform to NFPA-30 requirements. All flammable waste in the North Container Storage Building will be at least 50 feet from the fence which is the facility boundary.

Each cell in the North Container Storage Building is designed to contain greater than 10% of its total storage volume contained therein. The containment calculations of each cell are included in Figure 11.3. The system for removal of standing liquids is the sloped floor provided by the concrete slab base so that the liquids will drain to one side of each cell. Any contained liquid will then be removed using absorbent, a portable pump, etc. Should waste accumulate in the cells, it will be collected in containers and managed in accordance with regulatory requirements and will be handled and disposed as determined by analysis.

Pallets are placed in aisle for two purposes; while in the process of actively loading and unloading trucks, and to gain access to pallets stored behind the first pallet of a row.

2.2 Containment System Run-on

The containment system (building concrete pad) is constructed at least 3 feet above the surrounding grade. Therefore, run-on into the building is precluded. Some rainwater may, blow into the building from extreme weather events but this will be minimal and be on the dock area only.

3.0 CONTAINER MANAGEMENT PRACTICES

All containers will be kept closed during storage and opened only when material is being sampled, added or removed from the containers. Drums will be stored on wooden pallets, each measuring 42" X 42" or the typical 48" square and holding 4 drums. Each pallet will be moved using a forklift which meets the OSHA requirements of 29 CFR 1910.178. Other containers, such as totes which have legs may not be stored on pallets. In addition, the forklift may be equipped with a detachable device which will enable the driver to handle drums without pallets. Hand carts for moving drums will also be available. All containers used by CHF for the storage of hazardous wastes will meet appropriate D.O.T. performance standards.

A maximum of four hazardous waste roll-off containers are stored at the facility in designated areas illustrated in Figure 18.5.3. They will be stored within the curbed driveway area which will provide secondary containment. The roll-offs will generally contain solids so the need for secondary containment will be minimal. The tops of the containers will be kept closed, unless it is necessary to add or remove waste. CHF uses two types of roll-offs, open top roll-offs and "sludge boxes". Liquids are not placed in open top roll-offs, however on occasion rain or absorbed liquids may accumulate in the bottom.

4.0 Waste Segregation and Classification System

4.1 Container Storage

CHF will use a waste classification system for containerized waste that will preclude incompatible reactions due to the commingling of incompatible hazardous wastes. Incompatible materials will be kept separate. In the North Container Storage Building there are 17 segregation cells. Wastes are segregated in one of these cells according to compatibility. These compatibility classes are based on the Department of Transportation (DOT) segregation rules (49 CFR Part 177.848) which apply to the commingling of wastes during transportation.

The container management practices outlined in this chapter as well as Appendices II-F.3, F.4 and F.5, provides for the safe management of containers. Employees who handle these containers receive extensive training on proper container management practices. CHF does not reuse any containers which previously held a hazardous waste or contain residue. CHF does reuse outer containers that contain no residue and which were previously used for lab packs which were processed onsite. Those containers had no contact with any waste material shipped in them and contain no residue.

CHF has a procedure in place to minimize the possibility of mixing incompatibles. The procedure is based on the DOT shipping restrictions specified in 49 CFR 177.848. The Segregation Table for Hazardous Materials denotes which class of material may be transported together and any special precautions which must be observed. The items which cannot be transported together are denoted by an "X". CHF does not store those materials which are classified by an "X" in the same cell.

Storage compatibility decisions will be made based upon the primary hazard class of the material.

The South Container Storage Building does not contain segregation cells; therefore all wastes within this building are compatible.

Universal waste (including UPW Pharmaceutical) maybe stored in any permitted area as long as it is compatible with other wastes in that storage cell.

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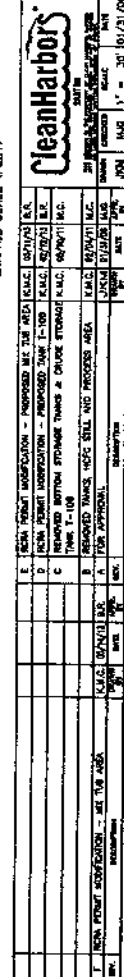
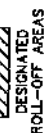


FIGURE 18.5.3

Appendix II-F.2

CONTINGENCY PLAN

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CONTINGENCY PLAN

1.0 Purpose and Implementation of the Plan

This contingency plan is designed to minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to the air, soil, or surface water.

This plan will be implemented immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.

2.0 Content of the Plan

2.1 Emergency Procedures

2.1.1 List of CHF Emergency Coordinators

The individuals who will act as CHF's Primary Emergency Coordinator and alternates are listed in Figure 6.1. At least one of these individuals or designee will be at CHF or on call at all times in order to coordinate all emergency response measures, and all have the authority to commit the resources needed to carry out the contingency plan (refer to Figure 6.2).

2.1.2 Primary Emergency Coordinator and Alternate Emergency Coordinator Responsibilities

During a release, fire or explosion, the Primary Emergency Coordinator (EC) (or designee in authority at the time of the incident) will immediately notify all facility personnel of the emergency by activating the fire alarm, using the public address system, or voice. If an evacuation is ordered facility personnel will proceed to the designated rally point for accountability purposes to ensure no one is unaccounted for.

Upon becoming aware of the incident, the EC will immediately proceed to the scene to identify the character, exact source, amount and extent of any released material and; to assess possible hazards to human health or the environment that may result from the release, fire or explosion (refer to Section 8.0 for assessment procedures). If the EC determines that the incident presents an imminent hazard or is an actual emergency, he/she will immediately notify:

1. Director, Hazardous Materials Team, Public Safety Department, 911 or (863) 534-5600.
2. The Polk County Fire Department, 911.

If the situation requires the evacuation of areas surrounding CHF (evacuation assessment procedures are presented in Sections 2.4 and 8.0), the EC shall notify:

1. The Florida Department of Environmental Protection (813) 632-7600. (8 am to 5 pm, non-weekend days and non-holidays)
2. The Polk County Sheriff's Department 911 or (863) 298-6200
3. The National Response Center 1-800-424-8802.
4. The Division of Emergency Management (Florida) (850) 413-9911.

When notifying the National Response Center, the EC will provide the following information:

1. His/her name and telephone number.
2. The name and location of the facility. (CHF, Avenue D, North, Bartow Municipal Airport Industrial Park Building # 170).
3. Time and type of incident.
4. Chemicals involved and quantity, if known.
5. The extent of injuries, if any.
6. The possible hazards(s) to human health or the environment outside the facility, if any.

If the EC determines that the release may create a possible hazard to human health or the environment outside the facility, he/she will notify the National Response Center (800-424-8802) and the Florida Division of Emergency Management (850-413-9911).

If the emergency response to a fire, explosion, or release requires CHF to stop operations, the EC will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. The EC will also ensure that tanks, valves, pipes, and other equipment are monitored to detect leaks, pressure build-up, gas generation, and ruptures.

The EC will direct the activities of responding agencies assisting in an emergency. Coordination agreements have been submitted to various local agencies (see Section 2.2).

Immediately after an emergency, the EC will initiate and supervise clean-up of the areas affected by the incident. If necessary, a clean-up contractor will be contacted to perform the clean-up operation. Otherwise, the on-site employees will contain and recover the hazardous wastes released during the emergency. Recovered waste, contaminated soil, surface water, contaminated residues, or any other material resulting from the emergency will be accumulated for analysis and characterization, and treatment or disposal. The EC will ensure that no waste which may be incompatible with the released material is treated, stored, or disposed until clean-up procedures have been completed.

Recovered hazardous wastes will be treated as follows:

1. Spilled waste in a containment area will be placed into a container or tank and stored until processed.
2. If a significant amount of water has contaminated the wastes, the wastes will be stored until tested. If within the allowable limits it will be discharged to the P.O.T.W. Logs of the water discharged to the P.O.T.W. will be maintained in the operating record for three years. These logs will include: test results of the water, volume discharged, date and time of discharge. If the levels are too high for discharge, the water will either be treated on-site or shipped to a RCRA permitted TSDF facility.
3. If soil becomes contaminated with hazardous waste, the soil will be collected and analyzed. If it is determined to be hazardous, the contaminated soil will be shipped to RCRA permitted TSD facility.

The EC will notify the Director of the Southwest District of the Florida Department of Environmental Protection (FDEP) that:

- no waste that may be incompatible with the released material is treated, stored, or disposed until cleanup procedures are completed; and
- all emergency equipment listed in this Contingency Plan is cleaned and fit for its intended use before operations are resumed.

Under the supervision of the EC all emergency equipment used to respond to an emergency will be cleaned and fit for its intended use before operations at CHF are resumed. Equipment such as disposable protective clothing will be placed into a container for shipment to a permitted TSDF facility. All small equipment will be cleaned inside a container within a secondary containment area. The rinse water from this cleaning will be analyzed by the on-site laboratory to determine the proper disposal method.

Decontamination equipment available on-site includes the following:

- Open head container - located near the South Container Storage Building to collect and accumulate decontamination rinsate.
- Chemical resistant hoses - located in the Maintenance Building - to act as a conduit for the flow of decontamination solutions.
- Pressure washer - located in the Maintenance Building.

CHF will notify the FDEP and local authorities that the facility is in compliance with 40 CFR 264.56(h) before operations are resumed in the affected area(s) of the facility.

The EC shall ensure that the time, date, and details of the incident are noted in CHF's operating record. As required by DEP, notification of any noncompliance which may endanger health or the environment, including the release of any hazardous waste that may endanger public drinking water supplies or the occurrence of a fire or explosion from the facility which could threaten the environment or human health outside the facility, shall be reported verbally to the Department within 24 hours, and a written report shall be provided within five days. The verbal report shall include the name, address, I.D. number, and telephone number of the facility, its owner or operator, the name and quantity of materials involved, the extent of any injuries, an assessment of actual or potential hazards, and the estimated quantity and disposition of recovered material. The written submission shall contain:

1. A description and cause of the noncompliance.
2. If not corrected, the expected time of correction, and the steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

2.2 Arrangements With Local Authorities

Coordination agreements have been submitted to various local agencies designating their response roles in the event of an emergency (see Figures 6.3 and 6.4). Copies of all executed agreements are maintained at the facility. First responders from the local fire department conduct site visits and familiarize themselves with materials onsite.

2.3 Emergency Equipment

2.3.1 General

Two emergency response cabinets are maintained for the storage of spill response equipment. One cabinet is located in the Maintenance Building and one is in the South Container Storage Building. The spill response equipment maintained in each cabinet, its uses and capabilities, are listed in Figure 6.5. First aid kits are also located near each cabinet and the North Container Storage Building. Basic CPR or first aid will be administered by qualified personnel when necessary and those injuries requiring more than first aid will be attended to by EMS and evacuated to the designated hospital.

CHF maintains equipment in addition to that stored in each emergency response cabinet at other locations at the facility. A list of this equipment, its uses and capabilities is also contained in Figure 6.5 or listed below:

- Open head salvage drums.
- Absorbent open head drums in each Container Storage Building, at each tank farm, and in the process area.
- Push brooms and shovels in each Container Storage Building, at each tank farm, and in the process area.

- Face Shields in the South Container Storage Building and in the process area.

2.3.2 Fire Suppression Equipment

The South Container Storage Building is protected by a closed-head wet pipe automatic fire sprinkler system using 286°F fusible link sprinkler heads. To assist personnel in controlling a fire, there is also a 50-foot 1.5-inch hose connected to the sprinkler system at the northeast corner of the building.

The North Container Storage Building is protected by a closed-head wet pipe automatic fire sprinkler system using 286°F fusible link sprinkler heads. To assist personnel in controlling a fire, there are also four 100-foot 1.5-inch hoses connected to the sprinkler system in the building (two on the North side and two on the South side).

Two fire hydrants are located at the facility and two fire cannons are equipped with foam capabilities. Two 125-pound dry chemical extinguishes are provided on wheeled carts. One is located at the north side of the South Container Storage Building and one is just west of the process area. In addition to these units, portable ABC-rated fire extinguishes are located throughout the facility (see Figure 6.6).

The reactives room in the North Container Storage Building is equipped with an automatically activated CO₂ system. It also has a fire door with closes automatically when a fire is present. The door has a fuse link which releases the door, allowing closure at 165°F. The CO₂ system is activated at 190°F.

2.3.3 Communication Equipment

In the event of a release, fire or explosion, communication on-site is accomplished by voice, intercom and/or sounding the alarm. To summon outside assistance, the following equipment is available.

- Pull stations - (to sound the alarm, alert the fire department and open the front gate) are located inside the North and South Container Storage Buildings, inside the Boiler Building, outside (south side) of the Maintenance Building, the Process Area and the Main Office Building.
- Telephones - (available to Emergency Coordinator to notify outside agencies and summon emergency response assistance) are located in the Maintenance Building, North and South Container Storage Buildings, Process Area, in the small room adjacent to the South Container Storage Building and the Main Office Building.

2.4 Evacuation Plan

The EC will assess the need for evacuation of the facility or off-site areas as follows. If it is unsafe for personnel to remain on-site, he will order an immediate evacuation. Unsafe

conditions may include the presence of hazardous constituents in gaseous or liquid form in quantities which will endanger plant personnel or residents off-site; imminent explosions, or the potential for any of the above to occur. Evacuation routes and the assembly point are specified on Figure 6.8. An accounting of all personnel will occur at the assembly point to ensure everyone is accounted for. The primary evacuation route is the main gate (shown on Figure 6.8) and should this main route be blocked or inaccessible, the gates on the east and west sides of the facility will be unlocked and opened to provide alternate routes of escape. These gates are typically closed and locked. These gates can be immediately unlocked by any facility personnel when necessary. The key to unlock the gates are located in a known location by facility personnel and are immediately accessed. The signal to evacuate is given by voice, public address system or indicated by the sounding of the fire alarm (initiated by activating one of the pull stations or the activation of the sprinkler system).

3.0 Copies of Plan

A record of revisions to this contingency plan will be recorded on the Revisions and Amendments Log (see Figure 6.9) which will be maintained on-site. The contingency plan, as well as revisions and amendments, will be submitted to the local police department, fire department, hospitals, and State and local emergency response teams and other outside organizations that may be called upon to provide emergency service (see Figure 6.10). The copy shall be sent via electronic file where possible and hardcopy where preferable to recipient. An additional copy of the plan is stored outside the facility in our records shed in the event a copy is needed outside the facility and the one maintained onsite is unavailable.

4.0 Amendment of Plan

This plan will be reviewed annually and, if necessary, amended whenever:

- the facility permit is revised; or
- the plan fails in an emergency; or
- CHF changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or CHF changes the response necessary in an emergency; or
- the list of emergency coordinators changes; or
- the list of emergency equipment changes.

5.0 Response to Release

5.1 General Response Actions

General response actions necessary to mitigate releases involving hazardous waste and hazardous waste constituents are described below. Specific response actions for specific waste types and units are described in sections 5.0 through 7.0.

1. Identify the source and extent of the release.
2. Identify the specific chemical, if possible.
3. Notify the Emergency Coordinator and/or Operations Manager of the release.
4. Obtain back-up help.
5. If contact with the chemical is likely, don appropriate protective clothing.
6. Move fire fighting equipment, mobile spill control equipment, and portable pumps, as determined necessary by the Emergency Coordinator, to the release site.
7. Take appropriate measures to stop the release.
8. Once the source of the release has been stopped, contain the release.
9. Collect the released material using pumps, absorbent, or other procedure that is appropriate.
10. Place released residues in DOT-specification containers or, if volume warrants, into a tank or tank truck.
11. Decontaminate the release area.

A release occurs when a reportable quantity as described by Comprehensive Environmental Response Compensation and Liability Act (CERCLA) is allowed to enter (in an unpermitted fashion) the air, soil or surface water. If a release occurs, the National Response Center (800-424-8802) and the Florida Bureau of Disaster Preparedness (850-413-9911) will be immediately notified. If the Emergency Coordinator determines that the release may threaten human health or the environment as stated in 40 CFR 264.51(b), the provisions of this Contingency Plan will be implemented. A release could occur from; transportation activities; containers; tanks and; overhead piping.

5.2 Response to Releases From Transportation Activities

On-site transportation of hazardous waste may involve the movement of containers along or across the perimeter road. Therefore, it is very unlikely that a release could occur to the soil or surface water. If a large amount of waste were spilled, a release to the air could occur. Releases or spills from transportation activities, will be cleaned up within four hours of discovery (unless additional time is needed for identification, or additional equipment is needed) to minimize the possibility of a release to the air. Liquid from this type of spill will be contained by the

perimeter road, which is curbed on each edge and sloped to the center (3-inch pitch across 24-foot width). The total containment capacity of the perimeter roadway is 26,098 gallons. Liquids collected on the perimeter road drain to a sump. If the spill is not large enough to reach the sump area, the liquid on the road will be removed using absorbent. Spilled materials from transportation activities which reach the sump will be:

- transferred into a DOT approved non-bulk container and placed in a Container Storage Building; or
- absorbed using a suitable sorbent, which will be placed into a DOT approved non-bulk container for disposal at an offsite disposal facility; or
- Transferred to a bulk container; or
- pumped directly into the appropriate tank in one of the hazardous waste tank farms (using a portable pump).

5.3 Response to Releases From Containers

Containers (except for satellite accumulation areas) are managed only in curbed driveway area, the solidification area and the North and South Container Storage Buildings which are equipped with curbs and secondary containment. All releases in the container storage buildings, including those in the South Container Storage Building that may result from emptying containers into mix tanks and operation of the can crushers, will be contained by the buildings' concrete floors, which are diked and sloped to contain any spills. These containment systems will prevent the spread of any releases involving hazardous waste.

Any spill which occurs in the solidification area or driveway from a container or the mixtub will be handled in the same manner as a spill from transportation activities mentioned in Section 5.2. A release from a container to the soil or surface water is very unlikely due to the fact they are always managed on curbed concrete surfaces. A release to the air could occur if the spill were large enough. The contents of a container will be identified using the drum number as each container has a unique number.

5.4 Response to Releases from Tanks

Releases from tanks may be due to either overfilling a tank or a breach in the tank wall. Both types of release should be captured by the secondary containment system. Also releases could occur from transfer operations from hoses, couplings, flanges, valves, etc.

A release due to a breach in the tank wall will require transfer of hazardous waste from the tank and containment system to a compatible tank in good condition. In order to facilitate the characterization of waste released from a tank system, all tanks are numbered. By identifying the number of the tank from which a release is occurring and checking the Daily Inventory Report, the identity of a waste can be quickly determined. Again, since the tanks are equipped

with secondary containment, a release to the soil or surface water is very unlikely. A release to the air could occur if the spill from a breach or overflow were large enough.

Should a spill or release occur during transfer operations from a hose coupling, flange, valve, etc., the operation will be stopped as soon as the operator can shut down the system (usually 2 or 3 minutes since an operator is always present during transfer operations). Waste flow from the source (another tank, tanker, etc.) will be stopped and isolated from the leaking equipment. Identification of the waste in the source will be determined from the Daily Inventory Report, tanker number or drum number of the source tank or container.

The notification to the Emergency Coordinator and/or Operations Manager will include the following information:

- identity of tank,
- chemical in the tank, and
- volume of liquid in the tank.

The flow of waste to a breached tank system will be stopped by closing off the valve or pump system feeding the tank. If it is necessary to cease operations due to a release from a tank, the associated valves, pipes, and other equipment will be monitored to detect leaks, pressure build-up, gas generation, and ruptures.

Waste in the tanks secondary containment system will be:

- Transferred into DOT-specification non-bulk containers and placed in a Container Storage Building; or
- absorbed using a suitable sorbent, which will be placed into DOT-specification non-bulk containers and transferred to a Container Storage Building; or
- Transferred to a bulk container; or
- pumped directly into a compatible tank in the hazardous waste tank farm.

5.5 Response to Releases from Overhead Piping

If a leak from piping is detected the flow into the pipe will be shut off by the operator (usually within 2 or 3 minutes since a operator is present during operations which require flow through piping). Releases from piping will be contained by the roadway containment system and/or the secondary containment constructed around the tank farm and process unit. Any leaks from piping will be readily detectable and will be fully contained. The perimeter road is completely diked on both edges. All process areas and tank farms are protected by diked containment areas. Again, since the piping is above secondary containment, a release to the soil or surface water is very unlikely. A release to the air could occur if the spill from a pipe were large enough. If a release is detected in the containment systems, the released liquids will be:

- pumped into a DOT-specification non-bulk container and placed in a Container Storage Building; or
- absorbed using a suitable sorbent, which will be placed into a DOT specification non-bulk container and transferred to a Container Storage Building; or
- Transferred to a bulk container; or
- pumped directly into a compatible tank in one of the hazardous waste tank farms.

6.0 Response to Fires

In the event of a fire in a waste management area, the individual(s) discovering the fire will do the following:

1. Immediately sound alarm from the nearest pull station (see Figure 6.6) and activate the appropriate fire fighting system. Pull stations are located inside the Container Storage Buildings, inside the Boiler Building, Maintenance Building, in the Process Area, and the office area.

The sounding of the alarm alerts the fire department. The front gate will automatically open and all non-essential personnel will leave the plant site and meet at the evacuation assembly area outside the fenced-in area of the plant. If the Emergency Coordinator feels that the fire cannot be safely handled by employees on-site, he will evacuate all remaining employees.
2. Emergency shut-down procedures will be initiated by personnel in the process area if instructed by the Emergency Coordinator. Emergency shut-down procedures may involve closing of tank valves leading to the process area.
3. As long as contact from the chemicals or fire can be avoided, one person shall remain in the process area to monitor equipment or circumvent any dangerous situation which may arise. The order to evacuate this area shall come from the Emergency Coordinator or an alternate.
4. Additional fire fighting systems will be activated by the Emergency Coordinator, if necessary. If it is safe to do so, employees will fight the fire until the fire department arrives and assumes control, or until the evacuation signal is given. When this signal is sounded the personnel shall immediately evacuate the area using the safest route available. Figure 6.8 illustrates all emergency gates to be used in the event of an evacuation.
5. Liquid residues (e.g. fire fighting solutions and released wastes) will be collected in containers for analysis when it is safe to enter the area again. (large amounts may be pumped to a tank using a portable pump).

6. The area will be assessed for contamination and the Emergency Coordinator will initiate decontamination efforts.
7. In the event of a fire, it will be unnecessary to remove containers from the Container Storage Buildings to prevent the spread of the fire because the buildings are protected by an automatic foam-generating fire suppression systems. The safest response to a fire in the building will be to allow the foam system to operate and to not enter the building in an effort to remove waste containers.

7.0 Response to Explosions

All areas where flammable liquids are handled are designed with explosion-proof equipment. To minimize the potential for explosions by avoiding the generation of sparks, grounding and bonding procedures for flammable liquid transfers involving containers and tanks are followed.

Although the likelihood of an explosion at CHF is minimal, if explosions do occur, the Emergency Coordinator will immediately sound the evacuation alarm. Figure 6.8 illustrates all evacuation routes. At no time will any CHF employee attempt to control a situation in which explosions are occurring.

8.0 Chemical Data

In the event of a release, fire, or explosion involving hazardous wastes or hazardous waste constituents, the Emergency Coordinator will assess the hazards of the incident as follows. First, he/she will determine the source of the incident. This will involve determining from which unit or piece of equipment a release of material has occurred, the name of the material and the volume released. In the event of a fire, he will identify the unit which is on fire (or which caused the fire) and the extent of the fire. After determining the source, the Emergency Coordinator will identify the impact of the release or fire on human health and the environment by referring to either Material Safety Data Sheets for the raw materials involved or to other appropriate references which contain information on hazardous substance biological, physical, and chemical properties. CHF's Material Safety Data Sheets and other reference materials are available at CHF for inspection by regulatory personnel.

9.0 Power Outages

All facility operations are conducted in a batch mode. In the event of a power outage all equipment, including waste feed systems will immediately shut down. This will ensure that hazardous waste or hazardous waste constituents are not released from any tank system, container, pipe, or containment system.

10.0 Severe Weather

The facility maintains a separate stand alone severe weather plan which addresses actions taken to mitigate any operational process along with preparedness steps to take in anticipation of

severe weather such as hurricanes, severe lightning storms, and prolonged rain fall.

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FIGURE 6.1 LIST OF EMERGENCY COORDINATOR AND ALTERNATES

**PRIMARY EMERGENCY
COORDINATOR:**

Wes McDuffie

Address: 510 Little Lake Court
Winter Haven, FL 33884

Home Telephone Number: (863) 324-0498
Work Telephone Number: (863) 533-6111
Cell Phone Number: (863) 559-1613

First Alternate: **Mike Bodiford**

Address: 2351 Gerber Dairy Road
Winter Haven, FL 33880

Home Telephone Number: (863) 651-5680
Work Telephone Number: (863) 533-6111
Cell Phone Number: (863) 559-2144

Second Alternate: **John Bosek**

Address: 1323 Monte Lake Drive
Valrico, FL 33594

Home Telephone Number: (813) 655-9220
Work Telephone Number: (863) 533-6111
Cell Phone Number: (863) 559-1610

FIGURE 6.2 AUTHORIZATION TO COMMIT CHF RESOURCES

I, John Bosek, do hereby grant the following persons the authority to commit the necessary resources to implement the contingency plan in responding to an emergency situation:

**PRIMARY EMERGENCY
COORDINATOR:**

Wes McDuffie

Address: 510 Little Lake Court
Winter Haven, FL 33884

Home Telephone Number: (863) 324-0498
Work Telephone Number: (863) 533-6111
Cell Phone Number: (863) 559-1613

First Alternate: **Mike Bodiford**

Address: 2351 Gerber Dairy Road
Winter Haven, FL 33880

Home Telephone Number: (863) 651-5680
Work Telephone Number: (863) 533-6111
Cell Phone Number: (863) 559-2144

Second Alternate: **John Bosek**

Address: 1323 Monte Lake Drive
Valrico, FL 33594

Home Telephone Number: (813) 655-9220
Work Telephone Number: (863) 533-6111
Cell Phone Number: (863) 559-1610

General Manager: _____
John Bosek

FIGURE 6.3 COORDINATION AGREEMENT WITH RESPONSE AGENCY

Date

Address

Dear Sir or Madam:

Clean Harbors Florida LLC (CHF) is a waste treatment and storage facility offering waste treatment services such as fuels blending and waste storage. With this letter, CHF is submitting to your agency a copy of our facility's Contingency Plan.

This plan is designed to minimize hazards to human health and the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. We are submitting it to you to familiarize you with our facility, wastes handled at our facility and their hazards, places where facility personnel would normally be working, entrances to, and roads inside our facility, and possible evacuation routes.

Title 40 of the Code of Federal regulations, Part 264.37, requires us to obtain an agreement with your agency regarding the implementation of our contingency plan and your ability to assist us within your capabilities in the event of an emergency, please sign the attached letter of confirmation.

Please feel free to contact me if you have any questions or if you would like me to arrange a plant tour to familiarize you with our facility at 863-533-6111.

Sincerely,

CHF

FIGURE 6.4 LOCAL AGENCY RESPONSE

Date

Clean Harbors Florida LLC
170 Bartow Municipal Airport
Bartow, Florida 33830-9504

Dear Sir or Madam:

This is to confirm that we have received a copy of the Clean Harbors Florida Contingency Plan. Our agency will assist your facility within our capabilities in the event of an emergency.

We can offer the following services:

_____ Fire Response _____ Spill Response

_____ Medical _____ Traffic Control

_____ Other (specify): _____

Sincerely,

Name: _____

Title: _____

Organization: _____

Address: _____

Figure 6.5 Spill Response Equipment, Uses and Capabilities

<u>Item</u>	<u>Use and Capabilities</u>
Salvage Drum	Deposit spill residue and over pack leaking containers; DOT-specification 85 gallon open head and 55-gallon containers
Gloves*	Protect hands from chemical exposure; chemical - resistant (6 pair per cabinet)
Absorbent	Absorb and prevent the spread of non- corrosive liquid spills
Push Broom	Sweep up spent absorbent
Shovel	Sweep up spent absorbent and solid spill residues; spark-proof blade
Fully Encapsulating Suit*	Protect skin from exposure to hazardous waste; chemical resistant; Tyvek coated; disposable (1 per cabinet)
Apron*	Cover body and partially cover legs to protect from exposure to hazardous waste splashes; chemical resistant (3 per cabinet)
Goggles*	Protect eyes from exposure to hazardous waste splashes (6 pair per cabinet)
Face Shield	protect eyes from exposure to hazardous waste splashes; chemical resistant
Boots*	Protect feet from chemical exposure chemical resistant (3 pair per cabinet)
Coveralls*	Chemically resistant pants and jacket combination to protect body and legs from spills (3 pair per cabinet)
Self Contained Breathing Apparatus*	Provide 30 minutes breathing air, with low supply alarm (1 per cabinet)

* Maintained in each emergency response cabinet.

FIGURE 6.6 LOCATIONS OF FIRE RESPONSE EQUIPMENT

FIGURE 6.8 EVACUATION ROUTES

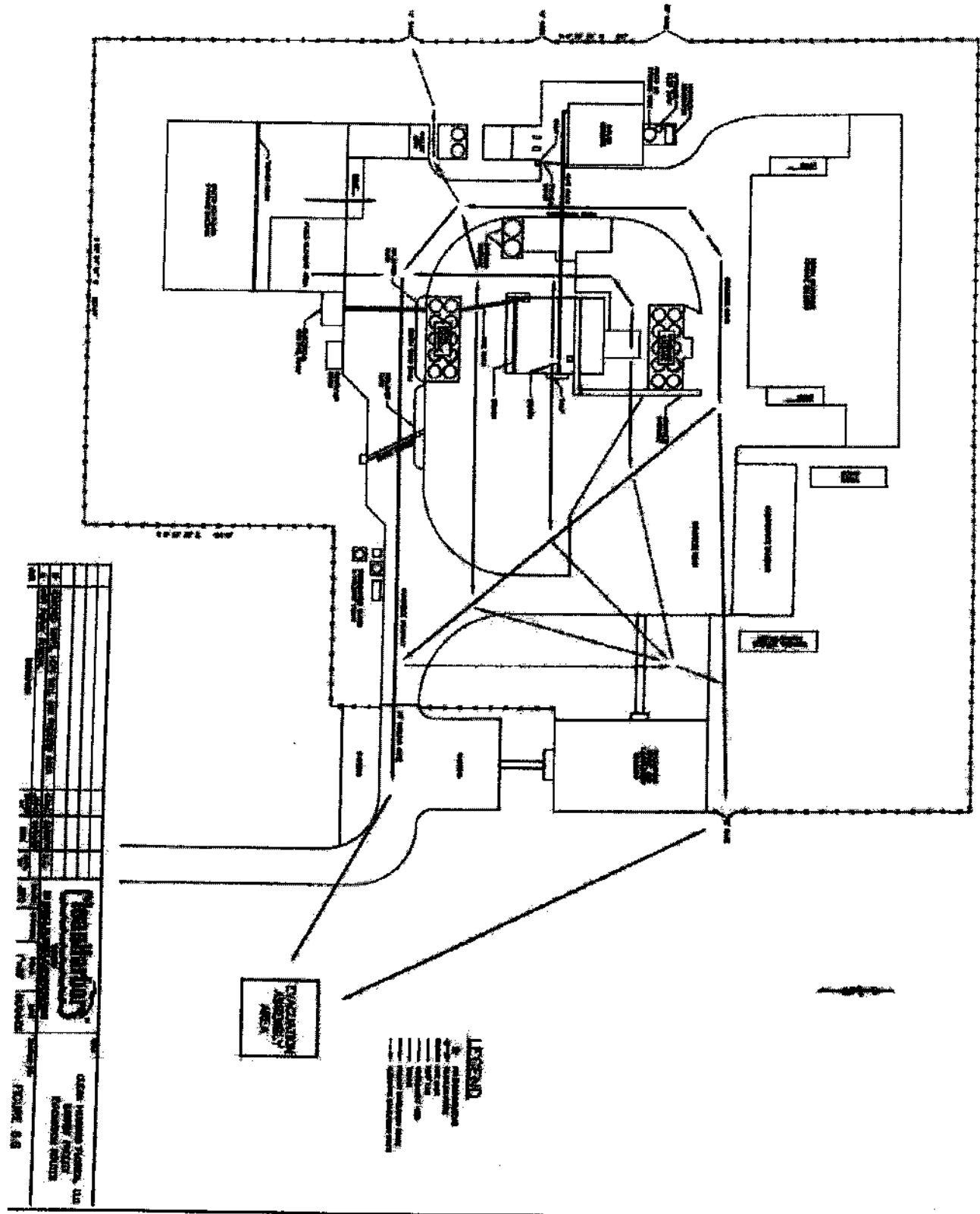


FIGURE 6.9 CONTINGENCY PLAN REVISIONS AND AMENDMENTS

[illegible]

**FIGURE 6.10 LIST OF ORGANIZATIONS CAPABLE OF PROVIDING EMERGENCY
SERVICE IN THE EVENT OF A RELEASE, FIRE, OR EXPLOSION**

Administrative Address	Non Emergency Number
1. Director of Emergency Management Polk County Department of Public Safety 1295 Brice Boulevard Bartow, Florida 33830	Tel #863-534-5600
2. Polk County Sheriff's Office Emergency Communications Center 1891 Jim Keene Blvd. Winter Haven, FL 33880	Tel #863-298-6200
3. Administrator Bartow Regional Medical Center P.O. Box 1050 Bartow, Florida 33831	Tel #863-533-8111
4. Polk County Fire – Eagle Lake 185 South 3rd Street Eagle Lake, FL 33839-3345	Tel #863-295-5173

SECTION K

CLOSURE PLAN

9.1 Closure Performance Standard

This plan identifies the steps necessary to completely close CHF at the end of the useful facility life. This plan describes how the facility will be closed in accordance with 40 CFR 264.111, 264.178 and 264.197.

Closure of CHF will involve removing all wastes from the site, cleaning and decontaminating structures and equipment that held waste, and sampling to demonstrate that decontamination has been effective. This closure plan is designed to eliminate post-closure escape of hazardous waste, constituents, leachate, or hazardous waste decomposition products to groundwater, surface water, or the atmosphere. This will eliminate need for post-closure monitoring or maintenance and eliminates potential release of hazardous wastes, constituents, or contaminated rainfall after closure.

Partial closure (defined as closing a hazardous unit before final closure) is not planned during the operation of the CHF facility. The entire facility as described in Chapter One will remain open and not be closed during the active life of the facility. A post-closure plan is not required since CHF is not a disposal facility and no hazardous wastes or residues will remain at the site upon closure.

Because of the construction of the secondary containment system throughout the facility, the introduction of hazardous waste into the soil is precluded. Consequently, the landfill closure and post-closure requirements do not apply to this facility.

If site assessment, interim measures or corrective action is required, these actions will be done in accordance with Chapter 62-780, F.A.C. and permit requirements.

9.2 Amendment of the Closure Plan

Until final closure is completed and certified in accordance with 40 CFR 264.115, a copy of the approved plan and all approved revisions will be furnished to the Florida Department of Environmental Protection (FDEP) or the EPA Regional Administrator upon request. Partial closure is not anticipated, however, any single unit of the facility or piece of equipment may be closed independently for maintenance, repairs, or other reasons.

9.3 Maximum Waste Inventory at Closure

The maximum inventory of wastes that could be potentially stored in the Container Storage Buildings is 243,320 gallons. The maximum inventory of waste that could be potentially stored in storage tanks is 72,600 gallons. (The fuels blending tanks are treatment tanks only and not permitted storage tanks, therefore no waste volume is assumed to be stored in them.) Four roll-offs could contain the equivalent of 32,320 gallons of RCRA regulated waste. An additional four roll-offs and a mix tub can contain non hazardous waste

These volumes are used to calculate the maximum RCRA inventory on-site for closure calculations. CHF may have RCRA waste in any combination of containers, including up to four roll offs. The maximum RCRA waste on-site is 388,034 gallons. The calculation of these volumes is shown in Figure 9.1.

9.4 Schedule for Final Closure

Final closure is anticipated during the year 2045 or thereafter. Complete closure is expected to take 180 days. If an extension of time for closure is necessary, the extension request will be in the form of a petition made to the FDEP. The petition will demonstrate that all reasonable steps will be taken to prevent threats to human health and the environment during the requested closure extension.

9.5 Closure Methods - South Container Storage Building

9.5.1 Container storage, staging and loading ramp areas

1. The FDEP will be notified at least 180 days prior to the date closure is to begin.
2. A review of the closure plan by appropriate CHF personnel will be conducted prior to closure commencement activities.
3. Acceptance of non-bulk containerized waste will be stopped on or before the date closure activities begin.
4. A physical inventory of containerized waste will be conducted and a check for proper labeling and marking will be conducted.
5. For liquid wastes, pre-bulking compatibility evaluation and/or testing will be conducted, and containerized wastes will be bulked to compatible storage tanks on-site or directly onto tankers, if available. Solid wastes will be bulked into roll-offs.
6. Wastes which cannot be bulked must be shipped off-site in separate containers. An

assessment of the appropriate off-site treatment, storage, or disposal technology will be performed, and an appropriate off-site TSD facility will be selected. The closure cost estimate identifies the current proposed method for off-site management of these wastes; however, at the time of closure improved methods of off-site management may be available.

7. Empty containers may be shipped to container re-conditioners, or off-site as scrap metal. Removal of containers and waste is expected to be completed within 60 days after closure activities begin.
8. After all containers are removed from the building; it will be examined for visual evidence of contamination. Contamination is expected to be minimal because all wastes will be stored in sound shipping containers, inspected regularly, and any spills or leaks will be cleaned up promptly.
9. A power washer will be used to pressure clean the floor of the container storage, staging, and ramp areas and the walls to a height of six feet above the floor (which corresponds roughly to the height of two 55-gallon drums stacked on pallets. Wash water will be directed into the containment trench and handled as a hazardous waste. If contaminants in the rinseate, concrete or debris are known to be from a listed hazardous waste, then TCLP would not be required to be performed for the purposes of hazardous waste determination. The waste would be hazardous by the mixture rule. Wash water will be pumped into suitable containers (i.e. tanker trucks or equivalent) and transported off-site to a RCRA-permitted facility for treatment.
10. After the floors, walls and ramp areas and containment trench are dry, a detergent solution (Simple Green or equivalent) will be applied to the floor and containment trench to remove remaining waste residues. The detergent solution will also be applied to the walls and ramp areas as needed to remove any remaining visible contamination.
11. The floor, containment trench, and walls (as needed) will be rinsed three times with potable water to remove detergent solution residues. Rinseate fluids shall be directed into the containment trench and handled as a hazardous waste. Rinseate fluids will be pumped into suitable containers (i.e., tanker trucks or equivalent) and transported offsite to a RCRA-permitted facility for treatment.
12. During the third rinse of various surfaces, a total of twelve samples of rinseate fluid and one sample of the potable water will be collected. One sample from the dock area, one sample from the ramp area, two samples from the staging area and two samples from each quadrant of the storage area will be collected and analyzed for the following parameter groups by the listed methods:

- Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
13. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
 14. Laboratory results will be compared to the groundwater clean-up target levels presented in Chapter 62-777 Florida Administrative Code (FAC). Decontamination will be considered complete if concentrations of contaminants are below these target levels or the practical quantification limit (PQL). In the event that decontamination is considered incomplete for a particular sample location, these decontamination procedures will be repeated in the immediate area of the sample and the rinsate will be re-sampled using the procedures described above until the concentrations meet the specified criteria.
 15. As required by 40 CFR 264.112(b)(4), the soils beneath the container storage, staging, ramp areas, and the area surrounding the containment trench sump will be sampled and checked for possible contamination as outlined in steps 16-26 below.
 16. These areas will be divided into a 10' x 10' grid and sampling locations selected at the line intersections.
 17. Eight samples within the container storage area, four samples within the staging area and two from the ramp area will be obtained. The 14 locations will be chosen randomly from the intersection points on the grid lines. Each sample location will entail drilling through the concrete floor of the building and ramp area.
 18. One additional soil sample will be taken from the area around the sump at the east end of the containment trench.
 19. If cracks are present in the floor (other than surficial cracks) the soil beneath them will be sampled as well.
 20. Samples will be taken at the soil surface, immediately beneath the concrete containment and analyzed for the following parameter groups by the listed methods:

- Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
21. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
 22. While soil contamination is not expected, the procedures outlined in steps 23-26 will be followed in the event soil contamination is determined to exist.
 23. Laboratory results will be compared to the soil cleanup target levels presented in 62-777 FAC. If concentrations are above the leachability based on SCTL's, groundwater monitoring may be required. If commercial/ industrial SCTL's are selected, institutional controls will be required and clean closure will not be an option.
 24. In the event surface soils at particular locations contain contaminants in concentrations above thresholds, those locations will be re-sampled at a depth of six to twelve inches. Additional soil sampling will not be required provided concentrations of contaminants are below target levels or the PQL.
 25. In the event soil sample locations at the six-inch depth contain contaminants in concentrations above thresholds, soil sampling at those locations will continue at six-inch intervals until no contaminants exist in concentrations above thresholds or until CHF determines that excavation and removal of contaminants cannot be done or is not practical. If such a determination is made, a post closure plan will be submitted to the Department.
 26. If concentrations of contaminants are detected above thresholds in soil, and the extent is such that removal is deemed impractical, the soil will be excavated to a depth of six inches below the depth of detected contamination. Excavated soil will be disposed at a RCRA-permitted TSDF. The excavated area will then be backfilled with clean, compacted soil and restored to the original condition. Confirmatory samples will be taken and analyzed for the contaminants of concern to demonstrate the contaminants of concern have been removed.
 27. Facility personnel and an independent, Florida registered, professional engineer will inspect the container storage area, staging area and ramp area. A certification will be submitted to the FDEP indicating these areas have been decontaminated and closed in accordance with this closure plan.

9.5.2 Fuels Blending Area

1. The FDEP will be notified as least 180 days prior to closure commencement activities.
2. A review of the closure plan by appropriate CHF personnel will be conducted prior to closure commencement activities.
3. Treatment of waste in the fuels blending equipment will be stopped on or before the date closure activities begin.
4. Waste residues present, if any, will be removed and placed in DOT approved containers for management at an off-site RCRA-permitted TSD facility.
5. A power washer will be used to pressure clean the interior surfaces of the tanks. Wash water will be collected and handled as a hazardous waste. Wash water will be pumped into suitable containers (i.e., tanker trucks or equivalent) and transported offsite to a RCRA permitted facility for treatment.
6. Tanks T-112 and T-114 will be removed from the Fuels Blending Area and cut into pieces suitable for transport to a steel recycling facility. The carbon steel will be melted and reprocessed as scrap metal. Due to the method of disposal of these tanks, the scrap steel resulting from tank closure will not be handled as a hazardous waste pursuant to the solid waste exemption criteria set forth in 40 CFR 261.4 (a)(13).
7. A power washer will be used to pressure clean the floor, walls, and ceiling of the Fuels Blending Area. Wash water will be collected and handled as hazardous waste. Wash water will be pumped into suitable containers (i.e., tanker trucks or equivalent) and transported off-site to a RCRA-permitted facility for treatment.
8. After the floors and walls are dry, a detergent solution (Simple Green or equivalent) will be applied to these surfaces, as needed, to remove remaining waste residues.
9. The floors and walls will be rinsed three times with potable water to remove detergent solution residues. Rinsate fluids will be collected and handled as a hazardous waste. Rinsate fluids will be pumped into suitable containers (i.e., tanker trucks or equivalent) and transported off-site to a RCRA-permitted facility for treatment.
10. During the third rinse of the floors and walls, a total of five samples (one from each quadrant of the floor and one from the center of the floor) of rinsate fluid and one sample of potable water will be collected and analyzed for the following parameter groups by the listed methods:

- Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
11. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
 12. Laboratory results will be compared to the groundwater clean-up target levels presented in Chapter 62-777 FAC. Decontamination will be considered complete if concentrations of contaminants are below these target levels or the PQL. In the event that decontamination is considered incomplete for a particular sample location, these decontamination procedures will be repeated in the immediate area of the sample and the rinsate will be re-sampled using the procedures described above until the concentrations meet the specified criteria.
 13. As required by 40 CFR 264.112(b)(4), the soils beneath the fuels blending area will be sampled and checked for possible contamination as outlined in steps 14-23 below.
 14. This area will be divided into a 10' x 10' grid and sampling locations selected at the line intersections.
 15. Four samples within the fuels blending area will be obtained. The four locations will be chosen randomly from the intersection points on the grid lines. Each sample location will entail drilling through the concrete floor of the building.
 16. If cracks are present in the floor (other than surficial cracks) the soil beneath them will be sampled as well.
 17. Samples will be taken at the soil surface, immediately beneath the concrete containment and analyzed for the following parameter groups by the listed methods:
 - Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)

18. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
19. While soil contamination is not expected, the procedures outlined in steps 20-23 will be followed in the event soil contamination is determined to exist.
20. Laboratory results will be compared to the soil cleanup target levels presented in 62-777 FAC. If concentrations are above the leachability based on SCTL's, groundwater monitoring may be required. If commercial/ industrial SCTL's are selected, institutional controls will be required and clean closure will not be an option.
21. In the event surface soils at particular locations contain contaminants in concentrations above thresholds, those locations will be re-sampled at a depth of six to twelve inches. Additional soil sampling will not be required provided concentrations of contaminants are below target levels or the PQL.
22. In the event soil sample locations at the six-inch depth contain contaminants in concentrations above thresholds, soil sampling at those locations will continue at six-inch intervals until no contaminants exist in concentrations above thresholds or until CHF determines that excavation and removal of contaminants cannot be done or is not practical. If such a determination is made, a post closure plan will be submitted to the Department.
23. If concentrations of contaminants are detected above thresholds in soil, and the extent is such that removal is deemed practical, the soil will be excavated to a depth of six inches below the depth of detected contamination. Excavated soil will be disposed of at a RCRA-permitted TSDF. The excavated area will then be backfilled with clean, compacted soil and restored to the original condition. Confirmatory samples will be taken and analyzed for the contaminants of concern to demonstrate the contaminants of concern have been removed.
24. Facility personnel and an independent, registered, professional engineer will inspect the fuels blending area. A certification will be submitted to the FDEP indicating the area has been decontaminated and closed in accordance with this closure plan.

9.6 Closure Methods - North Container Storage Building

1. The FDEP will be notified at least 180 days prior to the date closure is to begin.
2. A review of the closure plan by appropriate CHF personnel will be conducted prior to closure commencement activities.

3. Acceptance of non-bulk containerized waste will be stopped on or before the date closure activities begin.
4. A physical inventory of containerized waste will be conducted and a check for proper labeling and marking will be conducted.
5. For liquid wastes, pre-bulking compatibility evaluation and/or testing will be conducted, and containerized wastes will be bulked to compatible storage tanks on-site or directly onto tankers, if available. Solid wastes will be bulked into roll-offs.
6. Wastes which cannot be bulked must be shipped off-site in separate containers. An assessment of the appropriate off-site treatment, storage, or disposal technology will be performed, and an appropriate off-site TSDF will be selected. The closure cost estimate identifies the current proposed method for off-site management of these wastes; however, at the time of closure improved methods of off-site management may be available.
7. The polychlorinated biphenyl (PCB) storage area will be closed in accordance with the TSCA permit, *Approval to Commercially Store Polychlorinated Biphenyl's (PCBs)*, issued by the EPA on May 21, 1998. A description of the closure activities as approved is enclosed as Attachment 1 of this Chapter.
8. Empty containers may be shipped to container re-conditioners, or off-site as scrap metal. Removal of containers and waste is expected to be completed within 60 days after closure activities begin.
9. After all containers are removed from the building; it will be examined for visual evidence of contamination. Contamination is expected to be minimal because all wastes will be stored in sound shipping containers, inspected regularly, and any spills or leaks will be cleaned up promptly.
10. A power washer will be used to pressure clean the floor of the container storage, staging, ramp, and loading dock areas and the walls to a height of six feet above the floor (which corresponds roughly to the height of two 55-gallon drums stacked on pallets. Wash water will be directed into the containment trench and handled as a hazardous waste. Wash water will be pumped into suitable containers (i.e. tanker trucks or equivalent) and transported off-site to a RCRA-permitted facility for treatment.
11. After the floor, walls, staging area ramp area and loading dock are dry; a detergent solution (Simple Green or equivalent) will be applied to the floor, staging area, and cell curbs to remove remaining waste residues. The detergent solution will also be applied to the walls, ramp areas, and loading docks as needed to remove any remaining visible contamination.

12. The floor, staging area, and cell curbs will be rinsed three times with potable water to remove detergent solution residues. Walls, ramp areas, and loading docks also will be rinsed three times with potable water, as needed. Rinsate fluids will be pumped into suitable containers (i.e. tanker trucks or equivalent) and transported offsite to a RCRA-permitted facility for treatment.
13. During the third rinse of the various surfaces, a total of 21 samples will be collected. One sample will be collected from each cell storage area (16 samples, one from each ramp area (two samples), one from each dock area (two samples), and one from the potable water used (one sample). Each sample will be analyzed for the following parameter groups by listed methods:
 - Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
 - PCBs (EPA Method 8082; arochlors only)
 - Total cyanide (EPA Method 335.3)
14. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
15. Laboratory results will be compared to the groundwater clean-up target levels presented in Chapter 62-777 Florida Administrative Code (FAC). Decontamination will be considered complete if concentrations of contaminants are below these target levels or the PQL. In the event that decontamination is considered incomplete for a particular sample location, these decontamination procedures will be repeated in the immediate area of the sample and the rinsate will be re-sampled using the procedures described above until the concentrations meet the specified criteria.
16. As required by 40 CFR 264.112(b)(4), the soils beneath the container storage, dock areas, and ramp areas, will be sampled and checked for possible contamination as outlined in steps 17-26 below.
17. These areas will be divided into a 10' x 10' grid and sampling locations selected at the line intersections.
18. Eight samples within the container storage area, two samples within each dock area and two from each ramp area will be obtained. The 16 locations will be chosen randomly

from the intersection points on the grid lines. Each sample location will entail drilling through the concrete floor of the building and ramp area.

19. If cracks are present in the floor (other than surficial cracks) the soil beneath them will be sampled as well.
20. Samples will be taken at the soil surface, immediately beneath the concrete containment and analyzed for the following parameter groups by the listed methods:
 - Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
 - PCBs (EPA method 8082; arachlors only)
 - Total cyanide (EPA Method 335.3)
21. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
22. While soil contamination is not expected, the procedures outlined in steps 23-26 will be followed in the event soil contamination is determined to exist.
23. Laboratory results will be compared to the soil cleanup target levels presented in 62-777 FAC. If concentrations are above the leachability based on SCTL's, groundwater monitoring may be required. If commercial/ industrial SCTL's are selected, institutional controls will be required and clean closure will not be an option.
24. In the event surface soils at particular locations contain contaminants in concentrations above thresholds, those locations will be re-sampled at a depth of six to twelve inches. Additional soil sampling will not be required provided concentrations of contaminants are below target levels or the PQL.
25. In the event soil sample locations at the six-inch depth contain contaminants in concentrations above thresholds, soil sampling at those locations will continue at six-inch intervals until no contaminants exist in concentrations above thresholds or until CHF determines that excavation and removal of contaminants cannot be done or is not practical. If such a determination is made, a post closure plan will be submitted to the Department.
26. If concentrations of contaminants are detected above thresholds in soil, and the extent is

such that removal is deemed impractical, the soil will be excavated to a depth of six inches below the depth of detected contamination. Excavated soil will be disposed of at a RCRA-permitted TSDF. The excavated area will then be backfilled with clean, compacted soil and restored to the original condition. Confirmatory samples will be taken and analyzed for the contaminants of concern to demonstrate the contaminants of concern have been removed.

27. Facility personnel and an independent, registered, professional engineer will inspect the container storage area, dock areas and ramp areas. A certification will be submitted to the FDEP indicating these areas have been decontaminated and closed in accordance with this closure plan.

9.7 Closure Methods - Tanks

1. The FDEP will be notified as least 180 days prior to closure commencement activities.
2. A review of the closure plan by appropriate CHF personnel will be conducted prior to closure commencement activities.
3. Acceptance of bulk waste will be stopped on or before the date closure activities begin.
4. A physical inventory of bulk waste will be conducted to confirm that the Daily Inventory Sheet matches actual inventory.
5. Waste in the tanks will be loaded into tankers and these waste shipments will be transferred off-site to a RCRA-permitted TSD facility.
6. Any waste residues present in the tanks will be removed and placed in DOT approved containers for management at an off-site RCRA-permitted TSD facility.
7. A power washer will be used to pressure clean the interior surfaces of the tanks. Wash water will be collected and handled as a hazardous waste. Wash water will be pumped into suitable containers (i.e., tanker trucks or equivalent) and transported offsite to a RCRA permitted facility for treatment.
8. The tanks in the Crude Storage Tank Area and in the Bottoms Tanks Area will be removed and cut into pieces suitable for transport to a steel recycling facility. The carbon steel will be melted and reprocessed as scrap metal. Due to the method of disposal of these tanks, the scrap steel resulting from tank closure will not be handled as a hazardous waste pursuant to the solid waste exemption criteria set forth in 40 CFR 261.4 (a)(13).

9. A power washer will be used to pressure clean the floor and walls of the containment area surrounding each group of tanks. Wash water will be directed to the sump within each containment area and handled as a hazardous waste. Wash water will be pumped into suitable containers (i.e., tanker trucks or equivalent) and transported off-site to a RCRA-permitted facility for treatment.
10. After the floors and walls are dry, a detergent solution (Simple Green or equivalent) will be applied to these surfaces, as needed, to remove remaining waste residues.
11. The floor and walls of each containment area will be rinsed three times with potable water to remove detergent solution residues. Rinsate fluids will be directed to the sump in each containment area and handled as a hazardous waste. Rinsate fluids will be pumped into suitable containers (i.e., tanker truck or equivalent) and transported off-site to a RCRA-permitted facility for treatment.
12. During the third rinse of the containment area floors and walls, a total of four samples (two from each containment area floor) of rinsate fluid and one sample of potable water will be collected and analyzed for the following parameter groups by the listed methods:
 - Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
13. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
14. Laboratory results will be compared to the groundwater clean-up target levels presented in Chapter 62-777 FAC. Decontamination will be considered complete if concentrations of contaminants are below these target levels or the PQL. In the event that decontamination is considered incomplete for a particular sample location, these decontamination procedures will be repeated in the immediate area of the sample and the rinsate will be re-sampled using the procedures described above until the concentrations meet specified criteria.
15. As required by 40 CFR 264.112(b)(4), the soils beneath the containment areas, and the area surrounding the south tank farm will be sampled and checked for possible contamination as outlined in steps 16-25 below.
16. Each containment area will be divided into a 10' x 10' grid and sampling locations

selected at the line intersections.

17. One sample at the center of each tank farm containment area (two samples) will be obtained. Four additional samples will be taken from the area surrounding the south tank farm; one sample from each side (i.e. east, west, south and north) for a total of 6 samples. Each sample location will entail drilling through the concrete floor of the containment area or concrete perimeter road.
18. If cracks are present in the floor areas (other than surficial cracks) the soil beneath them will be sampled as well.
19. Samples will be taken at the soil surface, immediately beneath the concrete containment and analyzed for the following parameter groups by the listed methods:
 - Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
20. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
21. While soil contamination is not expected, the procedures outlined in steps 22-25 will be followed in the event soil contamination is determined to exist.
22. Laboratory results will be compared to the soil cleanup target levels presented in 62-777 FAC. If concentrations are above the leachability based on SCTL's, groundwater monitoring may be required. If commercial/ industrial SCTL's are selected, institutional controls will be required and clean closure will not be an option.
23. In the event surface soils at particular locations contain contaminants in concentrations above thresholds, those locations will be re-sampled at a depth of six to twelve inches. Additional soil sampling will not be required provided concentrations of contaminants are below target levels or the PQL.
24. In the event soil sample locations at the six-inch depth contain contaminants in concentrations above thresholds, soil sampling at those locations will continue at six-inch intervals until no contaminants exist in concentrations above thresholds or until CHF determines that excavation and removal of contaminants cannot be done or is not practical. If such a determination is made, a post closure plan will be submitted to the

Department.

25. If concentrations of contaminants are detected above thresholds in soil, and the extent is such that removal is deemed impractical, the soil will be excavated to a depth of six inches below the depth of detected contamination. Excavated soil will be disposed of at a RCRA-permitted TSDF. The excavated area will then be backfilled with clean, compacted soil and restored to the original condition. Confirmatory samples will be taken and analyzed for the contaminants of concern to demonstrate the contaminants of concern have been removed.
26. Facility personnel and an independent, registered, professional engineer will inspect the tanks and submit to the FDEP certification that the tanks have been decontaminated and closed in accordance with this closure plan within 180 days of commencement of closure activities.

9.8 Perimeter Road

Contamination in the perimeter road is expected to be minimal because this area is inspected regularly, and any spills or leaks are cleaned up promptly. For the purpose of this Closure Plan, the perimeter road is divided into two separate areas.

One area is those 4 designated roll off storage areas. This area is used for mixbox processing, staging before processing and/or loading/unloading activities and the potential for contamination is greater here than the remaining perimeter road area. The closure of this storage area of the perimeter road is given in Section 9.8.1.

Another area is the solidification area near the North Container Storage Building. This area is used to solidify non hazardous waste in a steel mix tub using inert reagents. The solidification waste is transferred to roll offs for shipment offsite. The area is irregularly shaped but is approximately 2190 ft².

9.8.1 Perimeter Road (Storage Area) and Solidification Area

Drawing BW-100-001 found in Chapter 1 identifies the 4 permitted roll off storage areas for RCRA hazardous waste and the 4 roll offs and mix tub locations for non hazardous waste.

1. The FDEP will be notified at least 180 days prior to the date closure is to begin.
2. A review of the closure plan by appropriate CHF personnel will be conducted prior to closure commencement activities.
3. A power washer will be used to pressure clean the surface of the staging area within the

perimeter road and the mix tub area. Wash water will be handled as a hazardous waste and directed to the perimeter road sump and the solidification sump. Wash water will be collected and pumped into suitable containers (i.e., tanker trucks or equivalent) and transported offsite to a RCRA-permitted facility for treatment.

4. After the surface in these areas are dry, a detergent solution (Simple Green or equivalent) will be applied to the Staging Area and mix tub area to remove remaining waste residues.
5. The staging area surface and mix tub area surface will be rinsed three times with potable water to remove detergent solution residues. Rinsate fluids will be directed into the sumps and handled as a hazardous waste. Rinsate fluids will be pumped into suitable containers (i.e., tanker truck or equivalent) and transported offsite to a RCRA-permitted facility for treatment.
6. During the third rinse of the staging area surface and mix tub area surface a total of eight samples (one from each quadrant of the staging area and one from each quadrant of the mix tub area) of rinsate and one sample of potable will be collected and analyzed for the following parameter groups by the listed methods:
 - Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
7. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
8. Laboratory results will be compared to the groundwater clean-up target levels presented in Chapter 62-777 FAC. Decontamination will be considered complete if concentrations of contaminants are below these target levels or the PQL. In the event that decontamination is considered incomplete for a particular sample location, these decontamination procedures will be repeated in the immediate area of the sample and the rinsate will be re-sampled using the procedures described above until the concentrations meet the specified criteria.
9. The soils beneath the Perimeter Road Storage Area and mix tub area will be sampled and checked for possible contamination as outlined in steps 10-19 below.
10. The areas will be divided into a 10' x 10' grid and sampling locations selected at the line intersections.

11. Four samples within the Perimeter Road Storage Area and four samples within the mix tub area will be chosen randomly from the intersection points on the grid lines. Each sample location will entail drilling through the concrete floor of the containment area.
12. If cracks are present in the area (other than surficial cracks) the soil beneath them will be sampled as well.
13. Samples will be taken at the soil surface, immediately beneath the concrete containment and analyzed for the following parameter groups by the listed methods:
 - Volatile organics (EPA Method 8260)
 - Semivolatile organics (EPA Method 8270)
 - RCRA metals, plus nickel (EPA Method 6010)
 - Pesticides (EPA Method 8081)
 - Total organic carbon (EPA Method 415.2)
 - Total organic halides (EPA Method 9252)
14. In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.
15. While soil contamination is not expected, the procedures outlined in steps 16-19 will be followed in the event soil contamination is determined to exist.
16. Laboratory results will be compared to the soil cleanup target levels presented in 62-777 FAC. If concentrations are above the leachability based on SCTL's, groundwater monitoring may be required. If commercial/ industrial SCTL's are selected, institutional controls will be required and clean closure will not be an option.
17. In the event surface soils at particular locations contain contaminants in concentrations above thresholds, those locations will be re-sampled at a depth of six to twelve inches. Additional soil sampling will not be required provided concentrations of contaminants are below target levels or the PQL.
18. In the event soil sample locations at the six-inch depth contain contaminants in concentrations above thresholds, soil sampling at those locations will continue at six-inch intervals until no contaminants exist in concentrations above thresholds or until CHF determines that excavation and removal of contaminants cannot be done or is not practical. If such a determination is made, this area would be subject to HSWA corrective action and/or Chapter 62-780 F.A.C.
19. If concentrations of contaminants are detected above thresholds in soil, and the extent is

such that removal is deemed impractical, the soil will be excavated to a depth of six inches below the depth of detected contamination. Excavated soil will be disposed of at a RCRA-permitted TSDF. The excavated area will then be backfilled with clean, compacted soil and restored to the original condition. Confirmatory samples will be taken and analyzed for the contaminants of concern to demonstrate the contaminants of concern have been removed.

20. Facility personnel and an independent, registered, professional engineer will inspect the container storage area, staging area and ramp area. A certification will be submitted to the FDEP indicating these areas have been decontaminated and closed in accordance with this closure plan.

9.8.2 Perimeter Road (Non-Storage Area)

Hazardous waste contamination in the perimeter road, non-storage area, is expected to be minimal as hazardous waste containers and drums are not handled or stored in these areas.

The non-storage area portion of the perimeter road will be visually inspected for signs of potential contamination. Areas of possible contamination will be pressure washed. Wash water will be handled as a hazardous waste and collected and pumped into suitable containers (i.e., tanker trucks or equivalent) and transported off-site to a RCRA-permitted facility for treatment. The area will be rinsed with potable water. One sample of rinsate fluid from the center of the washed area and one sample of potable water will be collected and analyzed for the following parameter groups by the listed methods:

- Volatile organics (EPA Method 8260)
- Semivolatile organics (EPA Method 8270)
- RCRA metals, plus nickel (EPA Method 6010)
- Pesticides (EPA Method 8081)
- Total organic carbon (EPA Method 415.2)
- Total organic halides (EPA Method 9252)

In addition, quality assurance will be addressed per Chapter 62-160. Laboratory analyses will be performed by a NELAC certified laboratory.

Laboratory results will be compared to the groundwater clean-up target levels presented in Chapter 62-777 FAC. Decontamination will be considered complete if concentrations of contaminants are below these target levels or the PQL. In the event that decontamination is considered incomplete for the rinsate fluid sample collected, the area will be rinsed a second time and the rinsate will be re-sampled using the procedures described above.

9.9 Miscellaneous Equipment

Expendable equipment such as personal protective equipment, shovels, brooms, buckets, hoses, pipes, etc. will be handled as hazardous waste and collected, contained, and shipped off-site to a RCRA-permitted TSD facility, as appropriate. Non-expendable equipment such as pumps, valves, control devices, can crushers, drum scraper, compactor/drum crusher etc. will be decontaminated by washing and wiping with appropriate cleaning agents. This also includes the filtering equipment used for the solids filtering process. Decontaminated equipment (including the tanks, and fuels blend equipment) may be left in place for subsequent use by a successor owner, transferred to another facility or taken to a scrap metal facility.

9.10 Run-on and Run-off Control During Closure Operations

The operating facility is designed to contain run-off and to prevent the movement of run-on onto the active portions of the facility. This is accomplished by the secondary containment systems surrounding each tank farm and the paved, curbed roadway which encompasses the facility. Both of these systems will remain intact during closure operations to control the movement of run-on and run-off at the facility.

9.11 Groundwater Monitoring

Because CHF does not operate a surface impoundment, waste pile, land treatment unit or landfill, the requirements of 40 CFR 264 Subpart F do not apply. Consequently, CHF will not conduct groundwater monitoring except as may be required for any corrective action program initiated on-site.

9.12 Certification of Closure

At the completion of closure activities, an independent, registered, professional engineer, licensed in the state of Florida, will inspect the entire facility and certify that closure was performed in accordance with the specifications in the approved Closure Plan. CHF will submit a certification of proper closure to the FDEP.

9.13 Survey Plat

Because CHF does not operate a landfill or other hazardous waste disposal unit, the requirements of 40 CFR 264.116 are not applicable.

9.14 Post Closure

Post closure is not required because CHF will not operate any hazardous waste disposal units on-site. However, should soil and/or groundwater contamination requiring post-closure care be found to exist, a post-closure care plan will be submitted as appropriate.

LIST OF FIGURES

1. Figure 9.1 - Maximum Waste Inventory At Closure

Figure 9.1 MAXIMUM WASTE INVENTORY AT CLOSURE

CONTAINER STORAGE BUILDINGS

South Container Storage Building

1,944 drums x 55 gallons/drum (or equivalent) = 106,920 gallons

North Container Storage Building

2,480 drums x 55 gallons/drum (or equivalent) = 136,400 gallons

STORAGE TANKS

South Tank Farm

Tanks T-101 through T-110..... 60,000 gallons

West Tank Farm

Tanks R-202 and R-203 12,600 gallons

Fuel Blending Tanks

Tanks T-112 & T-114 0 gallons

Subtotal - Tanks storage..... 72,600 gallons

ROLL-OFFS/MIXBOX

Four 40 yd³ roll-off boxes..... 32,320 gallons

NON RCRA ROLL-OFFS/MIX BOX

Four 40 yd² roll-off boxes..... 32,320 gallons

One mix tub 7,474 gallons

MAXIMUM STORAGE CAPACITY OF WASTE AT CHF = 388,034 gallons

SECTION Q

SOLID WASTE MANAGEMENT UNITS

1.0 Facility Process Description

Clean Harbors Florida, LLC (CHF) is a hazardous waste treatment, storage, and disposal facility located in Bartow, Florida. The facility accepts a variety of hazardous and non hazardous wastes from industrial and governmental generators. The waste is stored on-site in containers and tanks before being shipped off-site for final disposition.

2.0 Facility Solid Waste Manage Units and Areas of Concern

Handling these hazardous wastes at locations throughout the facility creates the potential for exposure to the environment. Areas of the facility where such exposure may occur are identified as either solid waste management units (SWMUs) or areas of concern (AOCs). A SWMU is defined as any unit which has been used for the treatment, storage, or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste. An AOC includes any area having a probable release of a hazardous waste or hazardous constituent which is not from a SWMU and which has been determined to pose a current or potential threat to human health or the environment.

The USEPA conducted a RCRA Facility Assessment (RFA) for this facility in Aug 1991. SWMUs identified at the CHF Bartow facility as a result of the RFA include the following units:

- SWMU #1: Hazardous Waste Fuel Blending Area
- SWMU #2: Drum Staging/Storage Area
- SWMU #3: Stormwater Collection Tanks
- SWMU #4: Stormwater Retention Ponds
- SWMU #5: Crude Storage Area (South Tank Farm)
- SWMU #6: Intermediate Storage Area
- SWMU #7: Process Area
- SWMU #8: Amnesty Days dumpster
- SWMU #9: Fume Hood Collection tank
- SWMU #10: Laboratory Satellite Accumulation Areas
- SWMU #11: Boot Cover Disposal Drums
- SWMU #12: Former Lab Trailer Drain Containment Pad

As a result of the RFA completed in Aug 1991, the Freon Wash Water Storage Tank was identified as the only AOC at the CHF Bartow facility (AOC A).

Three additional SWMU's were identified in the 2006 Part B renewal application. They include:

- SWMU # 13: North Container Storage Building sampling area
- SWMU # 14: Petroleum Wastewater Tanks
- SWMU # 15: Roll Off storage in the perimeter road area

These SWMUs and AOC are described in the following sections, along with their respective status under the current operating permit issued by DEP. Figure 18-1 shows the location of these SWMUs and AOC.

3.0 Description and Status of Solid Waste Management Units

A description and regulatory status of each SWMU is provided in the following.

3.1 Hazardous Waste Fuel Blending Area (SWMU #1)

The hazardous waste fuel blending area (SWMU #1) is located in the northeast portion of the South Container Storage Building on the south side of the facility. Fuel blending tanks (T-112 and T-114), a can crusher, a drum crusher, a drum scraper, and a drum pumping station currently are located within SWMU #1.

Activities conducted in SWMU #1 include the blending of hazardous wastes that cannot be reclaimed due to high viscosity, high concentrations of contaminants, or low recyclable value. Fuel grade wastes are determined by waste analysis. Containers of mostly liquid wastes are dumped or pumped into tanks T-112 or T-114, blended, and transferred to one of the hazardous waste storage tanks or directly to tanker trucks. Other activities conducted in SWMU #1 include drum and can crushing, drum scraping, and pumping drums directly to the crude storage tanks (T-100's). These activities are conducted within an enclosed building over concrete secondary containment.

Currently, SWMU #1 requires no further action.

3.2 Drum Staging Storage Area (SWMU #2)

The drum staging storage area (SWMU #2) is the South Container Storage Building located on the south side of the facility. SWMU #2 consists of a staging area where samples are collected from incoming drums and a storage area where drums are stacked on pallets. The concrete floor provides secondary containment and is tied to a trench drain that runs the length of the building. The permitted container storage area is designed to store a maximum volume of 106,920 gallons (equivalent to 1,944, 55-gallon drums).

Hazardous waste to be stored in SWMU #2 is unloaded at the dock and placed in the staging area

for sampling, labeling, bar coding, and other requested QC functions. After identification the hazardous materials are classified and moved into the storage area. The following activities and operations are associated within this storage building:

- Repackaging / Consolidation of containers.
- Storage of Haz and Non Haz electronic waste known as "E-Scrap".
- Staging areas for 10 day transfer facility materials.

Currently, SWMU #2 requires no further action.

3.3 Stormwater Collection Tanks (SWMU #3)

The stormwater collection tanks (SWMU #3) are located in the southeast corner of the facility near the main entrance/exit gate. Tank T-604 has a capacity of 5,800 gallons and T-605 has a capacity of 16,000 gallons. These tanks are used for temporary storage of stormwater collected and pumped from the low point of the perimeter road containment area. Stormwater collected in these tanks is tested prior to discharge off-site for treatment and disposal.

Currently, SWMU #3 requires no further action.

3.4 Stormwater Retention Pond (SWMU #4)

Stormwater retention ponds (SWMU#4) are located on the south side of the facility east of the South Container Storage Building and east of the office and laboratory building on the east side of the facility. SWMU #4 ponds normally are dry grassy areas that function as stormwater overflow structures for the perimeter road area and east area of the facility. Stormwater collected in these areas percolates and evaporates from these structures.

Initially, SWMU #4 was identified as requiring no further action. However, CHF conducts routine monitoring of groundwater at the facility outside of any regulatory involvement for internal risk management purposes. Monitoring results (see discussion below) from 1986 to the present showed potential groundwater impacts in the vicinity of the south retention pond and CHF subsequently notified EPA of the monitoring results. This notification triggered the corrective action requirements of the operating permit issued by DEP. A RCRA Facility Investigation (RFI) Work Plan was prepared in 1992 and updated in 1995 to identify the investigative activities proposed by CHF to determine the nature and extent of the groundwater impacts around the south retention pond.

In January 2002 the Florida Department of Environmental Protection (FDEP) determined that no further corrective action was required. This determination was reached after FDEP reviewed the facility's operating permit renewal application that contained sampling data results (1986 – 2000) from the facility's groundwater monitoring network. The findings are incorporated into the

facility operating permit (64247-HO-007) issued by FDEP on January 18, 2002.

SMU # 4 requires no further action

3.5 Crude Storage Area (South Tank Farm) (SWMU #5)

The crude storage area or the South Tank Farm (SWMU #5) is located in the south portion of the facility, north of the South Container Storage Building. SWMU #5 consists of ten steel storage tanks, T-101 through T-110, each with the capacity to hold 6,000 gallons of crude hazardous waste. A reinforced concrete pad and wall around the perimeter of the tanks provides secondary containment volume of 12,258 gallons. Other activities conducted in this area include three tanker truck loading and unloading stations used for crude hazardous waste handling and blended fuel waste handling.

Currently, SWMU #5 requires no further action.

3.6 Intermediate Storage Area (SWMU #6)

The intermediate storage area (SWMU #6) was located near the center of the facility, east of the Boiler Building and perimeter road and west of the Process Area. SWMU #6 consisted of ten steel storage tanks, T-201 through T-210, each with the capacity to hold 6,000 gallons of partially processed product. All tanks have been cleaned and removed. A reinforced concrete pad and wall around the perimeter of the former tanks provided secondary containment for this SWMU.

Currently, SWMU #6 requires no further action.

3.7 Process Area (SWMU #7)

The process area (SWMU #7) was located in the center of the facility, south of the Product Storage Area, north of the Crude Storage Area, and east of the intermediate storage area. SWMU #7 consisted of a vacuum still, thin-film evaporator, solvent, solvent wash tank, a hydrochlorofluorocarbon (HCFC) still, and distillation column. All equipment has been cleaned and removed.

Currently SWMU #7 requires no further action.

3.8 Amnesty Days Dumpster (SWMU #8)

The amnesty days dumpster (SWMU #8) does not currently exist but was located within the Perimeter Road Area. SWMU #8 was a lined and covered 40 cubic yard roll-off box that holds various types of solid or hazardous waste.

Currently SWMU #8 requires no further action.

3.9 Fume Hood Collection Tank (SWMU #9)

The fume hood collection tank (SWMU #9) is located on the north side of the Office and Laboratory Building on the east side of the facility. SWMU #9 was used to collect fluids from fume hoods located in the laboratory areas.

In February 1992, the EPA identified SWMU #9 as requiring confirmatory sampling to address concerns of potential contamination in this area. Confirmatory sampling at SWMU #9 was completed in April 1992. Sampling results were sent to the EPA and subsequently, CHF received notice from the EPA on June 24, 1992 stating that no further action was needed for SWMU #9.

Currently, SWMU #9 requires no further action.

3.10 Laboratory Satellite Accumulation Areas SWMU #10

Laboratory satellite accumulation areas (SWMU #10) are located in the Office and Laboratory Building on the east side of the facility, north of the visitor parking area. Hazardous waste materials are accumulated in this area inside the building.

Currently, SWMU #10 requires no further action.

3.11 Boot Cover Disposal Drums (SWMU #11)

The boot cover disposal drums (SWMU #11) were located in the Maintenance Building on the north side of the facility, east of the North Container Storage Building. These drums were used for collection of used personal protective equipment boot covers. Once these drums are filled, they are shipped off-site to a permitted TSD facility for disposal. These drums are no longer used to support facility operation and have been removed.

Currently, SWMU #11 requires no further action.

3.12 Former Lab Trailer Drain Containment Pad (SWMU #12)

The former lab trailer drain containment pad (SWMU #12) is located on the north side of the facility between the North Container Storage Building and the Maintenance Building. SWMU #12 previously was used as a containment pad area for laboratory drain collection tanks. SWMU #12 was not in use between 1996 and 2008. From 2008 to present the containment pad is used to accumulate scrap metal and hold decommissioned parts generated on site from operational maintenance of facility equipment. Items may include, ladders, steel grating, metal ramps, plate metal or other materials collected for recycling off site.

There is no hazardous waste materials placed in this area, no releases have ever taken place in this area, and all materials placed here are strictly accumulated for recycling or scrap materials to be reused.

Currently SWMU #12 requires no further action.

3.13 North Container Storage Building (NCSB) sampling area (SWMU #13)

The NCSB consists of a staging area, dock loading and unloading area where samples are obtained from incoming drums, and a storage area where drums are stacked on pallets. The staging and storage areas are divided into 17 holding cells for waste. This SMWU also has a containment area for reactive wastes and containment area for polychlorinated biphenyl (PCB) wastes. The following activities and operations are associated within this storage building:

- Repackaging / Consolidation of containers.
- Consolidation of gases.
- Satellite Accumulation Drums
- Secured storage in reactive cell of DOH prescription drugs (Haz and Non Haz).
- Storage of Haz and Non Haz electronic waste known as "E-Scrap".
- Staging areas (Contained Storage Cells) for 10 day transfer facility materials.

The concrete floor and cell curbs provide 10-percent secondary containment for the hazardous waste and/or 100% of the largest container stored in each cell.

The permitted container storage area is designed to store a maximum volume of 136,400 gallons (equivalent to 2,480, 55-gallon drums).

Hazardous waste to be stored in the NCSB is unloaded at the dock and placed in the staging area for sampling, labeling, bar coding, and other requested QC functions. After identification, the hazardous waste materials are classified and moved into the appropriate storage cell.

Currently SWMU # 13 requires no further action.

3.14 Petroleum Wastewater Tanks (SWMU # 14)

The two petroleum wastewater tanks (T-700 & T-701) are constructed of carbon steel, have a capacity of 5800 gallons with an eight (8) foot diameter and fifteen (15) feet six (6) inch height. The two tanks are in a reinforced concrete containment berm with containment volume of 7200 gallons. The concrete is sealed with an epoxy coating. The tanks are only used for non-RCRA petroleum materials.

Currently SWMU # 14 requires no further action.

3.15 Roll Off storage in the perimeter road area (SWMU # 15)

Up to four (4) bulk storage containers (rolloffs, intermodals, etc.) may be stored on the perimeter road. These containers will be kept covered while not in use. The area also serves as ten day transfer facility area in which bulk tanker trucks and other vehicles loaded with waste can be parked awaiting off site shipment. One of the permitted roll off areas is currently used for secured storage of Haz and Non Haz materials required to be locked up and secured with controlled access. (IE: DOH prescription drugs, other federal confiscated materials).

The perimeter road is constructed of reinforced concrete and is diked on all sides, creating containment of 26,098 gallons. The road drains to a blind sump capable of containing 300 gallons.

Currently SWMU # 15 requires no further action.

4.0 Description And Status Of Areas Of Concern

CHF has only one AOC, the Freon Wash Water Storage Tank. The AOC is located close to the southeast corner of Process Area. This AOC is a 3,500 gallon tank used to store freon wash water. A reinforced concrete pad and wall around the perimeter of the process area provides a secondary containment volume of at least 110% of the volume of this tank.

Currently, this AOC requires no further action.

5.0 Identification of New SWMUs

The facility proposes to construct a solidification area near the North Container Storage Building. This will be SWMU #16. This area will be new concrete connected to the existing perimeter road. It will be approximately 2,190 ft². Located on the pad will be a steel mix tub. Inside this container, non hazardous waste will be solidified using inert reagents such as paper pulp or sawdust. The solidified waste will be transferred to roll-offs for shipment offsite.

Currently this SMU requires no further action.



LEGEND

- 

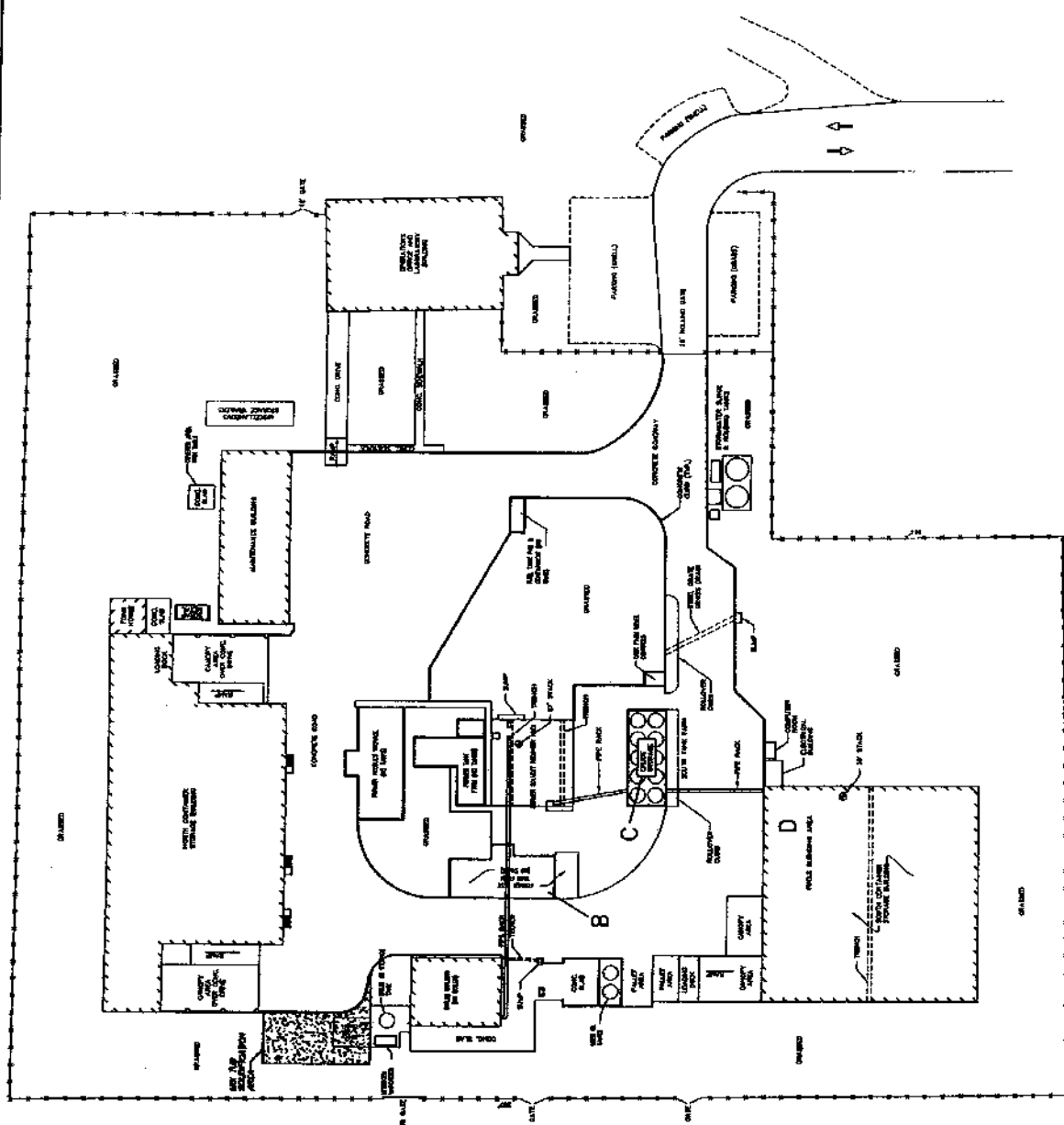





GENERAL NOTES

[illegible]

Figure 3.1



RELOCATION OF EXISTING HAZARDOUS WASTE UNITS

MARK	DESCRIPTION
B	BOTTOMS STORAGE TANKS (REMOVED)
C	CRUDE STORAGE TANKS
D	FUEL BURNING AREA

NOTE: UNIT "A" (AS DESIGNATED BY DOE) IS THE PRODUCT STORAGE TANK FARM WHICH IS NOT A HAZARDOUS WASTE UNIT.

LEGEND

- ALL EXISTING STRUCTURES
- NEW STRUCTURES
- NEW TANKS
- NEW LINES
- EXISTING LINES
- EXISTING PIPES
- EXISTING DUMPS

0 15 30 60 90 120
GRAPHIC SCALE (FEET)

GENERAL NOTES

GENERAL NOTES		CleanHarbor®										TITLE		CLEAN HARBORS BARTON, INC. BARTON FACILITY LOCATIONS OF HAZARDOUS WASTE UNITS		DATE		FIGURE 14.1	
NOTHING TO BE SHOWN		REV.		DATE		BY		CHECKED		DATE		BY		CHECKED		DATE		BY	
		1		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		1		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		2		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		3		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		4		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		5		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		6		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		7		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		8		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		9		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		10		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		11		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		12		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		13		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		14		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		15		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		16		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		17		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		18		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		19		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		20		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		21		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		22		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		23		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		24		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		25		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		26		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		27		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		28		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		29		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		30		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		31		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		32		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		33		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		34		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		35		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		36		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		37		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		38		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		39		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		40		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		41		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		42		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		43		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		44		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		45		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		46		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		47		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		48		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		49		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		50		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		51		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		52		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		53		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		54		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		55		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		56		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		57		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		58		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		59		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		60		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		61		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		62		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		63		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		64		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		65		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		66		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		67		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		68		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		69		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		70		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		71		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		72		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		73		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		74		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		75		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		76		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		77		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		78		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		79		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		80		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		81		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		82		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		83		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		84		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		85		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		86		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		87		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		88		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		89		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		90		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		91		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		92		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		93		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		94		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		95		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		96		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN		97		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
		98		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.		J.K.M.		10/1/78		J.K.M.	
NOTHING TO BE SHOWN																			