APPLICATION TO OPERATE
A COMMERCIAL PCB STORAGE FACILITY

Submitted to:

Office of Toxic Substances
US Environmental Protection Agency

by

Spring Grove Resource Recovery, Inc.
4879 Spring Grove Avenue
Cincinnati, Ohio 45232
EPA ID No. OHD000816629

Revised August 23, 2002

CERTIFICATION

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this "Application to Operate a Commercial PCB Storage Facility" document, including Closure Plan and Cost Estimate, is true, accurate, and complete. As to the identified section(s) of this or accompanying documents for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

I also certify that the units designated in this plan as "TSCA storage areas" meet the design requirements of 40 CFR 761.65(b) and (c), as applicable.

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Eric Gerstenberg, -President
Spring Grove Resource Recovery, Inc

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INTRODUCTION

This Application to Operate a Commercial Polychlorinated Biphenyl (PCB) Storage Facility is submitted to the United States Environmental Protection Agency (USEPA) by Spring Grove Resource Recovery, Inc. (SGRR) in accordance with the PCB storage facility permitting requirements of 40 CFR 761.65(d) under the Toxic Substances Control Act (TSCA).

SGRR is a hazardous waste storage, treatment, and transfer facility operating in accordance with a RCRA Part B permit issued by the Ohio Environmental Protection Agency (OEPA) on March 31, 1994 under the Resource Conservation and Recovery Act (RCRA). SGRR is currently authorized under TSCA interim status to conduct PCB storage/handling activities.

This Application describes the Commercial PCB activities to be pursued by SGRR at the consolidated SGRR facility and supercedes the Application for PCB Commercial Storage previously submitted to the Agency.

This Application is structured in accordance with 40 CFR 761.65(d)(6) to demonstrate that SGRR meets the design and management standards for PCB commercial storage facilities, and to provide a financial assurance mechanism for its PCB activities. SGRR has prepared a closure plan which includes the removal and disposal of the maximum inventory of PCB waste to be stored at the facility and the decontamination of all designated PCB storage and handling units authorized by this License. SGRR notes that PCB's are not designated as a hazardous waste pursuant to Ohio RCRA regulations. However, PCB wastes will be handled in structures/areas of the facility that are licensed for RCRA activities.

Under this Application, SGRR seeks to license one container storage buildings (High Bay), one storage tank and three vehicle parking areas for PCB storage and transfer activities. However, at the time of initial facility start-up, SGRR intends to only partially utilize the capacity of High Bay. Additional gallonage/capacity would be brought on-line to PCB service as business conditions warrant and with prior written notification to USEPA, including any necessary increase in the facility's closure cost funding mechanism.

SGRR is a wholly-owned subsidiary of Clean Harbors, Inc. of Quincy, Massachusetts. Three of SGRR's sister companies, Clean Harbors of Braintree Inc. (CHBI), Clean Harbors of Natick, Inc. (CHNI) and Clean Harbors of Connecticut, Inc. (CHCT) are commercial PCB storage facilities. A fourth sister facility, Clean Harbors of Chicago, Inc. is currently undergoing final TSCA approval to commence PCB activities.

1.0 FACILITY DESCRIPTION

1.1 Name, Address, and EPA ID Number

The legal name, mailing address and telephone number of the owner/operator of the proposed commercial storage facility for polychlorinated biphenyls (PCB's) is:

Name: Spring Grove Resource Recovery, Inc.
Address: 4879 Spring Grove Avenue
Cincinnati, Ohio 45232
EPA ID No: EPA ID No. OHD000816629
Telephone: (513) 681-5738

1.2 Current Regulatory Status

Spring Grove Resource Recovery, Inc. (SGRR) is a hazardous waste treatment, storage and transfer facility operating in accordance with a RCRA Part B permit issued by the Ohio Environmental Protection Agency (OEPA) pursuant to the Resource Conservation and Recovery Act (RCRA). A copy of the current Part B Permit signature pages is included in Appendix 1. Under the terms of the Part B Permit, SGRR is authorized to conduct various treatment and storage/transfer operations involving characteristic (D-code) and listed (F-, K-, P-, U-code) hazardous wastes.

PCB's are not designated as a hazardous waste pursuant to OEPA RCRA regulations. However, SGRR is currently authorized to conduct Commercial PCB Storage facility storage/handling activities under the Toxic Substance Control Act (TSCA) interim status regulations at 40 CFR 761. A copy of SGRR's "Notification of PCB Activities" (EPA Form 7710-53) and acknowledgment by USEPA is included in Appendix 2.

1.3 Facility Overview

1.3.1 Existing Structures and Activities

The location of the facility, topographical features of the site and surrounding area, and floodplain information are shown on the maps included in Appendix 3.

The layout of the facility and the existing structures at the facility are shown on Dwg. No. 5384-C-04. Detailed information concerning the location, design and operation of the structures and areas in which PCB's are to be stored and/or handled is presented Section 3.0 below and on Dwg. No 5384-S-03. SGRR notes that each of the PCB management areas is also permitted for RCRA hazardous waste handling activities. PCB activities shall be limited to the following areas:

A. TSCA Storage Areas

The following unit designated as "TSCA storage areas" shall be designed in accordance with 40 CFR 761.65(b) standards. The PCB storage area is designed and constructed with adequate roof and walls to prevent entry of rain, in compliance with 40 CFR 761.65(b).

1. High Bay - A fully-contained building used for the indoor storage and consolidation of PCB wastes in containers (e.g., drums);

B. Tank Storage Area

One 10,350 gallon storage tank that complies with 29 CFR 1910.106 and 40 CFR 112.

C. Vehicle Storage Areas

The following units are designated as "vehicle storage areas" where highway transportation vehicles (e.g., box trucks, flat bed trailers, rolloffs, tank trucks) containing PCB wastes may be stored for up to 30 days from the date the waste was received at the facility:

1. Rolloff Pad - Five (5) vehicles; and

2. Tanker Loading/Unloading Area - Two (2) vehicles.

3. Truck loading/unloading area (Stabilization building)- two (2) vehicles.

D. Shipping/Receiving Areas

The following units are designated as "shipping/receiving areas" for PCB waste in bulk and non-bulk form. Inbound or outbound waste may be "staged" in these areas for up to 10 days without being considered in storage:

1. High Bay Receiving Dock - A roofed dock on the northern side of the High Bay building which used for receiving, shipping, and staging of RCRA and PCB wastes in containers; and

2. Building F Receiving Dock - A roofed dock on the northern side of Building F which used for receiving, shipping, and staging of RCRA and PCB wastes in containers.

SGRR notes that the Truck Loading/Unloading Area (Stabilization Building H), the Rolloff Pad, and the Tanker Loading/Unloading Area identified above function as active loading and offloading area for vehicle transporters hauling PCB wastes. The Stabilization building H may be used to solidify PCB sludges prior to placement in rolloffs for offsite disposal. Sludges will be solidified in rolloffs and/or a steel mix box (dimensions: 20'x 20' x 3').inert reagents (clay, sawdust) will be used that do not cause an exothermic reaction. An excavator will be used to mix the reagents and sludge and transfer the waste into a rolloff box. The mixtub and/or rolloffs would be considered a PCB container per 40 CFR 761.3

and would be decontaminated per 40 CFR 761.79(c)(1). The excavator would be decontaminated per 40 CFR 761.79(c)(2).

E. Other Areas

SGRR has identified several "other areas" of the facility in which PCB's may be present. These "other areas" are assets or structures that provide support services related to SGRR's management of PCB's at the facility (e.g., a laboratory used to test samples to determine PCB concentration, etc.), but are not PCB waste storage, treatment or disposal units or processes which require a USEPA TSCA permit. The "other areas" are identified under this application so that they may be included in confirmatory PCB sampling at the time of facility closure. The "other areas" include the following units:

1. Laboratory - An analytical testing laboratory for onsite waste analysis;

2. Transportation/Receiving Building - The security checkpoint and the waste shipment entrance to the facility;

3. Roadway System - An asphalt-paved roadway system on which all highway vehicles carrying PCB and RCRA waste move about the facility; and

4. "Transfer Facility" - All transportation- related areas (e.g., roadways, parking areas) at the facility. These areas are used for stoppage of highway vehicles which are "in-transit" (i.e., carrying TSCA waste that is not manifested to or from SGRR) for a period of time not to exceed 10 days in accordance with the 40 CFR 761.3 definition for "transfer facility".

1.3.2 Environmental Conditions

SGRR is located on Spring Grove Avenue in Cincinnati, Ohio. The property is approximately 5 acres in size. Access to the site is via an paved asphalt road leading from Spring Grove Avenue to the waste receiving/shipping gate located west of the High Bay building.

Land use information for the site is shown on the City of Cincinnati Zoning/Land Use map provided in Appendix 3. As shown on the map, surrounding land use in the vicinity of the facility is generally medium/heavy industrial. Floodplain information for the site is shown in the floodplain map provided in Appendix 3. The map, taken from the Federal Emergency Management Agency's (FEMA's) National Flood Insurance Program Flood Insurance Rate Map (FIRM) Community Panel No. 3902100010B, shows that the facility is not located within a 100-year floodplain. There are no underground tanks or groundwater drinking water supply wells at the site. Groundwater at the site ranges from three to nine feet below ground surface. Drinking water for SGRR and the surrounding community is provided by the City of Cincinnati municipal supply system. There are no active or closed land disposal units on the property.

2.0 Company Ownership and Qualifications

2.1 Company Ownership

SGRR is a wholly-owned subsidiary of Clean Harbors, Inc. (CHI), one of the largest environmental services and hazardous waste management firms in the United States. Founded in 1980, CHI employs over 1,500 professional, technical, and support personnel in twelve subsidiary companies. In addition to SGRR, the subsidiary companies include:

- Clean Harbors of Braintree, Inc. - a hazardous waste treatment and storage facility operating under RCRA interim status, and commercial PCB storage facility operating under TSCA interim status;
- Clean Harbors of Natick, Inc. - a RCRA Part B permitted storage facility and licensed commercial PCB storage facility;
- Clean Harbors of Connecticut, Inc.- a RCRA Part B permitted treatment and storage facility, and commercial PCB storage facility operating under TSCA interim status;
- Clean Harbors Services, Inc. - a RCRA Part B permitted treatment and storage facility, currently undergoing final TSCA permitting to commence operations of a commercial PCB storage facility;
- Clean Harbors of Baltimore, Inc.- a RCRA Part B hazardous waste storage and treatment facility;
- Clean Harbors Environmental Services, Inc. - an industrial wastewater treatment facility;
- Murphy's Waste Oil Service, Inc. - a RCRA Part B hazardous waste (waste oil) storage facility;
- Clean Harbors Environmental Services, Inc.- a RCRA Part B permitted hazardous waste incinerator in Kimball, NE; and
- Clean Harbors Environmental Services, Inc. - a provider of environmental services including licensed hazardous waste transportation, waste oil recycling at three (3) facilities, oil/hazardous materials emergency response, and commercial analytical laboratory services.

A detailed description of CHI's subsidiaries, company experience, and management qualifications is Appendix 4, "Statement of Qualifications and Experience".

2.2 Key Personnel

Company Officers and other key management personnel involved in the oversight of PCB activities at SGRR include:

Eric Gerstenberg - Director and President
Jim Rutledge – Director, Executive Vice President and Treasurer
David Musselman – Senior Vice President and Assistant Secretary
Michael McDonald – Vice President and Assistant Secretary
C. Michael Malm - Secretary

Resumes reflecting the educational and professional experience of these individuals are included in CHI's Qualification Statement presented in Appendix 4.

Key facility personnel responsible for the actual onsite operation of the commercial PCB storage facility include:

- Steve Vasse- General Manager
- Steve Bley - Compliance Manager

Resumes reflecting the qualifications and experience of these individuals are included in Appendix 5.

2.3 Environmental Compliance History

2.3.1 Clean Harbors Companies

A description of all past and current enforcement actions and civil/criminal lawsuits against CHI and its subsidiaries, including SGRR, can be found in the compliance history summary included in Appendix 6.

2.3.2 Other Companies Owned/Operated by Principals or Key Employees

No principals or key employees have been affiliated directly with any waste management companies, other than those owned by CHI, within the five (5) years prior to this submittal.

3.0 Identification and Description of PCB Storage Areas

3.1 Description of PCB Management Activities

SGRR receives PCB wastes in containers, bulk transport vehicles, and PCB Items such as transformers and electrical equipment. Flowable PCB liquids will be drained and/or pumped from their original container and consolidated into transport vehicles or other containers such as tote tanks and drums. Oil-based and aqueous-based PCB liquids will be stored in containers such as drums and tote tanks prior to gravity phase separation, sampling to determine PCB concentration, and shipment to offsite disposal/treatment facilities. PCB contaminated solids including soil and debris will be consolidated into rolloff containers and shipped offsite for disposal.

Depending on PCB concentration, original containers may be flushed with an appropriate solvent (e.g., diesel fuel, No. 2 fuel oil, xylene, etc.) and/or shipped to authorized offsite management facilities such as TSCA incinerators, TSCA landfills, or other commercial PCB storage facilities. In the case of a PCB-contaminated transformer drained in accordance with 40 CFR 761.60(b)(4), or a PCB container decontaminated in accordance with 40 CFR 760.79, the drained/decontaminated unit may be shipped for scrap metal reclaim or disposal as a non-TSCA waste.

PCB transformers are drained by one of two methods to ensure all free flowing liquid is removed. If the transformer has a bottom drain valve a pump and hose is connected and all free flowing liquid is pumped into drums and/or bulk containers. A second method involves opening the top access cover and placing a dipleg on the suction side of a pump into the transformer and pumping all free flowing liquid into drums and/or containers. Whichever method is used, the empty transformer will be visually inspected to ensure all free flowing liquid has been removed.

All PCB waste will be stored only in containers that meet DOT requirements per 49 CFR part 171-180.

Forklifts will be used to move PCB waste. As the wastes are packaged in DOT containers, the forklifts are not exposed to the waste and are not expected to require any cleaning/decontamination. If the equipment becomes contaminated, decontamination methods per 40 CFR 761.79(c)(2) will be used.

3.1.1 Recordkeeping And Reporting Protocols To Ensure Compliance With 40 Cfr 761.180(B)

Spring Grove Resource Recovery has developed a waste information network win) to track waste material profiles, manifests, analytical results, and other information associated with generator waste streams in order to ensure that each waste stream received at the facility is managed in a compliant manner. The WIN system is essentially a relational database that stores information on waste streams and waste shipments, and which has been programmed to allow SGRR to store certain information regarding waste streams containing PCBs so that SGRR can generate a PCB annual document log and PCB annual report. SGRR shall prepare and retain annual document logs and annual reports in accordance with the requirements of 40 CFR 761.180(b).

For ease of understanding, the specific recordkeeping and reporting requirements of 40 CFR 761.180(b) have been listed below, with an explanation of how SGRR will comply with the regulation.

40 CFR 761.180(B)(1)(I)

SGRR retains all manifests received at, and shipped from its facility. All manifests are available for inspection at any time.

40 CFR 761.180(B)(1)(II)

SGRR retains all certificates of disposal received from disposal facilities for PCB waste shipments shipped to those disposal facilities.

40 CFR 761.180(B)(1)(III)

SGRR retains all inspection records on-site at its facility, including those records required by 40 CFR 761.65(c). In the event a container is found to be leaking, it will be cleaned up in accordance with 761.65(c)(5), and a record of the incident will be recorded on the inspection form.

40 CFR 761.180(B)(2)(I) through 40 CFR 761.180(B)(2)(II)(D)

SGRR utilizes the Clean Harbors WIN system to electronically generate an annual document log as required by 40 CFR 761.180(b)(2).

The annual document log shows the name, address, and EPA id number for SGRR, as well as the calendar year covered by the log. The Clean Harbors WIN system utilized by SGRR utilizes unique waste category codes to identify PCB wastes, and a numbering system to categorize specific PCB waste types. For example, the Clean Harbors waste category code for solid PCB waste intended for landfill is CHSL. This code is assigned to each generator specific waste material profile that consists of this category of PCB waste. SGRR also assigns a number to each PCB waste stream, upon receipt at its the facility, as follows:

1. Bulk Liquid Or Solid
2. Transformer
3. Capacitor
4. PCB Article Container
5. PCB Container

This numbering system allows SGRR to identify the specific types of PCB waste that it received each year, in accordance with the requirements of 40 CFR 761.180(b)(2)(ii)(a) through (d). The information is entered into the WIN system, and the annual document log is generated based on this information.

40 CFR 761.180(B)(2)(II)(E)

SGRR is not a disposer, so this requirement is not applicable.

40 CFR 761.180(B)(2)(III)

SGRR shall utilize the information in the WIN system to provide the information required by this regulation.

40 CFR 761.180(B)(3)(I) through 40 CFR 761.180(B)(3)(VII)

SGRR will use the information in the PCB annual document log to generate the PCB annual report, due on July 15 of each year.

40 CFR 761.180(B)(4)

SGRR uses a manifest for every shipment of PCB waste that it receives from off-site and in turn ships to another facility for storage or disposal.

40 CFR 761.180(B)(5)

SGRR shall report PCB voltage regulators as PCB transformers. This is accomplished by use of the 1-5 numbering system discussed above.

3.2 Identification PCB Handling Areas

PCB storage and handling activities at SGRR shall be limited to the areas and timeframes identified below. The location of each of the PCB management areas is shown on Dwg. No. 5384-C-04. A detailed description of each area presented in Section 3.3 below. SGRR notes that areas identified for the handling of PCB wastes are also designated for the handling of RCRA hazardous waste.

A. TSCA Storage Areas

The following unit is designated as "TSCA storage areas" that shall be designed in accordance with 40 CFR 761.65(b) standards:

1. High Bay - A fully-contained building used for the indoor storage and consolidation of RCRA and PCB wastes in containers (e.g., drums), including PCB waste which exhibits the RCRA characteristic of ignitability (i.e., flash point less than or equal to 140°F);

B. Tank Storage Area

One 10,350 gallon tank which is located in concrete lined secondary containment will be used for liquid PCB wastes.

C. Vehicle Storage Areas

The following units are concrete-lined and secondary contained "vehicle storage areas" where highway transportation vehicles (e.g., box trucks, flat bed trailers, rolloffs, tank trucks) containing PCB wastes may be stored for up to 30 days from the date the waste was received at the facility:

1. Rolloff Pad - Five (5) vehicles; and
2. Tanker Loading/Unloading Area - Two (2) vehicles.
3. Truck loading/unloading area (Stabilization building) - two (2) vehicles.

D. Shipping/Receiving Areas

The following units are "shipping/receiving areas" shall be utilized for the shipping and receiving PCB waste in bulk and non-bulk form. Inbound or outbound waste may be "staged" in these areas for up to 10 days without being considered in a "TSCA storage" or "vehicle storage" area:

1. High Bay Receiving Dock - A roofed dock on the northern side of the High Bay building which used for receiving, shipping, and staging of RCRA and PCB wastes in containers; and

2. Building F Receiving Dock - A roofed dock on the northern side of Building F which used for receiving, shipping, and staging of RCRA and PCB wastes in containers.

SGRR notes that the Truck Loading/Unloading Area (Stabilization Building H), the Rolloff Pad, and the Tanker Loading/Unloading Area identified above function as active loading and offloading area for vehicle transporters hauling PCB wastes.

E. Other Areas

The "other areas" are assets or structures that provide support services related to SGRR's management of PCB's at the facility (e.g., a laboratory used to test samples to determine PCB concentration, etc.), but which are not PCB waste storage, treatment or disposal units or processes requiring a USEPA TSCA permit. The "other areas" are identified under this application so that they may be included in confirmatory PCB sampling at the time of facility closure.

1. Laboratory - An analytical testing laboratory for onsite waste analysis;

2. Transportation/Receiving Building - The security checkpoint and the waste shipment entrance to the facility;

3. Roadway System - An asphalt-paved roadway system on which all highway vehicles carrying PCB and RCRA waste move about the facility; and

4. "Transfer Facility" - All transportation- related areas (e.g., roadways, parking areas) at the facility. These areas are used for stoppage of highway vehicles which are "in-transit" (i.e., carrying TSCA waste that is not manifested to or from SGRR) for a period of time not to exceed 10 days in accordance with the 40 CFR 761.3 definition for "transfer facility".

3.3 Detailed Description of PCB Handling Areas

3.3.1 TSCA Storage Areas

The "TSCA storage area" at SGRR is designed and shall be managed in accordance

with 40 CFR 761.65(b)(1) criteria. This PCB storage area is located indoors to prevent rainwater from reaching the stored PCB's and PCB Items per 40 CFR 761.65 (b)(1)(i). The area is located above the 100-year floodplain elevation per 40 CFR 761.65 (b)(1)(v). Additional design details for the unit is presented in Sections 3.3.1.1 and 3.3.1.2 below.

3.3.1.1 Container Management Building (High Bay)

The Container Management Building (High Bay) is an existing hazardous waste container storage building identified as High Bay on SGRR Dwg. No. 5384-C-04. Under this Application, only a portion along the northeast side of the building shall be designated for combined RCRA/TSCA activities. PCB management activities will include the storage and consolidation of PCB Items (e.g., transformers, electrical equipment, drums, tote tanks), and the decontamination (draining and/or flushing) of transformers and other PCB Items containing PCB liquids. Storage area(s) will maintain two feet (2) aisles between rows to facilitate movement, fire protection and spill control.

The High Bay PCB storage area is designed to meet TSCA secondary containment requirements for container storage units. The floor is constructed of a minimum 10-inch thick poured concrete that is coated with a epoxy sealant and is free of any drain valves, floor drains, cracks, or gaps. A minimum 6-inch high concrete containment curb runs along the perimeter of the storage unit and conforms with 40 CFR 761.65(b)(1) standards. The berm is poured on top of the concrete floor with connecting rebar. A water stop was placed at the berm/floor interface. The epoxy sealant provides an impermeable seal at the interface. Design details and secondary containment calculations for High Bay are shown on Dwg. No. 5384-S-03.

Drums are placed on 48" x 48" pallets. If double or triple stacked, the base pallet(s) will have a stable container configuration (Ie: four 55 gallon drums) before another pallet is stacked on top. This area can hold seventeen pallets on the floor base level. If PCB containers (55 gallon drums) are stacked three (3) high the containers of each layer must be secured by banding (shrink-wrapping) them together and a pallet shall be used between the layers. If the containers are also placed on a pallet, they must be within the pallet edges.

As shown on SGRR Dwg. No. 5384-S-03, the secondary containment volume for High Bay is 3,374 gallons. Per 40 CFR 761.65(b)(1)(ii), the secondary containment volume of any PCB storage unit must exceed the larger of (a) two times the largest PCB container or (b) 25% of the total of all containers. Secondary displacement from pallets and containers is as follows; each pallet has a displacement volume of 1.34 ft3. The pallet is built of six 1"x4"x48" boards and three 2"x4"x48" boards. Pallet heights vary slightly but will be no less than 4" and no more than 5.95". A 55 gallon drum displaces 1.047 ft3 for the bottom 4".

- 55 gallon drum has a diameter of 24"
- Volume = $\Pi(r)2h$ = 3.14 x 1' x 1' x 0.33333'= 1.047 ft3

The berm is 8" high (see drawing 5384-s-03), so we consider the 4" pallet and 4" of the drum. A maximum of 17 pallets can be put in the bermed area. Therefore, the pallet and drum displacement is 703 gallons. (17 pallets x 1.34 ft3/pallet; 68 drums x 1.047 ft3/drum.) Available containment excluding pallet and container displacement is 3374-703= 2671 gallons.

Given these design restrictions: (a) the maximum allowable container size is 1335 gallons [2671/(2) = 1335 gal] and (b) the maximum allowable storage volume is 10,684 gallons [2671 gal/(0.25) = 10,684 gal] of PCB waste. On a 55-gallon drum basis, the storage bay is capable of providing adequate capacity for up to 194 drums [10,684 gal/55 gal/drum = 194.25 drums].

The maximum number of PCB Items which are be stored in this area will vary with the type, size, and contents of the drum, transformer, capacitor, or other item(s) actually received from offsite generators. However, in no case will the total amount of PCB's stored in the High Bay exceed 10,670 gallons.

Under this PCB Commercial Storage application, SGRR seeks to license High Bay for the storage of up to 10,670 gallons of PCB waste. ; additional gallonage shall be brought on-line to PCB service as business conditions warrant and with prior written notification to USEPA, including any necessary increase in the facility's closure cost funding mechanism.

3.3.1.2 Tank storage area

SGRR intends to utilize a 10,350 gallon tank to store PCB liquids. Tank specifications are:

- 10,350 gallon
- 16' sidewall and 10.5' diameter
- pressure/vacuum vent: OPW 95ut, 3". Pressure setting 2 oz/in2, vacuum setting 0.5 oz/in2.
- emergency vent: opw 202-f-0600

The tank must comply with 40 CFR 761.65(c)(7) which references meeting the standards of 29 CFR 1910.106 and 40 CFR 112. This section dicusses compliance with 29 CFR 1910.106. The SPCC covers compliance with 40 CFR 112.

Per 1910.106 *(b)Tank Storage (1) design and construction of tanks:*
(i) *Materials (b):*
The tank is constructed of steel and is UL rated for flammable and combustible liquids

(i) *Materials (f):*
The specific gravity of product stored will be that of water (1.0) and will be stored at ambient tempeature (mean is 53° f)

(ii) *Fabrication (b):*
The tank has welded seams.

(iii): The tank is UL rated for flammable and combustible liquids.

(iii)*Atmospheric tanks*

(3)(b): Not Applicable.

(3)(d): Liquid is stored at a temperature below the boiling point.

Per 1910.106 *(b)Tank Storage (2) Installation of Outside Aboveground tanks:*

(ii) *Spacing (shell to shell) between aboveground tanks*
Shell to shell spacing is (3) three feet. Adjacent tanks are the same size (10.5' diameter)

(iv) *Normal venting for aboveground tanks*
The Tank has OPW 95 3" vent with pressure settings of 2 oz/in2 and vacuum settings of 0.5 oz/in2.

(v)*emergency relief venting for fire exposure for aboveground tanks*

The tank has an OPW 202-F8" emergency vent

(vi) *vent piping for aboveground tanks*

The tank is vented through activated carbon canisters for volatile organic control.

(vii) *drainage, dikes, and walls for aboveground tanks*

Containment is found in the SPCC plan. In summation, containment is greater than the largest tank, walls are reinforced concrete sealed with an epoxy coating.

(viii) *tank openings other than vents for aboveground tanks*

Filling and emptying connections are submerged fill, equipped with ball valves. The tank is outside within secondary containment. Gaging openings have vaportight caps. The tank is not connected to any piping systems. All liquid transfer will be by dedicated hoses and pump. This is to ensure no cross contamination of piping systems and/or other tanks.

(3) *Installation of underground tanks*

not applicable

(4) *Installation of tanks inside buildings*
Not applicable

(5) *Supports, foundations, and anchorage for all tank locations*

The tank pedistal is concrete. No steel support or exposing piling exists. The tank foundation is approximately 14" reinforced concrete and has been in continual service for greater than (10) ten years with no evidence of cracks or any failure. The tank is not subject to flooding.

(6) *Sources of Ignition*

Smoking in the facility is prohibited. Electrical systems in the tank containment system are class 1, division 1.

(7) *Testing*

The tank is UL rated and has been in operation greater than (10) ten years.

Per 1910.106 *(c) Piping, valves and fittings*

The tank has the following welded steel connections on the sidewall:

- One 3" ~6" from the tank bottom
- One 3" ~6" from the tank top
- Three 3" spaced along the sidewall
- Eight 1" spaced along the sidewall
- One 1.5" ~6" from the tank bottom

All welded connections have steel ball valves within 6" of the tank shell via flange connections (threaded connections for the 1"). The tank and piping are painted for external corrosion control.

(2) Materials for piping, valves and fittings

All fittings, piping and valves are carbon steel construction.

(3) Pipe Joints

All flange connections have Teflon gaskets.

(4) Supports

Not Applicable.

(5) Protection against corrosion

All exposed steel is painted.

(6) Valves

Check valves are not used as the pumps utilized are air driven and only can be operated with flow in one direction.

(7) Testing

The tank has been in service greater than 10 years with no failures.

3.3.2 Vehicle Storage Areas

SGRR shall utilize three (3) concrete-lined and contained truck pads for the storage of highway transportation vehicles (e.g., box trucks, flat bed trailers, rolloffs, tank trucks) containing PCB wastes. Such vehicles may be stored for up to 30 days from the date the waste was received at the facility. The vehicle storage areas include:

1. Rolloff Pad - five (5) vehicles; and

2. Tanker Loading/Unloading Area - Two (2) vehicles.

3. Truck loading/ unloading area (Stabilization building)- two (2) vehicles.

Other PCB handling activities conducted in the the vehicle storage areas may include: (i) storage and decontamination (draining/flushing) of transformers; (ii) consolidation and storage of PCB liquids in bulk transport vehicles; and (iii) consolidation and storage of PCB solids in rolloff containers.

The tanker loading/unloading and truck loading/unloading (stabilization building) areas are RCRA-permitted vehicle storage areas which meets the 40 CFR 264.175 secondary containment requirements for containers. The floors are constructed of minimum 8-inch thick poured concrete, are coated with an epoxy sealant, and are free of any drain valves, floor drains, cracks, or gaps. Sloped concrete curbing along the perimeter of the pads control liquid runon/runoff to the area. Construction details and secondary containment volumes for these units are shown in Dwg. No. 5384-S-03.

Only solid PCB wastes as defined by the paint filter test will be stored on both the rolloff pad and the truck loading/unloading areas.

The number/volume of PCB's stored in the vehicle storage areas will vary with the actual type, size, and contents of the transport vehicles being used and the waste which they are loaded with. The maximum PCB waste inventory is based on a "worst-case" scenario in which each pad filled with transportation units which have the highest designed unit capacity.

Based on operating experience, the possible units include: (a) Flat bed trailers, each loaded with 100 transformers with an internal fluid volume of 10 gallons per unit and having an effective PCB volume of 1,000 gallons per unit; (b) Rolloff containers, each loaded with 30 cubic yards of PCB solids, having an effective capacity of 6,059 gallons per unit [(30 CY)(7.48 gal/CF)(27 CF/CY) = 6,059 gal]; and (c) Bulk liquid transporters, each having a capacity of 7,200 gallons. Based on the above design specifications and assumptions, bulk liquid transporters have the highest PCB capacity per unit and represent the "worst-case" scenario. Thus, for TSCA closure cost estimation purposes, up to two (2) bulk liquid transporters (tanker loading/unloading pad) will be stored in the vehicle storage areas and seven (7) rolloffs of PCB solids will be stored on both the rolloff pad and truck loading/unloading area (stabilization bld).

3.3.3 Shipping/Receiving Areas

There are two (2) designated "shipping/receiving areas" for PCB wastes, including the High Bay Receiving Dock and the Building F Receiving Dock.

PCB management activities in the shipping/receiving areas include the staging (up to 10 days) of inbound/outbound containers, pre-acceptance and pre-transport paperwork review (e.g., labels, manifests, etc.), container sampling, consolidation of PCB Items (e.g., transformers, electrical equipment, drums, tote tanks), and decontamination (draining and/or flushing) of transformers and other PCB Items containing PCB liquids.

3.3.4 Other Areas

The "other areas" designated for PCB support activities are not subject to any specific TSCA design or management standards.

3.4 Future PCB Storage

As of the date of this application, SGRR intends to only partially utilize the capacity of High Bay by limiting its initial operational practice closure funding) to just 216 drums (55-gallon equivalents) stored within a designated area inside High Bay (see Section 3.3.1.1 above). Additional gallonage/capacity shall be brought on-line to PCB service as business conditions warrant and with prior written notification to USEPA, including any necessary increase in the facility's closure cost funding mechanism.

High Bay is an indoor waste storage building that is designed to meet TSCA secondary containment requirements for container storage units. The floors are constructed of a minimum 10-inch thick poured concrete that is coated with a epoxy sealant and is free of any drain valves, floor drains, cracks, or gaps. A minimum 6-inch high concrete containment curb runs along the perimeter of the storage unit and conforms with 40 CFR 761.65(b)(1) standards.

4.0 PCB CLOSURE PLAN

4.1 Maximum PCB Inventory at Closure

For the purpose of closure, the maximum PCB inventory at the facility will be the sum of the maximum operating capacities of the "TSCA storage areas" and "vehicle storage areas" described in Section 3.3.1 and 3.3.2 above. The capacity of each unit is summarized in Table 1.

SGRR notes that the PCB waste inventory associated with "future" PCB storage activities in High Bay is not included in the determination of maximum PCB inventory. That "maximum inventory" will be adjusted as SGRR seeks approval to increase storage activities in those units as discussed in Section 3.4 above.

4.2 TSCA Closure Plan

SGRR has developed a separate TSCA Closure Plan which accounts for all PCB waste managed at the facility. The TSCA Closure Plan also incorporates specific TSCA references and standards (e.g., notification timelines, PCB Spill Cleanup and Decontamination Standards, etc.). The TSCA Closure Plan is presented in Appendix 8.

4.3 Closure Cost Estimate

SGRR has prepared a TSCA Closure Cost Estimate based on the TSCA

Closure Plan. The TSCA Closure Cost Estimate is presented in Appendix 9. The cost estimate reflects the full cost of a third-party decontamination and closure of the PCB activities at the site. The estimate included the cost of waste preparation, transportation, and disposal at TSCA-licensed facilities or other suitable disposal sites.

SGRR notes that while the closure cost estimate does not include the removal of PCB waste inventory associated with "future" PCB storage activities in High Bay the cost estimate does include the cost associated with the decontamination of the secondary containment structures within those buildings in recognition of the fact that both buildings have been used for past PCB storage activities.

Per 40 CFR 761.65.(f)(2), the TSCA closure cost estimate will be revised annually to account for inflation. The closure cost estimate will also be adjusted following any modification to the closure plan which increases the cost for closure.

Table 1
Maximum PCB Waste Inventory at Closure

A. TSCA STORAGE AREA

PCB ITEM	MAXIMUM CONTAINER/ARTICLE	VOLUME
1. Container Management Building (High Bay)		
liquid PCB, solid PCB, PCB capacitors, PCB transformers (drained)	194 55-gallon drum equivalents	10,670 gallons
2. Tank Storage Area		
Liquid PCB		10,350 Gallons

B. Vehicle Storage Areas

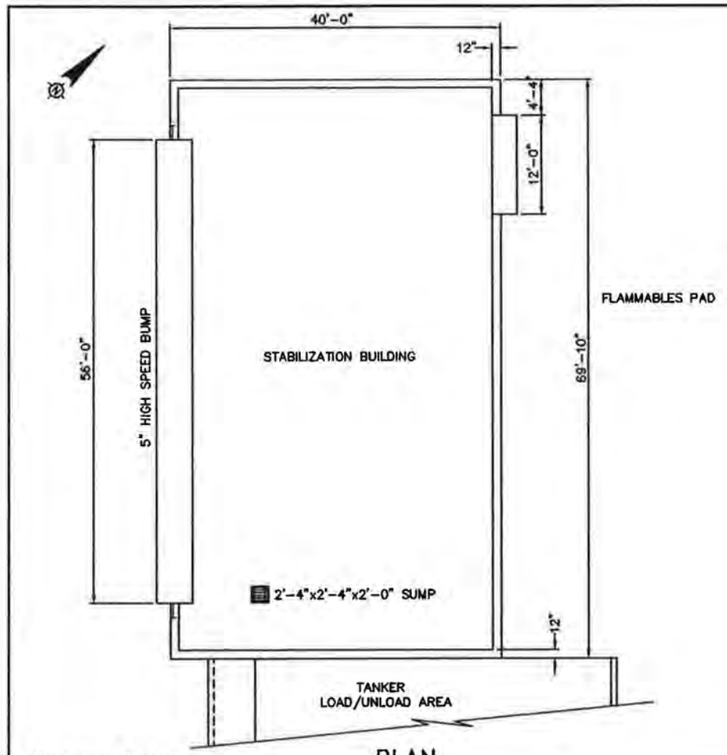
1. Rolloff Pad		
solid CPB	five 30 CY rolloff containers	30,295 gallons
2. Tanker Loading/Unloading Area		
liquid PCB	two 7,200 gallon bulk transporters or equivalent	14,400 gallons
3. Truck Loading/Unloading Area (Stabilization Building)		
solid PCB	two 30 CY rolloff containers	12,118 gallons
TOTAL		77,833 GALLONS

NOTE: PCB CONCENTRATION OF EACH ITEM WILL VARY. MAXIMUM CONCENTRATION IS ASSUMED TO BE 100% IN LIQUIDS AND LESS THAN 100% IN SOLIDS. SOLID PCB'S ARE DEBRIS, SAND, RAGS, SOIL, ETC.

4.4 Financial Assurance

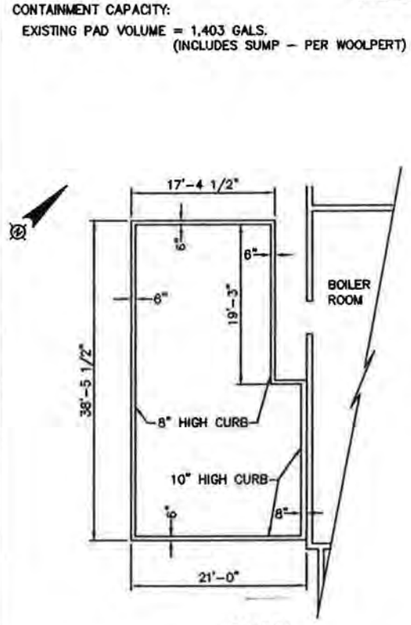
As a permitted RCRA Part B facility, SGRR is required to maintain financial assurance for the closure of the regulated RCRA units at the site. The total amount for TSCA closure is in addition to total amount for RCRA closure. As such, SGRR shall provide a separate TSCA financial assurance instrument to cover the TSCA closure costs.

The financial mechanism will updated on an annual basis as the cost estimates are adjusted for inflation.



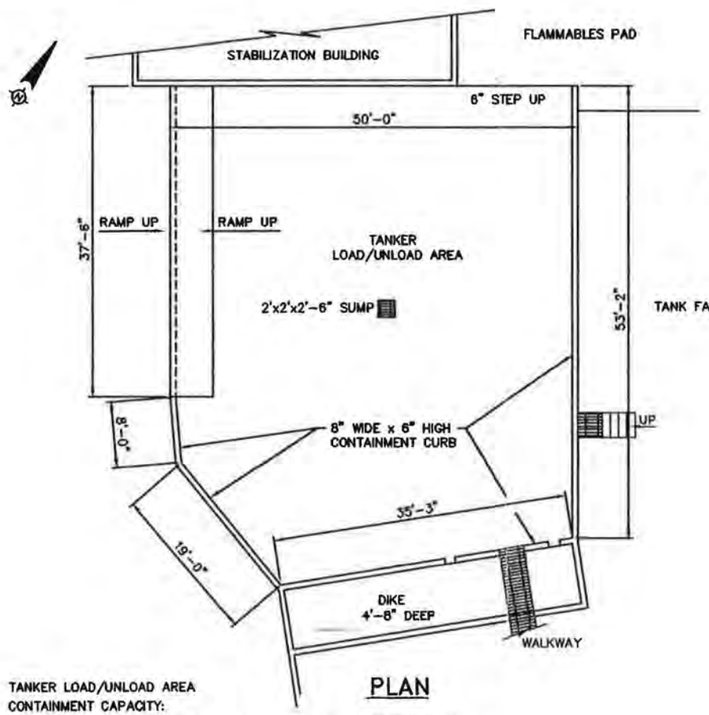
PLAN

STABILIZATION BUILDING
CONTAINMENT CAPACITY:
EXISTING PAD VOLUME = 1,403 GALS.
(INCLUDES SUMP – PER WOOLPERT)



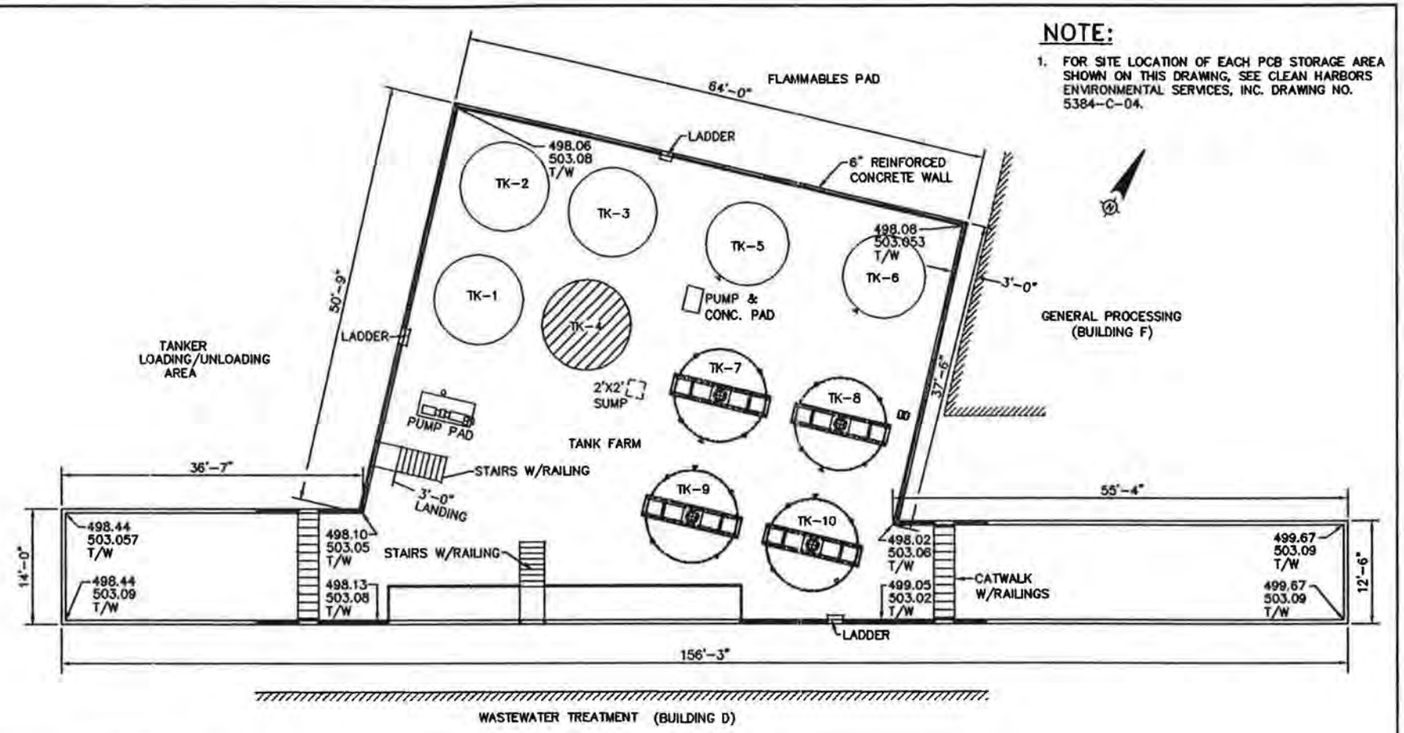
PLAN

CONTAINMENT CAPACITY:
VOLUME = 19.25'x16.375'x.667'x7.48 + 18.2083'x19.83'x.667'x7.48
= 3,374 GALS.



PLAN

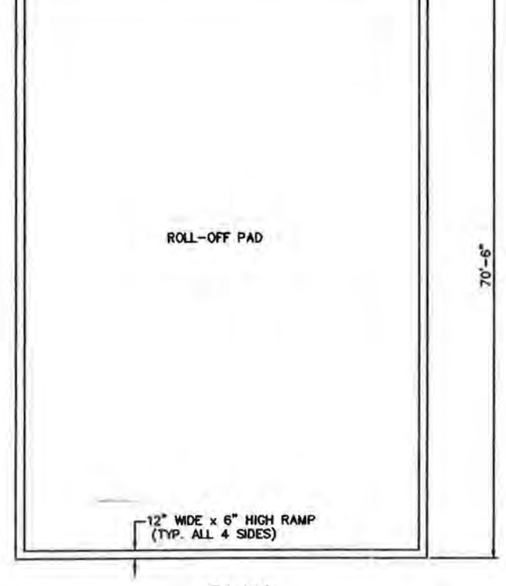
TANKER LOAD/UNLOAD AREA
CONTAINMENT CAPACITY:
EXISTING PAD VOLUME = 8,450 GALS. (INCLUDES SUMP & LESS RAMP)
(PER WOOLPERT)



NOTE:

1. FOR SITE LOCATION OF EACH PCB STORAGE AREA SHOWN ON THIS DRAWING, SEE CLEAN HARBORS ENVIRONMENTAL SERVICES, INC. DRAWING NO. 5384-C-04.

PLAN



PLAN

ROLL-OFF PAD
CONTAINMENT CAPACITY:
PAD VOLUME = 68.5'x48'x0.5'x7.48
= 12,297 GALS.

RAMP VOLUME = 1'x0.5'x48'x7.48 + 1'x0.5'X70.5'x7.48
= 444 GALS.

TOTAL VOLUME = 12,741 GALS.

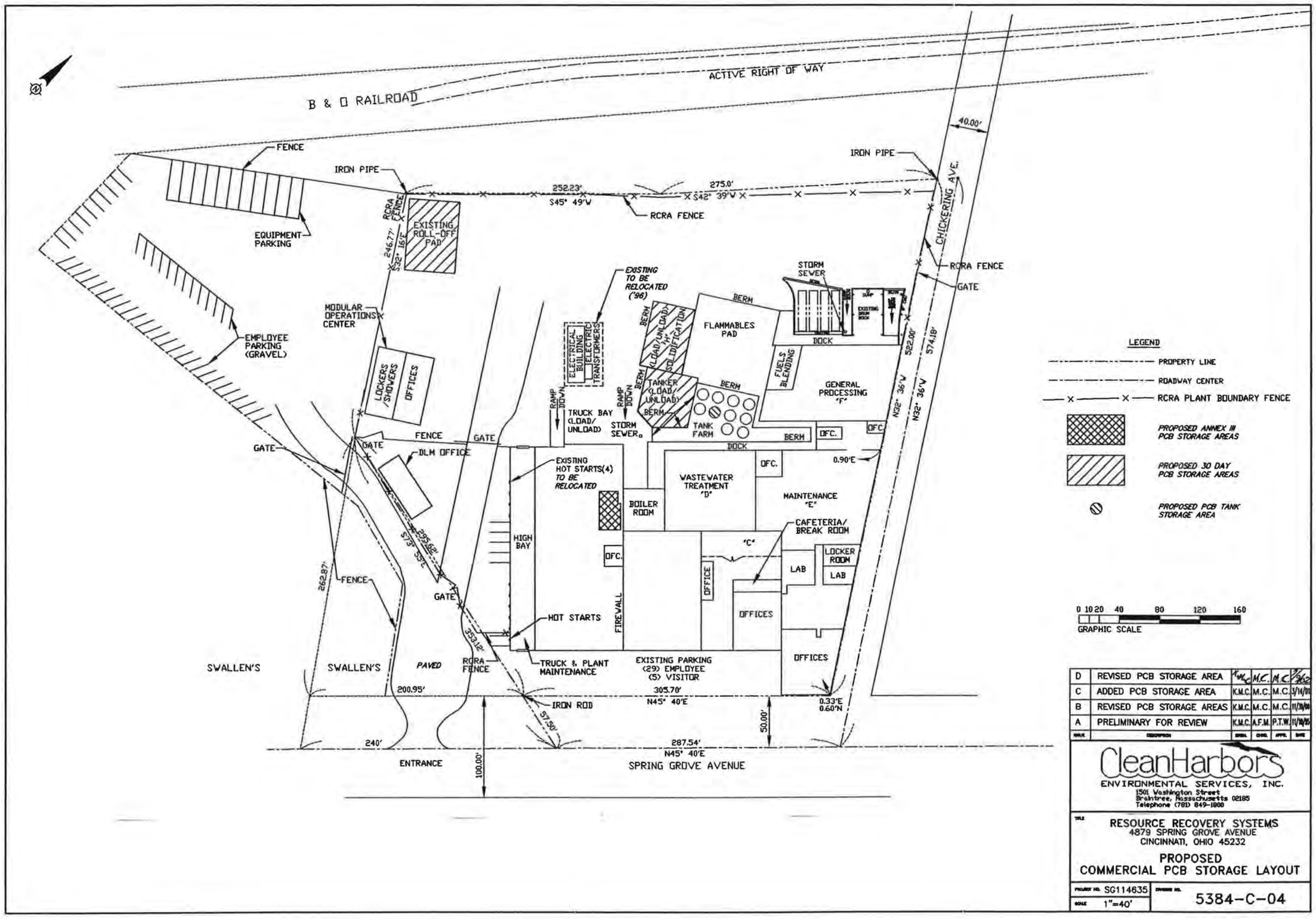
D	REVISED PCB STORAGE AREAS	K.M.C.	M.C.	M.C.	7/26/02
C	REVISED PCB STORAGE AREAS	K.M.C.	M.C.	M.C.	4/5/01
B	REVISED PCB STORAGE AREAS	K.M.C.	M.C.	M.C.	11/9/00
A	PRELIMINARY	K.M.C.	A.F.M.	P.T.W.	11/1/00
ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE

CleanHarbors
ENVIRONMENTAL SERVICES, INC.
ENVIRONMENTAL CONSTRUCTION & TECHNICAL SERVICES DIVISION
1501 Washington Street
Braintree, Massachusetts 02185
Telephone (781) 849-1800

WILE
RESOURCE RECOVERY SYSTEMS
4879 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

PCB STORAGE AREAS LAYOUT & DETAILS

PROJECT NO. GW-5384
SCALE 1/8"=1'-0"
DRAWING NO. 5384-S-03



D	REVISED PCB STORAGE AREA	K.M.C.	M.C.	M.C.	3/26/02
C	ADDED PCB STORAGE AREA	K.M.C.	M.C.	M.C.	3/14/01
B	REVISED PCB STORAGE AREAS	K.M.C.	M.C.	M.C.	11/29/00
A	PRELIMINARY FOR REVIEW	K.M.C.	A.F.M.	P.T.W.	11/15/00
ISSUE	DESCRIPTION	ENGR.	CHKD.	APPD.	DATE

CleanHarbors
ENVIRONMENTAL SERVICES, INC.
1501 Washington Street
Braintree, Massachusetts 02185
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TITLE

RESOURCE RECOVERY SYSTEMS
4879 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

PROPOSED
COMMERCIAL PCB STORAGE LAYOUT

PROJECT NO. SG114635	DRAWING NO. 5384-C-04
SCALE 1"=40'	

B & O RAILROAD

ACTIVE RIGHT OF WAY

FENCE

IRON PIPE

252.23'
S45° 49'W

275.0'
S42° 39'W

RCRA FENCE

EXISTING ROLL-OFF PAD
(90 DAY ACCUMULATION)

246.77'
S32° 16'E

EQUIPMENT PARKING

EMPLOYEE PARKING (GRAVEL)

MODULAR OPERATIONS CENTER

STORM SEWER

ELECTRICAL BUILDING
ELECTRIC TRANSFORMERS

LOCKERS
SHOWERS
OFFICES

GATE

FENCE

GATE

EXISTING HOT STARTS (4)

OUTSIDE OFFICE

RAMP DOWN

TRUCK BAY (LOAD/UNLOAD)

STORM SEWER

BERM

TANKER (LOAD/UNLOAD)

TANK FARM

NITROGEN STORAGE PAD

FLAMMABLES PAD

(BUILDING H)

TANK (TYP.)

FUELS BLENDING ROOM

GENERAL PROCESSING (BUILDING F)

0.27'E

0.15'E

DOCK

OFC.

0.90'E

WASTEWATER TREATMENT (BUILDING D)

BOILER ROOM

MAINTENANCE (BUILDING E)

HIGH BAY (BUILDING B)

VEHICLE STORAGE AREA (BUILDING B)

FIREWALL

OFFICE

"C"

LAB

LOCKER ROOM

OFFICES

262.87'

S73° 55'E

MAIN GATE

EXISTING HOT STARTS

353.12'

GRAVEL

RCRA FENCE

SWALLEN'S

SWALLEN'S

EXISTING PARKING
(29) EMPLOYEE
(5) VISITOR

200.95'

305.70'
N45° 40'E

0.33'E
0.60'N

IRON ROD

57.50'

240'

ENTRANCE

287.54'
N45° 40'E

100.00'

50.00'

SPRING GROVE AVENUE

40.00'

CHICKERING AVE.

RCRA FENCE

GATE

374.18'

522.00'

N32° 36'W

N32° 36'W

PCB Wipe Sample Locations
1. DLM Office
2. Lockers/Showers
3. Office
4. Office
5. Laboratory
6. Break Room

LEGEND

- PROPERTY LINE
- ROADWAY CENTER
- RCRA PLANT BOUNDARY FENCE
- P — PERSONNEL DOOR
- OVH — OVERHEAD DOOR

NOTE:

1. THE DISPERSION UNIT, INCLUDING TANK 11, IS LOCATED IN THE AREA MARKED FUELS BLENDING ROOM.

0 10 20 40 80 120 160
GRAPHIC SCALE

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FIGURE B.2

A	RCRA PART B SUBMITTAL				

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SPRING GROVE RESOURCE RECOVERY
4879 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

FACILITY PLAN MAP

OUS

BRINT

B & O RAILROAD

ACTIVE RIGHT OF WAY

CHICKERING AVE.

40.00'

IRON PIPE

FENCE

EQUIPMENT PARKING

252.23'
S45° 49'W

275.0'
S42° 39'W

RCRA FENCE

246.77'
S32° 16'E

EXISTING ROLL-OFF PAD
(90 DAY ACCUMULATION)

GATE

MODULAR OPERATIONS CENTER

EMPLOYEE PARKING (GRAVEL)

STORM SEWER

ELECTRICAL BUILDING
ELECTRIC TRANSFORMERS

BERM

(LOAD/UNLOAD) "H" SOLIDIFICATION

FLAMMABLES PAD

DOCK

EXISTING DRUM DOCK

FUELS BLENDING

0.27'E

522.00'

574.18'

N32° 36'W

GENERAL PROCESSING "F"

0.15'E

TANKER (LOAD/UNLOAD)

TANK FARM

RAMP DOWN

TRUCK BAY (LOAD/UNLOAD)

LOCKERS /SHOWERS

OFFICES

FENCE

GATE

DFC.

0.90'E

EXISTING HOT STARTS(4)

WASTEWATER TREATMENT "D"

MAINTENANCE "E"

BOILER ROOM

HIGH BAY

"C"

LOCKER ROOM

LAB

OFFICE

FIREWALL

OFFICES

EXISTING HOT STARTS

EXISTING PARKING
(29) EMPLOYEE
(5) VISITOR

0.33'E
0.60'N

DIM OFFICE

295.82'
S73° 55'E

262.87'

MAIN GATE

GRAVEL

353.12'

RCRA FENCE

SWALLEN'S

SWALLEN'S

200.95'

305.70'
N45° 40'E

IRON ROD

57.50'

50.00'

240'

ENTRANCE

287.54'
N45° 40'E

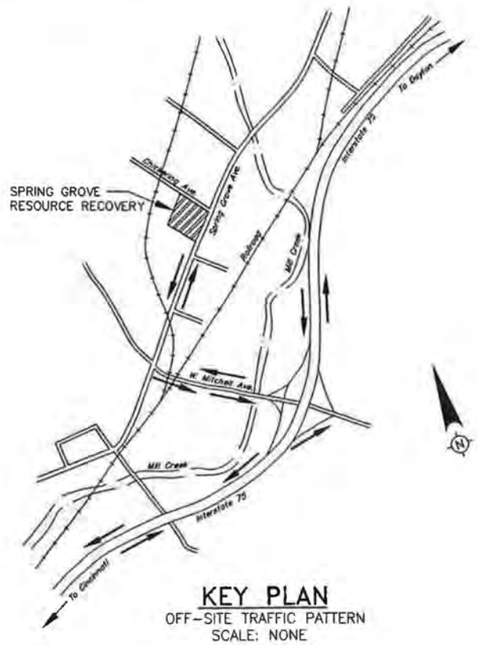
100.00'

SPRING GROVE AVENUE

FOR OFF-SITE TRAFFIC PATTERN
SEE KEY PLAN

REDUCED COPY
DO NOT SCALE PRINT

0 10 20 40 80 120 160
GRAPHIC SCALE



KEY PLAN

OFF-SITE TRAFFIC PATTERN
SCALE: NONE

LEGEND

- PROPERTY LINE
- ROADWAY CENTER
- RCRA PLANT BOUNDARY FENCE
- TRUCK TRAFFIC PATTERNS
- ON-SITE CONTAINER TRANSFER TRAFFIC PATTERN
- P — PERSONNEL DOOR
- OVH — OVERHEAD DOOR
- 1 — RANDOM SOIL/ASPHALT SAMPLES

ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
D	ADDED RANDOM SOIL/ASPHALT SAMPLES	K.M.C.	M.C.	M.C.	3/14/01
C	REVISED FOR REVIEW	K.M.C.	M.C.	M.C.	2/5/01
B	PRELIMINARY FOR REVIEW	K.M.C.	M.C.	M.C.	12/19/00
A	RCRA PART B SUBMITTAL	K.M.C.	J.A.K.	J.A.K.	12/18/98

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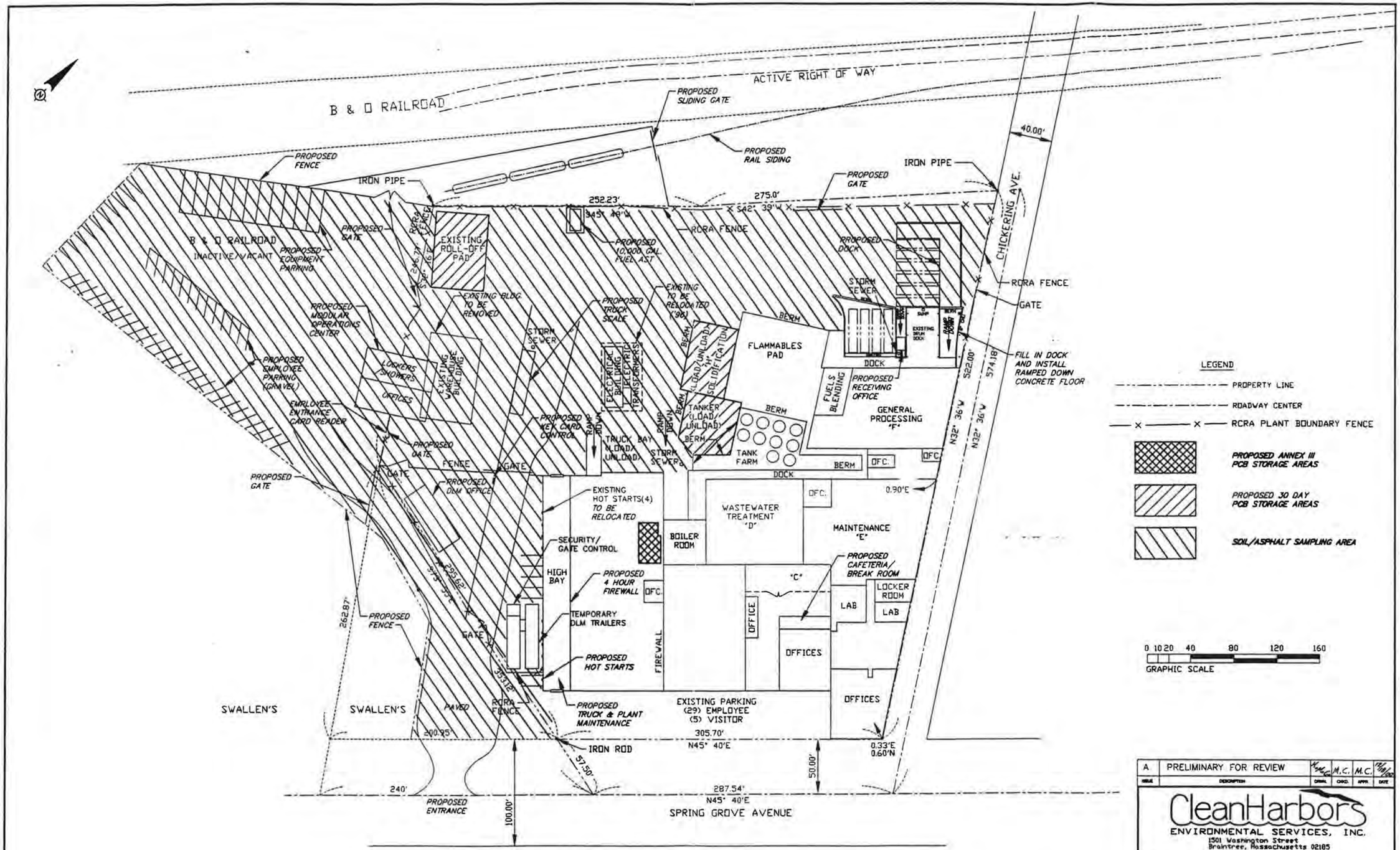
1501 Washington Street
Braintree, Massachusetts 02185
Telephone (781) 849-1800

TITLE: SPRING GROVE RESOURCE RECOVERY
4879 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

TRAFFIC PATTERNS

PROJECT NO. SG114635
SCALE 1"=40'
DRAWING NO. 5384-C-21



REDUCED COPY
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ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
A	PRELIMINARY FOR REVIEW	H.M.	M.C.	M.C.	11/19/02

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ENVIRONMENTAL SERVICES, INC.
1501 Washington Street
Braintree, Massachusetts 02185
Telephone (781) 849-1800

TITLE
RESOURCE RECOVERY SYSTEMS
4879 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

SOIL/ASPHALT SAMPLING AREA PLAN

PROJECT NO.	DRAWING NO.
SG114635	5384-C-22
SCALE 1"=40'	

Appendix 5

Appendix 5

DAVID T. MUSSELMAN

42 Longwater Drive
Norwell, MA 02339
musselman.david@cleanharbors.com
Cell: (781) 635-9919
Office: (781) 792-5181

PROFESSIONAL EXPERIENCE

CLEAN HARBORS, INC., Norwell, MA — 2011-Present
Senior Vice President and General Counsel

INTERNATIONAL POWER AMERICA, INC., Marlborough, MA — 2003 – 2011
Vice President, General Counsel and Secretary

AMERICAN ELECTRIC POWER COMPANY, INC., Columbus, OH — 2000-2003
Assistant General Counsel, Commercial and Transactional Services Group

CINERGY CORP. (now Duke Energy Corporation), Cincinnati, OH — 1989 – 2000
Senior Counsel, Regulatory, Environmental and Corporate Finance Groups

SQUIRE, SANDERS & DEMPSEY, Cleveland, OH — 1986 – 1989
Associate

EDUCATION

INDIANA UNIVERSITY, KELLEY SCHOOL OF BUSINESS
M.B.A. (2001)

CASE WESTERN RESERVE UNIVERSITY SCHOOL OF LAW
J.D., *magna cum laude*; Order of the Coif, Law Review (1986)

ALBION COLLEGE
B.A., Economics and Management/German (1982)
Management Internships: General Motors, Warren, MI; Hoechst AG, Bad Hersfeld, Germany

UNIVERSITÄT AUGSBURG, Augsburg, Germany (1982)

BAR ADMISSION

Ohio (1986)
Kentucky (1996)
Texas (2002)
Massachusetts (2003)
England and Wales (2011)

PROFESSIONAL ACTIVITIES

ASSOCIATION OF CORPORATE COUNSEL
KENTUCKY BAR ASSOCIATION
TEXAS BAR ASSOCIATION

COMMUNITY

TOWN OF SHREWSBURY, MASSACHUSETTS

Elected Town Meeting Representative (2009 – 2012)
Board of Assessors (2011 – 2012)

ALL SAINTS CHURCH

Junior Warden (2011)
Personnel Committee (2009 – 2011)
Vestry (2005 – 2008)
Finance Committee (2006 – 2009)

ST. PATRICK'S EPISCOPAL CHURCH

Vestry (2002 – 2003)

ACTIVITIES

VOLUNTEER LAWYER PROJECT

Pro Bono Attorney (1995 – 2000)

FOREIGN LANGUAGE

German

Stephen A. Bley
8285 Jordan Ridge Drive
Cleves, Ohio 45002
(513) 941-3827

EDUCATION

The University of Findlay- 1000 North Main Street, Findlay, Ohio 45840 Bachelors Degree of Science in Environmental and Hazardous Materials Management (Emphasis in Policy and Compliance) Minor in Public Administration Graduation Date: December 14, 1997

RELEVANT COURSEWORK

Emergency Management
Project Management
Risk Management
Hazardous Waste Management
Chemistry
Environmental Law and Regulations
Environmental Sampling
Properties of Hazardous Materials
OSHA 40 hour

WORK EXPERIENCE

Clean Harbors Environmental Services February 1998 to Present
Facility Compliance Manager April 2002 to Present
Major duties and responsibilities: Administrating the facility's various permits across all media (Air, Land, and Water) and directly interfaces with all regulatory authorities. Duties include RCRA Inspections, Discrepancy resolution, Training of Plant personnel, and permit modifications, facility contact for all Regulatory bodies

Clean Harbors Environmental Services April 2000 to 2002
Compliance Specialist
Major duties and responsibilities: Assisting the Compliance manager in facility compliance with all Permits. Duties include RCRA Inspections, Discrepancy resolution, Training of Plant personnel, and permit modifications

Clean Harbors Environmental Services February 1998 to April 2000
Receiving Chemist
Major duties and responsibilities: Take samples of all waste shipped to the plant, and conducted analytical tests to Fingerprint waste to determine the course of treatment for the waste.

Texo Corporation February 1995 to August 1995
Laboratory Technician
Major duties and responsibilities: Fill orders for samples by drawing on present stock or making small chemical batches.

MILITARY EXPERIENCE

June 1992 to Feb 2004 Ohio National Guard- Bravo Company 1/147 Armor

Company Executive Officer
Major duties and responsibilities: Readiness training of an Armor Company Personnel and Maintenance of all equipment
CERTIFICATONS
OSHA 40 Hour
CHMM

REFERENCES

Available upon request

Stephen Vasse | General Manager

513-932-0919
svasse@cinci.rr.com

Facility General Manager 2008-Current, *Clean Harbors Environmental, Inc*

- Responsible for all daily activities at TSDF Spring Grove Resource Recovery facility
- Manage 24 plus employees
- Accountable for all Compliance and Health regulations
- Manage Facility budget

Chemical Operations Manager 2001-2008, *Clean Harbors Environmental, Inc*

- Coordinated scheduling and processing of all material
- Directly supervised 10 employees
- Responsible for keeping facility within compliance by following EPA and DOT regulations
- Responsibilites also included waste tracking, transportation paperwork, chemical analysis and equipment operations

Plant Coordinator 1996-2001, *Clean Harbors Environmental, Inc*

- Supervised 3 people while scheduling all shipments into and out of the facility.
- Provided Cost analysis and determined profitability for final disposition of material
- Accountable that all paperwork is accurate and is in compliance with EPA and DOT regulations

Receiving Chemist 1995-1996, *Clean Harbors Environmental, Inc*

- Operate all activities related to the receipt of waste into facility
- Perform lab analysis and classify waste for treatment and disposal

Package Handler 1992-1995, *United Parcel Service, Baltimore Md 21227*

Appendix 8

Appendix 8

Spring Grove Resource Recovery, Inc.
TSCA Closure Plan

September 24, 2002

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 INTRODUCTION

1.1 Current Regulatory Status

Spring Grove Resource Recovery, Inc. (SGRR) owns and operates an existing hazardous waste storage and treatment facility at 4879 Spring Grove Avenue in Cincinnati, Ohio. The EPA I.D. number for the facility is OHD000816629. The existing facility operates under a RCRA Part B Permit issued by the Ohio Environmental Protection Agency (OEPA) on March 31, 1995. In addition, SGRR facility holds TSCA interim authorization as a Commercial Polychlorinated Biphenyl (PCB) Storage facility.

1.2 RCRA Facility Investigation

As a RCRA Part B permitted facility, SGRR is responsible for conducting a RCRA Facility Investigation (RFI) and performing any necessary Corrective Actions (CA's) on the facility property. Under the RFI/CA process, SGRR is required to identify those areas of the site which are "solid waste management units" (SWMU's) from which there may have been a release of hazardous constituents, including PCB's. Any former PCB management areas or other part of the property which is found to be contaminated with PCB's would be considered a SWMU for the purposes of the RFI/CA program.

2.0 PURPOSE OF CLOSURE PLAN

In accordance with the regulatory requirements set forth by USEPA in 40 CFR 761.65(e)(3), SGRR has developed this TSCA Closure Plan as part of its commercial PCB storage facility application.

This Plan identifies all activities which are necessary to close each PCB management unit or the facility as a whole during any point or at the end of its intended operating life. For the purposes of this Plan, all units will be assumed to be fully active and operating at maximum capacity at the time of closure. The Plan addresses decontamination of all units and areas of the facility used for PCB waste handling activities under the commercial PCB storage facility application.

The Closure Plan will be amended to reflect any changes in the maximum capacity occurring as the result of significant facility modifications or the closure of any of the individual PCB management units. All amendments to the Closure Plan will be submitted to USEPA for review and approval 40 CFR 761.65(e)(4).

The purpose of this Closure Plan is to ensure that the SGRR facility and the PCB handling areas within the facility are closed in a manner that eliminates the need for post-closure maintenance. This Plan has been carefully designed to eliminate the risk of post-closure escape of PCB wastes to groundwater, surface water, soil, or the

atmosphere, and to prevent any threat to public health, safety, or welfare, or the environment. This plan is accompanied by a corresponding "Closure Cost Estimate" and a "Financial Assurance for Closure."

Changes in the design and operation of the commercial PCB storage facility will not be implemented until the appropriate modifications have approved by USEPA. The facility Compliance Manager at SGRR has the responsibility to amend the Closure Plan whenever changes in operating plans, facility design or facility equipment affect the accuracy of the Closure Plan.

This Closure Plan will become effective upon issuance of SGRR's TSCA Commercial Storage Facility approval, and will remain in effect until modified by SGRR and/or USEPA. A copy of this Closure Plan will be maintained on file at SGRR. The Closure Plan will, as necessary, be amended in accordance with the requirements of 40 CFR 761.65(e)(4).

3.0 PCB WASTE HANDLING AREAS AND MAXIMUM WASTE INVENTORY

3.1 Identification of PCB Waste Handling Areas

As described in the commercial PCB storage application, SGRR shall conduct PCB handling activities in numerous units throughout the facility, as follows:

A. TSCA Storage Areas

The following units are designated as "TSCA storage areas" that shall be designed in accordance with 40 CFR 761.65(b) standards.

1. High Bay - A fully-contained building used for the indoor storage and consolidation of PCB wastes in containers (e.g., drums);

B. Tank Storage Area

One 10,350 gallon steel tank.

C. Vehicle Storage Areas

The following units are designated as "vehicle storage areas" where highway transportation vehicles (e.g., box trucks, flat bed trailers, rolloffs, tank trucks) containing PCB wastes may be stored for up to 30 days from the date the waste was received at the facility:

1. Rolloff Pad - five (5) vehicles and

2. Tanker Loading/Unloading Area - Two (2) vehicles.

3. Truck loading/unloading area (stabilization building)- two (2) vehicles

D. Shipping/Receiving Areas

The following units are designated as "shipping/receiving areas"

for PCB waste in bulk and non-bulk form. Inbound or outbound waste may be "staged" in these areas for up to 10 days without being considered in storage:

1. High Bay Receiving Dock - A roofed dock on the northern side of the High Bay building which used for receiving, shipping, and staging of RCRA and PCB wastes in containers; and

2. Building F Receiving Dock - A roofed dock on the northern side of Building F which used for receiving, shipping, and staging of RCRA and PCB wastes in containers.

SGRR notes that the Truck Loading/Unloading Area (Stabilization Building H), the Rolloff Pad, and the Tanker Loading/Unloading Area identified above function as active loading and offloading area for vehicle transporters hauling PCB wastes.

E. Other Areas

SGRR has identified several "other areas" of the facility in which PCB's may be present. These "other areas" are assets or structures that provide support services related to SGRR's management of PCB's at the facility (e.g., a laboratory used to test samples to determine PCB concentration, etc.), but are not PCB waste storage, treatment or disposal units or processes which require a USEPA TSCA permit. The "other areas" are identified under this application so that they may be included in confirmatory PCB sampling at the time of facility closure. The "other areas" include the following units:

1. Laboratory - An analytical testing laboratory for onsite waste analysis;

2. Transportation/Receiving Building - The security checkpoint and the waste shipment entrance to the facility;

3. Roadway System - An asphalt-paved roadway system on which all highway vehicles carrying PCB and RCRA waste move about the facility; and

4. "Transfer Facility" - All transportation- related areas (e.g., roadways, parking areas) at the facility. These areas are used for stoppage of highway vehicles which are "in-transit" (i.e., carrying TSCA waste that is not manifested to or from SGRR) for a period of time not to exceed 10 days in accordance with the 40 CFR 761.3 definition for "transfer facility".

3.2 Maximum Inventory of PCB Waste

The maximum waste inventory for the facility is presented in Table 1. The "maximum inventory" shall be used as the daily inventory limit for PCB waste at the site and as the basis for the TSCA closure cost estimate calculations.

SGRR notes that for the purposes of the daily inventory, any waste present in the "shipping/receiving areas" shall be counted against the "maximum inventory" for the facility. SGRR notes that PCB waste in the designated "other areas" of the facility (e.g., samples in the laboratory, in-transit vehicles) is incidental or not subject to TSCA commercial storage facility licensing requirements, and shall not be counted against the daily inventory limit.

4.0 GENERAL CLOSURE ACTIVITIES

4.1 Closure Schedule

SGRR will submit a written notice of intended closure to the USEPA at least 60 days prior to the date on which closure is expected to begin. The expected beginning closure date shall be no later than 30 days after the date on which the PCB unit receives the known final volume of PCB waste. Generators which utilize the commercial PCB storage facility will, to the extent practicable, be notified at least 30 days in advance of the date that PCB wastes will no longer be accepted at the unit or facility. Within ninety (90) days after the facility receives the final volume of PCB waste, all PCB waste in storage or in treatment will be removed from the site in compliance with the approved Closure Plan. All closure activities will be completed within 180 days after receiving the final volume of PCB waste at the PCB management unit or facility. Within 60 days of the completion of closure, SGRR will certify completion of closure in a written notice to USEPA. The certification of closure will be signed by SGRR and an independent professional engineer.

Table 1
Maximum PCB Waste Inventory at Closure

A. TSCA STORAGE AREA

PCB ITEM	MAXIMUM CONTAINER/ARTICLE	VOLUME
1. Container Management Building (High Bay)		
liquid PCB, solid PCB, PCB capacitors, PCB transformers (drained)	194 55-gallon drum equivalents	10,670 gallons
2. Tank Storage Area		
Liquid PCB		10,350 Gallons

B. Vehicle Storage Areas

1. Rolloff Pad		
solid CPB	five 30 CY rolloff containers	30,295 gallons
2. Tanker Loading/Unloading Area		
liquid PCB	two 7,200 gallon bulk transporters or equivalent	14,400 gallons
3. Truck Loading/Unloading Area (Stabilization Building)		
solid PCB	two 30 CY rolloff containers	12,118 gallons
TOTAL		77,833 GALLONS

NOTE: PCB CONCENTRATION OF EACH ITEM WILL VARY. MAXIMUM CONCENTRATION IS ASSUMED TO BE 100% IN LIQUIDS AND LESS THAN 100% IN SOLIDS. SOLID PCB'S ARE DEBRIS, SAND, RAGS, SOIL, ETC.

A closure timeline graph illustrating the relationship of these activities during the closure process is presented in Figure 1. Upon closure of the facility, all equipment and structures that have been in contact with PCB wastes will be decontaminated or demolished and transported for secure land disposal in accordance with 40 CFR Part 761. Decontamination of the facility and removal of all wastes for off-site disposal at the time of closure will eliminate the need for post-closure care. The closure schedule is for planning purposes, and intermediate time frames and completion dates may vary from those given in the schedule. The time required for completion of all closure activities for a final facility closure is estimated to be 90 days.

4.2 Inventory Removal

At closure, all PCB wastes in inventory will be prepared for transport and shipped to offsite treatment and disposal facilities in accordance with 40 CFR 761 recordkeeping and and container standards. No PCB wastes will be treated or disposed of at SGRR.

The waste inventory removal methods to be utilized during all closure actions will be identical to SGRR's daily operating procedures for pumping liquid, handling sludges and solids, consolidating waste streams, and loading bulk trailer/tanker transport vehicles. Free flowing PCB liquids in transformers will be drained and transferred to to other PCB containers (e.g., drums, bulk transport vehicles, tote tanks, etc.). Similarly, drummed solids (e.g., soil, debris) shall be consolidated into rolloff containers for bulk shipment purposes. Empty drums that are no longer usable will be disposed of at authorized offsite waste disposal facilities. Emptied transformers will be shipped to a TSCA landfill or scrap metal reclaimer depending on the concentration of PCB's in the unit.

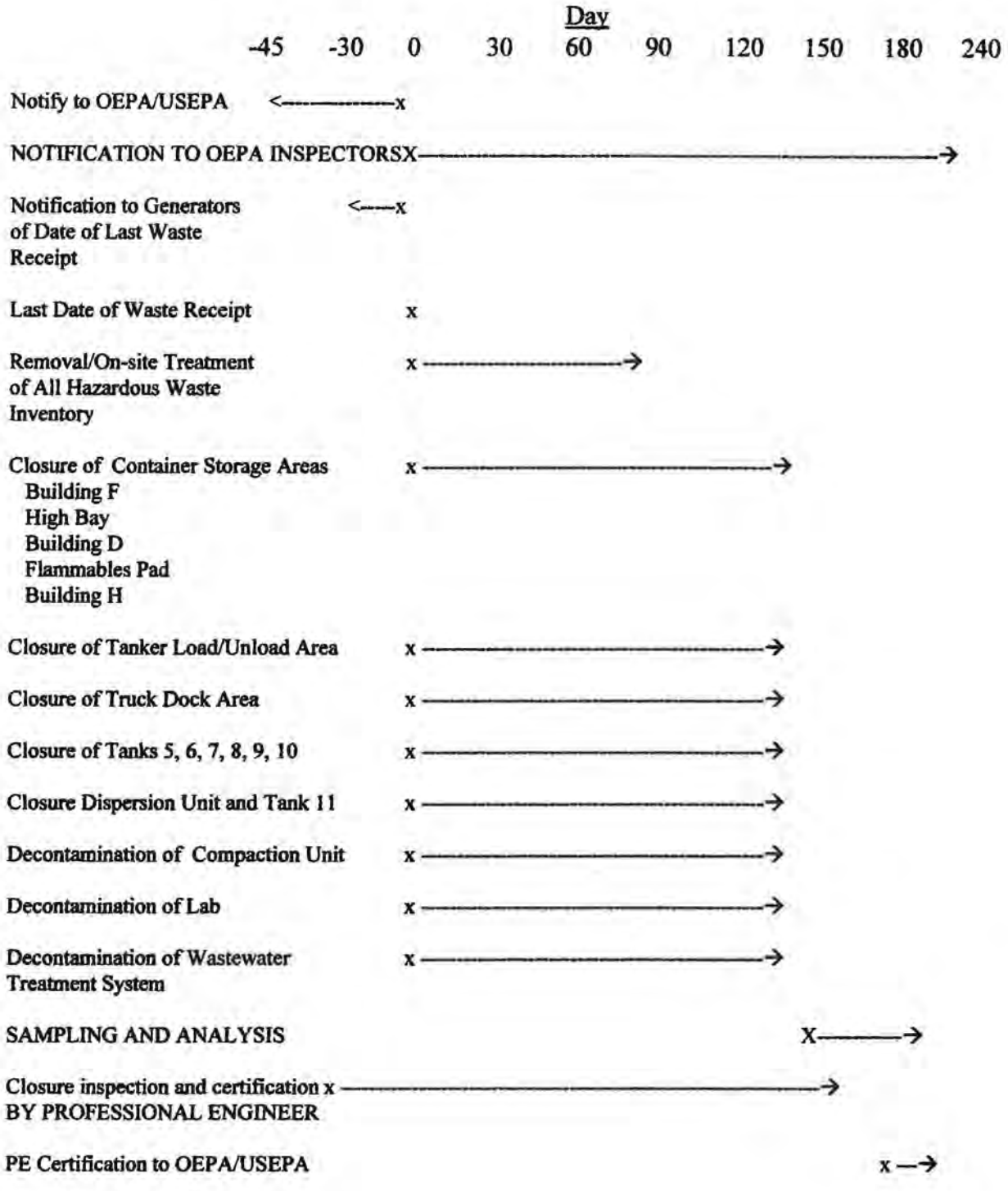
Following inventory removal, all dust and other residues will be swept or otherwise cleaned up and handled as PCB waste. Pallets used for container staging purposes will be broken down and disposed of as PCB debris.

The specific types of offsite PCB waste management facilities to be used for the disposal of SGRR's waste inventory will be based on the availability of such facilities and any advancements in PCB treatment technologies. For the purposes of cost estimation, the disposal/ treatment options to be considered will include:

1. For PCB liquids, including PCB oils, solvent flush, and aqueous PCB mixtures - Incineration at Onyx in Port Arthur, TX.

2. For drummed capacitors, ballasts, and other electrical equipment - Incineration at Onyx in Port Arthur, TX.

Figure 1
Closure Schedule for Final Closure of the Facility



3. For empty transformers (>500 ppm PCB) and all PCB solids/debris (>50 ppm) - Secure chemical landfilling at EQ in Belleville, MI.

4. For empty transformers (<500 ppm PCB; non-TSCA regulated) - Scrap metal reclaim at TCI, Incorporated in Hudson, New York.

Decontamination of a PCB management unit will begin as soon as the unit is cleared of all inventory. Decontamination procedures are described in Section 5.0 below.

5.0 DESCRIPTION OF CLOSURE/DECONTAMINATION ACTIVITIES

In Sections 5.1 through 5.4, SGRR describes the procedures and decontamination objectives for the various types of PCB handling units/structure in operation at the facility, including:

- Equipment such as tanks, pipes, pumps, and other associated equipment (e.g., filter baskets) are used for liquid transfer activities such as drum pumping (Section 5.1);
- Concrete floor surfaces found in the container storage buildings (i.e., High Bay and Building F), the vehicle storage areas, and the shipping/receiving areas (Section 5.2);
- Contaminated soil/asphalt from roadways and other non-contained areas used for PCB management activities such as in-transit vehicle parking (Section 5.3); and
- Miscellaneous units, structures, and equipment not otherwise addressed in Sections 5.1 through 5.3 (Section 5.4).

5.1 Tank, Piping, Pumps, and Ancillary Equipment

5.1.1 Equipment and Areas to be Decontaminated/Closed

Equipment such as tanks, pipes, pumps, and other associated equipment (e.g., filter baskets) are used for liquid transfer activities such as drum pumping.

5.1.2 Decontamination/Closure Standards

Specific decontamination/closure standards which apply to the piping and ancillary equipment are as follows:

1. Pursuant to 40 CFR 761.60(b)(5), the piping and ancillary equipment (which meet the definition of "PCB article") may be disposed at a TSCA landfill operating under 40 CFR 761.75 provided that all free flowing liquid is removed and incinerated in a TSCA incinerator operating under 40 CFR 761.70. Under this option, the pipelines, pumps, and other

equipment would be disconnected, inspected for the presence if free liquids, drained if free liquids are found, and then sent offsite for disposal at a TSCA landfill.

2. If a scrap metal or non-PCB reuse option is identified, the piping and other equipment shall first be decontaminated to meet a TSCA decontamination procedure as required by U.S. EPA regulations or U.S. EPA Region V policy. The internal and external surfaces of all pipelines and other impervious equipment would be triple rinsed with a solvent capable of dissolving PCB's as required by 40 CFR 761.79(a). The final solvent rinse cycle shall contain less than 2 ppm PCB's to start, and serve as a verification rinse. The solvent from the verification rinse shall drained, and a composite sample shall be collected. If the PCB concentration of the solvent is 2 ppm or greater, the cleaning and verification rinse procedures shall be repeated. If the PCB concentration in the solvent is less than 2 ppm, the equipment shall be considered TSCA decontaminated.

3. All porous materials contaminated with PCB's such as wood, gasket material, and rubber shall be disposed at a TSCA incinerator per 40 CFR 761.70, or a TSCA landfill per 40 CFR 761.75.

4. All solvents and cleanup material (rags, absorbent pads, etc.) contaminated with solvent shall be incinerated at a facility in compliance with 40 CFR 761.70.

5. All tank(s) will be decontaminated per 40 CFR 761.79(c)(1).

5.1.3 Materials and Procedures for Decontamination

In all cases, the piping, pumps and other equipment shall be dismantled using wrenches and other standards hand tools. The piping and other equipment shall be visually inspected for signs of free flowing liquid. Any free liquids inside the piping or other equipment shall be containerized and shipped for offsite disposal at a TSCA incinerator.

Equipment decontamination shall be conducted inside High Bay or the Loading/Unloading Area (Stabilization Building). In all cases, SGRR shall take all appropriate precautions to reduce PCB contamination during closure such as lining the floor of the building with plastic sheeting.

No TSCA decontamination standard is applicable if the equipment is intended to be shipped for TSCA disposal. If a non-TSCA reuse option is selected, or if the piping and other equipment are intended for scrap metal reclaim, it must first meet a TSCA decontamination procedure as required by U.S. EPA regulations or U.S. EPA Region V policy.

5.2 Concrete Floors and Walls

5.2.1 Equipment and Areas to be Decontaminated/Closed

The equipment and area in this phase includes the concrete floors and walls (UP TO 5' FROM THE FLOOR)of units such as the receiving/shipping areas, container storage building (High Bay and Building F), and vehicle storage areas.

5.2.2 Decontamination/Closure Standards

Specific closure/decontamination standards which apply to concrete floors and walls are as follows:

1. Concrete floors and walls shall be decontaminated to comply with the cleanup standard for "other restricted access areas" in 40 CFR 761.61(a)(4)(i)(B), specifically to a TSCA cleanup level of 25 PPM PCB'S by weight.

2. All solvents and cleanup material (rags, absorbent pads, etc.) contaminated with solvent shall be incinerated at a TSCA incinerator per 40 CFR 761.70. All sandblast grit and other porous residuals contaminated with PCB's at a detection limit of 1 ppm PCB shall be disposed at a TSCA incinerator per 40 CFR 761.70, or a TSCA landfill per 40 CFR 761.75.

3. Destructive sampling will be done for concrete.

5.2.3 Materials and Procedures for Decontamination/Closure

SGRR may elect to conduct pre-cleaning sampling of concrete floors and walls to determine if, in fact, they are contaminated with PCB's and require TSCA decontamination. Samples shall be collected in accordance with the grid sampling procedures described in Section 6.1 below. If the samples show a PCB concentration of less than 25 PPM, the piece shall be deemed clean and not subject to further decontamination procedures.

If necessary, TSCA decontamination shall be conducted using a solvent soak and a thorough scrub down with hard bristle brushes and brooms. Hardened residual shall be scraped off using common hand tools, and following the initial scrub down, the walls/floor shall be rinsed with clean solvent. Grid samples taken from the floor and walls to confirm compliance with the TSCA cleanup level of 25 PPM.

If necessary, TSCA decontamination may also be conducted by sandblasting the exposed floor/wall surfaces, and disposing of the spent abrasive grit which contains greater than 1 ppm PCB in a TSCA landfill per 40 CFR 761.75. Samples shall be taken from the floor and walls in accordance with the grid sampling procedures described in Section 6.1 below to confirm compliance with the TSCA cleanup level of 25 PPM.

5.3 Soil/Asphalt

5.3.1 Areas to be Decontaminated/Closed

The facility roadway system, parking areas, and other soil/asphalt areas that are outside of concrete-lined and sealed secondary containment structures shall be included in the facility closure plan. Should a PCB spill take place on the plant traffic routes during transportation within the facility boundary line, cleanup immediately begins pursuant to 40 CFR part 761.61(a). Under this potential spill management practice, the plant traffic routes are maintained free from PCB contamination. At the closure of this facility, Clean Harbors will perform destructive random sampling from ten (10) locations as indicated on drawing 5384-C-21.

5.3.2 Investigative Sampling to Confirm PCB Contamination

Soil/asphalt areas which have been identified as having handled PCB's shall be pre-sampled to determine if PCB contamination is actually present. Ten (10) random samples will be collected in the traffic routes. Refer to drawing 5384-C-21. All soil contaminated with less than 25 ppm PCB's shall be considered to be clean and not requiring further decontamination/closure. Any soil/asphalt results which show a PCB concentration equal to or greater than 25 ppm shall be considered to be PCB contaminated and shall be excavated and disposed as described in Section 5.3.3 below.

5.3.3 Excavation of PCB Contaminated Soils

5.3.3.1 Decontamination Criteria

Specific decontamination/closure standards which apply to the soil are as follows:

1. In accordance with 40 CFR 761.61(a)(4)(B) soil contaminated with PCB's shall be decontaminated to 25 ppm PCB's by weight. All soil contaminated with less than 25 ppm PCB's shall be considered non-TSCA regulated.

5.3.3.2 Materials and Procedures for Decontamination/Closure

The nonimpervious asphalt topping and the first 10 inches of underlying soil within the outdoor container storage areas shall be excavated, removed, and disposed in a TSCA landfill per 40 CFR 761.75 if the PCB concentration is greater than 25 ppm PCB's. Following the excavation, SGRR shall collect soil samples taken inside each construction area to confirm compliance with the cleanup standard of 25 ppm PCB's by weight. If the 25 ppm cleanup level is not achieved after removal of the top 10 inches of soil, soil excavation and sampling shall be repeated in 6-inch lifts until the 25 ppm or less is met.

The asphalt topping and the first 10 inches of underlying soil

within designated construction areas shall be excavated, removed, and disposed at a properly licensed waste management facility. Excavation in each area shall continue to the depth required to complete the intended construction activity. Any "hot spots" identified during subsequent excavation activities shall also be removed and disposed. Excavation of "hot spots" shall be deemed complete when no further visual evidence of a "hot spot" is encountered.

5.4 Decontamination/Closure of "Other Areas"

For the designated "other areas" where PCB's are to be handled, the following decontamination/closure procedures shall apply:

- Laboratory: Removal and disposal of all PCB samples, contaminated glassware and debris, followed by a solvent washdown of the walls, floors, and workbenches similar to the procedures for floors and walls described in Section 5.1 above. The washdown will be followed by sampling of the cleaned surface in accordance with the sampling procedures described in Section 6.2 below.

- Roadway System: Shall be decontaminated/closed as described in Section 5.3 above.

Any remaining area, structure, piece of equipment, or other device that is contaminated with PCB's shall be subject to decontamination and closure using the procedures analogous to described in Section 5.1 through 5.3 above, in accordance with 40 CFR Part 761, and/or as directed by USEPA Region V.

6.0 SAMPLING PROCEDURES

6.1 Sample Number and Location

All cleaned PCB surfaces shall be sampled and analyzed for PCB's to assess the success of the decontamination operations.

For floors, walls, and other similar concrete/metal surfaces, SGRR shall collect samples with the number and location based on the grid sampling procedures described in USEPA's "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup".

All expected sampling has been included in this plan. The number and location of samples for PCB articles and other devices not specifically addressed by this Plan and/or the USEPA Field Manual for Grid Sampling shall be determined in consultation with USEPA Region V prior to undertaking specific decontamination activities.

6.2 Wipe Testing Protocol

Wipe testing shall be performed and interpreted as follows:

1. A 100 cm2 template shall be placed on the area to be tested (except for interior pipe sampling).

2. The wiping medium shall be a gauze pad, glass wool or filter paper which has been saturated with hexane.

3. Collection and testing of field blanks and replicates shall be carried out in accordance with standard laboratory practices.

4. Results from wipe tests must be less than 10 micrograms per 100 square centimeters (except for interior pipe sampling).

5. If results are higher than 10 micrograms per 100 cm2, the areas must be re-cleaned and testing repeated until contamination levels are less than 10 micrograms per 100 cm2 unless USEPA Region V approval is given to encapsulate these areas.

6.3 Health & Safety

All sampling activities will be conducted within the context of the facility's Health and Safety Plan, Training Plan, and Contingency Plan to ensure that appropriate levels of personnel training, monitoring, and protective equipment are maintained throughout the closure sampling process. All contaminated sampling debris and residuals will be containerized and disposed of as PCB waste along with the general PCB waste inventory.

6.4 Decontamination Criteria

The PCB management units are more than 0.1 kilometers away from a residential/commercial area and are surrounded by a manmade barrier (chain link fence). The units contain both low-contact and high-contact industrial surfaces. The surfaces which will undergo decontamination (e.g., floors, walls, curbing) are nonimpervious solid surfaces such as concrete and gravel.

All PCB storage areas will be decontaminated in accordance with 40 CFR 761.61(a)(4) standards. All solid surfaces shall be cleaned to a level of 25 PPM. If at any time after closure, this area is converted to a high occupancy area as a result of increased exposure of people or animals in or at this site, an owner of this area must clean up the site, meeting the high occupancy area cleanup level in compliance with 40 CFR 761.61(a)(4)(ii) and (iii).

7.0 CERTIFICATION OF CLOSURE

Within 60 days of the completion of closure activities for a particular unit or the facility in general, SGRR shall, by certified mail or by hand-delivery, submit in writing USEPA a certification signed by SGRR and an independent professional engineer that the facility has been closed in compliance with the requirements of this Closure Plan.

8.0 CLOSURE COST ESTIMATE

SGRR has prepared a detailed cost estimate for the TSCA closure activities described in this Plan. A copy of the TSCA Closure Cost Estimate is included in Appendix 9 of the Commercial PCB Storage Facility Application.

Per 40 CFR 761.65.(f)(2), the TSCA closure cost estimate will be revised annually to account for inflation. The closure cost estimate will also be adjusted following any modification to the closure plan which increases the cost for closure.

9.0 FINANCIAL ASSURANCE FOR CLOSURE

SGRR will provide suitable financial assurance for the TSCA Closure Cost Estimate prior to final issuance of the facility's Commercial PCB Storage Facility Permit. The TSCA financial assurance mechanism shall, at a minimum be valued to reflect any cost for TSCA closure activities which is in addition to any RCRA closure cost estimate. A copy of the TSCA financial assurance mechanism is included in Appendix 10.

Appendix 9

Appendix 9

Spring Grove Resource Recovery, Inc.
TSCA Closure Cost Estimate

August 23, 2002

1.0 TSCA Units Undergoing Closure

Individual cost estimates are presented in Section 3.0 for the following TSCA management units proposed for PCB management activities at Spring Grove Resource Recovery, Inc. (SGRR):

Section / Unit

3.1 Building B (High Bay) Container Storage Area (Annex III)
3.2 Building H (Stabilization Building) Truck Storage Area
3.3 Tank Truck Loading/Unloading (30-day Area)
3.4 Rolloff Pad (30-day Area)
3.5 Building F Containment Structure
3.6 Building B (High Bay) Containment Structure (& Future Storage)
3.7 Other Areas -- Roadway System & Laboratory
3.8 Tank Storage Area

2.0 Pricing and Assumptions

2.1 Disposal Facilities/Pricing

The following disposal facilities and costs are used to calculate closure cost estimates. These figures represent third-party transportation and disposal costs as of August 2002.

Disposal Facility	Disposal	Transportation	Total
a. Onyx—Port Arthur, TX TSCA Incineration			
- PCB oils, solvent flush, aqueous PCB mixtures	$1.66/gal	$0.41/gal	$2.07/gal
- drummed capacitors, ballasts, electrical equipment	$0.99/lb	$0.05/lb	$1.04/lb
b. EQ—Belleville, MI TSCA Secure Chemical Landfill			
- PCB solids/debris	$90/cy	$25/cy	$115.00/cy
- PCB transformers	$7.00cf	$1.78/cf	$8.78/cf

2.2 Labor, Equipment, and Analytical Charges

The following labor cost and equipment costs represent charges that would be incurred during a third-party closure of SGRR. The figures reflect August 2002 costs for labor and equipment in the greater Cincinnati, Ohio area.

Labor

a. work crew (1 supervisor @$530/day, 3 laborers @ 340/day/man) = $ 1,550/day

Equipment

a.	Miscellaneous Supplies (Brooms, squeegees, shovels, protective clothing, etc.)	= $ 100/day
b.	Portable Drum Crusher	= $ 100/day
c.	vacuum truck with operator	= $ 800/DAY
d.	Rolloff Container (30 cubic yards)	= $ 100/day

Analytical

a.	wipe samples	= $ 50/sample
b.	soil/solid/liquid samples	= $ 110/sample

2.3 General Assumptions

1. Where possible, all wastes will be consolidated onsite and shipped to the ultimate treatment/disposal facility in bulk form. The rate of repacking/consolidation is approximately 100 55-gallon drums per work crew per day.

2. The floors and walls of the containment basin/pad undergoing decontamination will be cleaned using a suitable solvent (e.g., hexane, diesel fuel, No. 2 heat oil, etc.) and scrubbing brooms, followed by a solvent rinse. All cleaning residues and and rinsate waters will be collected and shipped offsite for treatment/disposal. The total volume of solvent used in the cleaning and rinsing process is equal to 1% of the containment volume of the unit undergoing decontamination.

3. All empty drums will be crushed onsite using a portable drum crusher unit and shipped offsite in 30-CY rolloff containers. For cost estimation purposes, it is assumed that 1 crushed drum occupies a volume of 3 cubic feet or 0.11 cubic yards.

4. All pallets will be broken down and shipped offsite in 30-CY rolloff containers. For cost estimation purposes, it is assumed that 1 pallet occupies a volume of 4 cubic feet or 0.15 cubic yards.

5. All materials and equipment used as part of onsite decontamination activities (e.g., pumps, hoses, drum crusher, etc.) shall be adequately decontaminated after use. The cost for such decontamination is assumed to be $2,500 per PCB unit.

6. Sampling costs are included in labor costs. Analytical costs are separately accounted.

7. Liquid density is assumed to be 9.0 lb/gal. Solid density is assumed to be 2000 lb/yd3

3.0 Unit-Specific Closure Costs

3.1 Building B (High Bay) Container Storage Area (Annex III)

Item	Number	Time/Quantity	Unit Rate	Item Cost
A. Consolidation and Preparation for Shipment				
Labor	1 crew	2 days	1550 $/day	3100
Equipment				
- vacuum truck	1 unit	2 days	800 $/day	1600
- Rolloff	1 unit	2 days	100 $/day	200
- Drum Crusher	1 unit	2 days	100 $/day	200
- Miscellaneous	1 unit	2 days	100 $/day	200
Consolidation And Onsite Treatment Subtotal				5300
B. Disposal				
Liquids				
- bulk	49 drums	55 gal/dr	2.07 $/gal	5578
Solids				
- transf/sol	114 drums	7.35 cf/dr	8.78 $/cf	7357
- drum caps/bal	31 drums	440 lb/dr	1.04 $/lb	14185
Debris				
- crushed drums	194 drums	0.11 cy/dr	115.00 $/cy	2455
- pallets	49 units	0.15 cy/unit	115.00 $/cy	846
Disposal Subtotal				30421
C. Storage Bay Decontamination				
Labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
- Decontamination	1 unit	1 unit	2500 /unit	2500
Analytical				
- Wipe Samples	1 bay	37 sample/bay	50 $/sam	1850
- destructive	1 bay	37 sample/bay	110 $/sam	4070
disposal	34 gallons	1 unit	2.07 $/gal	70
Decontamination Subtotal				10140
GRAND TOTAL				45861

Notes:
1. The TSCA storage area is designed to hold up to 194 55-gallon drums. At closure, drums containing free-liquids or bulk solids will be consolidated into bulk liquid tanks or rolloff containers, while drums containing capacitors/ballasts or other types of electrical equipment will be shipped in their original container.

For cost estimation purposes, it is assumed that the distribution of drums among the various categories of PCB waste (i.e., liquid, solids/transformers, capacitors/ballasts) at SGRR is identical to the historical PCB receipt records from SGRR's sister facility, Clean Harbors of Braintree, Inc. in Braintree, MA, as follows:

Category	% of all PCB received	Assumed number for closure estimate (Based on 194 total)
i. Liquid	25%	49
ii. Solids/Transformers	59%	114
iii. Capacitors/Ballasts	16%	31
	100	194

2. The floor and wall surfaces of the storage area are adequately decontaminated through a solvent soak and a thorough scrub down with hard bristle brushes and brooms.

3. The amount of solvent used for the floors and walls is equal to 1% of the total containment volume of the structure. Per the calculations shown on SGRR Drawing No. 5384-S-03, the containment volume for the Building B (High Bay) storage bay is 3,374 gallons. Therefore, the solvent used is 34 gallons [(0.01)(3,374) = 34].

4. Emptied liquid/solid drums will be crushed onsite and placed into three 30 cubic yard rolloff container along with wooden pallets (194/4 = 49) and decontamination residuals (e.g., brooms, squeegees, protective equipment).

5. Post-closure analysis consists of 37 random wipe samples and 37 random destructive samples taken in conformance with the USEPA "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup", May 1986.

3.2 Building H (Stabilization Building) Truck Storage Area

Item	Number	Time/Quantity	Unit Rate	Item Cost
A. Truck Consolidation and Preparation for Shipment				
labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
Consolidation And Preparation Subtotal				1650
B. Truck Disposal				
solids	2 rolloffs	30 cy/rolloff	115 $/cy	6900
Disposal Subtotal				6900
C. Truck Decontamination				
labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
- Decontamination	1 unit	1 unit	2500 $/unit	2500
Analytical				
- floor	1 bays	37 sample/bay	50 $/sam	1850
- destructive	1 bays	37 sample/bay	110 $/sam	4070
disposal	148 gallons	1 unit	2.07 $/gal	306
Decontamination Subtotal				10376
GRAND TOTAL				18926

Notes:

1. Truck is designated as a waste vehicle storage area used for the storage of up to 2 bulk solids rolloff containers for PCB solids.

2. The floor of Truck is impervious concrete which can be decontaminated through a solvent soak and a thorough scrub down with hard bristle brushes and brooms. The amount of solvent used to decontaminate the unit is equal to 1% of the total containment volume of the structure.

3. Post-closure analysis consists of 37 random wipe samples and 37 random destructive samples taken conformance in with the USEPA "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup", May 1986.

4. Decontamination of Rolloffs and Tankers will be tripled rinsed per 40 CFR 761.79(c)(1). The same Diesel rinse will be used for all rolloffs and tankers. Costs for sampling and decontamination in 3.2, 3.3 and 3.4 are included in 3.4.

3.3 Tank Truck Loading/Unloading (30-day Area)

Item	Number	Time/Quantity	Unit Rate	Item Cost
A. Consolidation and Preparation for Shipment				
labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
Consolidation And Preparation Subtotal				1650
B. Disposal				
Liquid				
- bulk	2 trucks	7200 gal/truck	2.07 $/gal	29808
Disposal Subtotal				29808
C. Decontamination				
labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
- Decontamination	1 unit	1 unit	2500 $/unit	2500
Analytical				
- destructive	1 bay	37 sample/bay	110 $/sam	4070
disposal	128 gallons	1 unit	2.07 $/gal	265
Decontamination Subtotal				6265
GRAND TOTAL				39943

Notes:

1. The Tank Truck Loading/Unloading 30-day Area is a designated waste vehicle parking area used for the storage of up to 2 of the following: (i) bulk liquid transport vehicles, each with a capacity of 7,200 gallons (ii) flat bed trailers, each holding 100 transformers of various sizes, and/or (iii) bulk solids rolloff containers for PCB solids. For "worst-case" closure cost estimation purposes, SGRR has assumed that the area contains 2 bulk liquid transporters containing 7,200 gallons of PCB liquids requiring TSCA incineration.

2. The floor of the Tank Truck Loading/Unloading 30-day Area are impervious concrete which can be decontaminated through a solvent soak and a thorough scrub down with hard bristle brushes and brooms. The amount of solvent used to decontaminate the unit is equal to 1% of the total containment volume of the structure. As shown in SGRR Drawing No. 5384-S-03, the total containment volume of the Tank Unloading Area is 12,741 gallons. Therefore, the total solvent used is 128 gallons. [(0.01)(12,741) = 128 gals].

3. Post-closure analysis consists of 37 random floor samples taken in conformance with the USEPA "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup", May 1986.

4. Decontamination of Rolloffs and Tankers will be tripled rinsed per 40 CFR 761.79(c)(1). The same Diesel rinse will be used for all rolloffs and tankers. Costs for sampling and decontamination in 3.2, 3.3 and 3.4 are included in 3.4.

3.4 Rolloff Pad (30-day Area)

Item	Number	Time/Quantity	Unit Rate	Item Cost
A. Consolidation and Preparation for Shipment				
labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
Consolidation And Onsite Treatment Subtotal				1650
B. Disposal				
solids	5 rolloffs	30 cy/rolloff	115 $/cy	17250
Disposal Subtotal				17250
C. Storage Bay Decontamination				
labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
- Decontamination	1 unit	1 unit	2500 $/unit	2500
Analytical				
- destructive	1 bay	37 sample/bay	110 $/sam	4070
disposal	128 gallons	1 unit	2.07 $/gal	265
Decontamination Subtotal				6265
D. Rolloff and Tanker Decontamination				
Labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
Diesel		800 gal	$1.50/gal	1200
Diesel				
Trans and disposal		800 gal	$2.07/gal	1656
Analytical	27	3/vehicle	$110/sam	2970
Subtotal				7476
GRAND TOTAL				34861

Notes:

1. Rolloff Pad 30-day storage is a designated waste storage parking areas used for the storage of up to five (5) bulk solids rolloff containers for PCB solids.

2. The floor of Rolloff Storage Area is impervious concrete which can be decontaminated through a solvent soak and a thorough scrub down with hard bristle brushes and brooms. The amount of solvent used to decontaminate the unit is equal to 1% of the total containment volume of the structure. As shown in SGRR Drawing No. 5384-S-03, the total containment volume of the Rolloff Pad

is 12,741 gallons. Therefore, the total solvent used is 128 gallons [(0.01)(12,741 gal) = 128 gals].

3. Post-closure analysis consists of 37 random floor samples taken in conformance with the USEPA "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup", May 1986.

4. Decontamination of Rolloffs and Tankers will be tripled rinsed per 40 CFR 761.79(c)(1). The same Diesel rinse will be used for all rolloffs and tankers. Costs for sampling and decontamination in 3.2, 3.3 and 3.4 are included in 3.4.

3.5 Building F Containment Structure

Item	Number	Time/Quantity	Unit Rate	Item Cost
A. Waste Consolidation and Disposal -- Not Applicable; see Note 1.				
B. Decontamination				
labor	1 crew	3 days	1550 $/day	4650
Equipment				
- Miscellaneous	1 unit	3 days	100 $/day	300
- Decontamination	1 unit	3 days	2500 $/day	7500
Analytical				
- floor	1 bay	37 sample/bay	50 $/sam	1850
- destructive	1 bay	37 sample/bay	110 $/sam	4070
disposal	94 gallons	1 unit	2.07 $/gal	195
Decontamination Subtotal				18565
Grand Total				18565

Notes:

1. Building F is not intended for future storage and handling activities involving containers of PCB's. Since Building F is not an active PCB storage unit, the closure cost estimate does not reflect the cost associated with inventory removal. However, since the unit was previously used for the storage of PCB's, the closure cost estimate includes the cost for decontamination of the secondary containment structure in which containers of PCB waste are staged.

2. Per the containment calculations shown in Appendix 11 of the TSCA Application, the total secondary containment volume of Building F is 9,324.5 gallons. Therefore, the volume of rinsewater is (0.01)(9324.5 gal) or 94 gallons.

3. Post-closure analysis consists of 37 random wipe samples and 37 random destructive samples taken conformance with the USEPA "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup", May 1986.

3.6 Building B (High Bay) Containment Structure (& Future Storage)

Item	Number	Time/Quantity	Unit Rate	Item Cost
A. Waste Consolidation and Disposal -- Not Applicable; see Note 1.				
B. Floor Space Decontamination -- See Note 2				
labor	1 crew	7 days	1550 $/day	10850
Equipment				
- Miscellaneous	1 unit	7 days	100 $/day	700
- Decontamination	1 unit	7 days	2500 $/day	17500
Analytical				
- floor	1 bay	37 sample/bay	50 $/sam	1850
- destructive	1 bay	37 sample/bay	110 $/sam	4070
disposal	125 gallons	1 unit	2.07 $/gal	259
Decontamination Subtotal				35229
GRAND TOTAL				35229

Notes:

1. Building B (High Bay) is intended to be used for storage and handling activities involving containers of PCB's. However, the active PCB storage and handling activities inside High Bay shall be limited to no more than 194 55-gallon drums (or equivalent) within the designated PCB area on the east side of High Bay until such time that: (i) SGRR notifies U.S. EPA Region V of its intent to utilize additional part of High Bay for PCB storage and (ii) additional closure costs (for the disposal of additional inventory) are estimated and secured by an appropriate financial assurance mechanism.

2. Since the High Bay expansion is a future (not active) PCB storage unit, the closure cost estimate need not reflect the cost associated with inventory removal. However, since the entire floor area of High Bay was previously used for the storage of PCB the closure cost estimate includes the cost for decontamination of the secondary containment structure in which containers of PCB waste are staged.

3. Per the containment calculations shown in Appendix 11 of the TSCA Application, the total secondary containment volume of Building B is 12,445 gallons. Therefore, the volume of rinsewater is (0.01)(12,445 gal) or 125 gallons.

4. Post-closure analysis consists of 37 random wipe samples and 37 random destructive samples taken conformance with the USEPA "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup", May 1986.

3.7 Other Areas -- Roadways & Laboratory

Item	Number	Time/Quantity	Unit Rate	Item Cost
A. Waste Consolidation and Disposal -- Not Applicable; see Note 1.				
B. Roadway Decontamination -- See Note 2				
labor	1 crew	2 days	1550$ /day	3100
Equipment				
- Miscellaneous	1 unit	2 days	100 $/day	200
- Decontamination	1 unit	2 days	2500 $/day	5000
Analytical				
- soil/asphalt	2 zones	37 sampl/zone	110 $/sam	8140
Decontamination Subtotal				16440
C. Laboratory Decontamination -- See Note 3				
labor	1 crew	1 day	1550 $/day	1550
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
- Decontamination	1 unit	1 unit	2500 $/unit	2500
Analytical				
- wipe	1 round	37 samples/rnd	50 $/sam	1850
- solid	1 round	37 samples/rnd	110 $/sam	4070
Decontamination Subtotal				10070
Grand Total				26510

Notes:

1. The Roadway System and Laboratory are not TSCA storage units. There is no inventory of PCB waste to be disposed.

2. The exact number and location of PCB samples for the roadway system will be taken in conformance with the USEPA "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup", May 1986. Given the size of the roadway system, the cost estimate provides for 2 zones of sampling.

3. The exact number and location of PCB samples for the laboratory will be taken in conformance with the USEPA "Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup", May 1986. Given that the nature of the floors, walls, and other surface areas in the laboratory are both pervious/impervious, the cost estimate provides sampling for both types.

3.8 Tank Storage Area

Item	Number	Time/Quantity	Unit Rate	Item Cost
A. Consolidation and Preparation for Shipment				
labor	1 crew	0.5 day	1550 $/day	775
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
Consolidation And Preparation Subtotal				875
B. Disposal				
Liquid				
- bulk	2 trucks	10350 gal	2.07 $/gal	21424
Disposal Subtotal				21424
C. Decontamination				
labor	1 crew	0.5 day	1550 $/day	775
Equipment				
- Miscellaneous	1 unit	1 day	100 $/day	100
- Decontamination	1 unit	1 unit	2500 $/unit	2500
Analytical				
- decon solvent	1 tank	3/tank	110 $/sample	330
- destructive	1 bay	37/bay	$110/sample	4070
disposal	1035 gallons	1 unit	2.07 $/gal	2142
Decontamination Subtotal				16212
Grand Total				38511

Notes:

1. The Tank is used for the storage of up to 10,350 gallons of PCB liquid. For "worst-case" closure cost estimation purposes, SGRR has assumed that the tank contains 10,350 gallons of PCB liquids requiring TSCA incineration.

2. Closure per 40 CFR 761(c)(1) involves triple washing with a suitable solvent. SGRR intends to utilize diesel fuel. Therefore 10% of 10,350 gallons is 1,035 gallons. It is assumed that the same 1,035 gallons can be used for each of the three washes required (IE: PCB < 50 ppm)

4.0 Inspection and Certification by Professional Engineer

SGRR will retain an independent Professional Engineer (P.E.) to inspect and certify that the closure activities have been completed in accordance with the approved Closure Plan. It is assumed the cost for the P.E. will be 40 hours at $100 per hour or $4,000.

5.0 Summary of Closure Costs

5.1 TSCA Closure Cost Estimate

Using the unit-specific cost estimates calculated above, the total cost for full TSCA closure (i.e., removal of maximum PCB inventory and decontamination of PCB storage units) at SGRR is:

	Unit	Unit Cost
3.1	Building B (High Bay) Container Storage Area (Annex Iii)	45861
3.2	Building H (Stabilization Building) Truck Storage Area	18926
3.3	Tank Truck Loading/Unloading (30-Day Area)	39943
3.4	Rolloff Pad (30-Day Area)	34861
3.5	Building F Containment Structure	18565
3.6	Building B (High Bay) Containment Structure (& Future Storage)	35229
3.7	Other Areas -- Roadway System & Laboratory	26510
3.8	Tank Storage Area	38511
4.0	Professional Engineer Certification	4000
Subtotal		262406
Contingency Factor (5%)		13120
Grand Total		275526

Appendix 11

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN
(SPCC Plan)

For

SPRING GROVE RESOURCE RECOVERY INC.
CLEAN HARBORS INC.
4879 Spring Grove Ave.
Cincinnati, Ohio 45232-1975

Note: This plan supercedes the existing plan dated July 2003 and incorporates the requirements of the SPCC Rules. 40 CFR 1 12, as amended to be effective September 5, 2008.

Prepared for :
Spring Grove Resource recovery, Inc.
Clean Harbors Inc.
4879 Spring Grove Ave.
Cincinnati, Ohio 45232

Reviewed by:
Arun Lakhani, P.E.
Clean Harbors Environmental Services, inc.
2605 Egypt Road
Trooper, PA 19403

Certification

I hereby Certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112, attest that the SPCC Plan has been prepared in accordance with good engineering practices.

ARUN M. LAKHANI
Printed Name of registered Engineer

Signature of Registered Engineer

Date	Registration No.	State
3/23/09	PE-046787-E	PA

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN
(SPCC plan)
For

SPRING GROVE RESOURCE RECOVERY INC.
CLEAN HARBORS INC.
4879 Spring Grove Ave.
Cincinnati, OH 45232-1975

MANAGEMENT APPROVAL

This SPCC Plan has the complete support of the management at Clean Harbors Environmental Services, and will be implemented as herein described. I am at a management level with authority to commit the necessary resources.

Signature: _____

Name: Steve Vasse

Title: General Manager

Emergency Phone numbers

Spill Prevention Control Coordinator:
Steve Vasse (Home) 513-932-0919
(Cell) 513-200-7572

Alternate:
Steve Bley (Home) 513-941-3827
(Cell) 513-616-7248

Other Telephone Numbers:

Cincinnati Fire Department	513-241-2525 911
Ohio Environmental Protection Agency	800-282-9378
National Response Center	800-424-8802
US Coast Guard	513-684-3295
Clean Harbors (Cincinnati) After hours	513-681-6242 800-343-4244

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN
(SPCC Plan)

For

SPRING GROVE RESOURCE RECOVERY INC.
CLEAN HARBORS INC.
4879 Spring Grove Ave.
Cincinnati, Ohio 45232-1975

Part I **SPCC Plan**

The information contained in this SPCC Plan has been developed in accordance with the "General Requirements for Spill Prevention, Control and Countermeasure Plans" as described in 40CFR 11237 and 112.8 as amended to be effective on August 16,2002.

112.7(a)(1) **Discussion of Facility's Conformance**

This plan has been prepared in accordance with good engineering practices and is subject to the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. The information is presented in the same alphanumeric sequence as specified in 40CFR 112.7 and 112.8.

112.7(a)(2) **Compliance with Requirements**

This plan complies with the applicable rule requirements including those for secondary containment.

121.7(a)(3) **Facility Description**

Name and Location:

Spring Grove Resource Recovery, Inc.
4879 Spring Grove Avenue
Cincinnati, ohio45232 –6242
Tel, (513) 681-6242

Owner:

Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Braintree, MA 02061
Tel. (781) 792-5000

Facility Description (Cont.)

Spring Grove Resource Recovery Inc., (SGRRI), is a hazardous waste storage and treatment facility located in the community of Winton Place under jurisdiction of Cincinnati, Ohio located at 4879 Spring Grove Ave. The facility resides on approximately 8 acres of land owned by Clean Harbors at the intersection of Spring Grove Avenue (to the east) and Chickering Avenue (to the north). The nearest body of water is located approximately 1/4 of a mile to the east, identified as the Mill Creek. (The Mill Creek is not known to be a navigable waterway).

SGRRI's facility is located on land owned by Clean Harbors. A plot plan is shown as Figure 1 with the areas where oil/PCBs may be stored. Fixed storage, relative to this SPCC Plan, is all above ground and specifications on each tank are attached.

Operations at SGRRI consist of organic fuels blending, wastewater treatment, stabilization/solidification, transfer, storage, and consolidation of drummed waste and bulk chemicals, including PCB's, for bulk shipment to off-site licensed facilities for ultimate disposal.

112.7(a)(3)(i) Type of Oil & Storage Capacity

There are a total of 20 above-ground storage tanks located in five different areas throughout the facility. All 20 above-ground storage tanks are currently in service.

Many storage tanks contain products that are not oil or oil-related, and do not fall under the SPCC Plan regulations. Six of the tanks, including a fractionation tank, potentially contain oil, and are the focus of this plan. Furthermore, oil and PCBs are stored in 55-gallon drums. The areas where these drums are stored are also covered by this plan.

Containment or diversionary structures are present at all of the oil management areas, as discussed below.

AREA A – Frac Tank Located On the Tanker Pad

Tank	Contents	Maximum Tank Volume	Material of Construction
frac	water/oil	20,000 gal	Carbon Steel
Total: 1 Tank		20,000 gal	

AREA B – Fuel Tank/Drums Located in Highbay-Building B

Tank	Contents	Maximum Tank Volume	Material of Construction
	Diesel Fuel	275 gal	Carbon Steel
	Oil/Water/PCBs	55 Gal	Carbon Steel or Polyethylene
Total:	1 Tank	275 gal	
	Up to 2395 55-gallon Drums		

AREA C - Drums Located on the Flammables Pad – Building H

Tank	Contents	Maximum Tank Volume	Material of Construction
	Oil/Water/PCBs	55 Gal	Carbon Steel or Polyethylene

Total: Up to 4936 55-gallon drums

AREA D- Drums Located in Building F

Tank	Contents	Maximum Tank Volume	Material of Construction
	Oil/Water/PCBs	55 Gal	Carbon Steel or Polyethylene

Total: Up to 6384 55-gallon drums

AREA E- Tanks Located Within Diked Tank Farm

Tank	Contents	Maximum Tank Volume	Material of Construction
TK1	water/leachate	10,500 gal	Carbon Steel
TK2	water/leachate	10,500 gal	Carbon Steel
TK3	water/leachate	10,500 gal	Carbon Steel
TK4	water/leachate	10,500 gal	Carbon Steel

Total: 42,000 gallons

112.7(a)(3)(ii) Discharge Prevention Measures

Truckloads entering the facility are directed to the loading/offloading area that is designed to contain the maximum volume that could be spilled from

Any tank truck compartment. Loading/unloading only takes place at designated places, where containment is provided, and only by or under the supervision of trained CHES employees. The facility will follow loading/unloading procedures that meet the D.O.T. regulations, at a minimum. Tank trucks are not to be filled at such an extent that sudden bumps or swerves will cause oil spillage. Prior to filling and departure of any tank truck, the lower most drain on all outlets of such vehicles are closely examined for leakage while in transit. All drivers inspect the truck and tank level for sufficient volume to handle the load.

Tank mounted level monitoring and level indication equipment is present on all bulk tanks, and will be addressed, by storage area, in the following section.

No buries piping is in use at this facility.

Pipelines leading to tanks that are either not in service, or that are in standby service for an extended time, are closed off by a manual ball valve, whose handle is then removed, to prevent accidental transfer.

All exposed pipes and their supports are adequately designed to minimize abrasion and corrosion and allow for expansion and contraction.

All valves and pipelines are visually inspected as part of the daily inspection plan conducted by the compliance department and operations personnel.

There is no exposed piping that can be inadvertenly damaged by vehicular traffic.

112.7(a)(3)(iii) <u>Discharge or Drainage Controls</u>

There is no hard piped or "engineered" drainage system from any of the facility's containment areas9process areas). There are no flapper type drain valves used to drain diked areas of the facility. Rainwater collected in containment areas is removed via manually controlled pumps no later than 24 hours after the cessation of a rainfall event. In most cases, the rainwater will be processed in the on site wastewater treatment plant.

Rainwater that does not fall in a processing area (i.e. Parking lot) is not collected and thus allowed to naturally run-off or flows to stormwater sewers on site. The storm sewers (combined system) flow to the same Cincinnati Metropolitan Sewer District for treatment. These outfalls are fitted with manually controlled valves that are normally in the closed position to prevent spilled materials from entering the storm sewer. There

is no direct discharge into open watercourses. All water is visually inspected to assure no oil is present prior to opening the valve.

The tanker Pad, Area A, is a bermed area sloped toward a blind sump. In the event of a spill exceeding the volume of the sump, the liquid overflows to a pit with a capacity of 8,450 gallons. Storm water entering this pit is manually pumped out and treated through the wastewater treatment system.

Areas B, C, and D are located within bermed areas inside buildings. Any oil released in these areas would be contained within the secondary containment. Area B has four separate containment areas with a total capacity of 13,180 gallons. Area C has a secondary containment capacity of 27,150 gallons. Area D has five containment areas with a total capacity of 35,124 gallons.

The Tank Farm, Area E, is a diked area with a total secondary containment volume of 143,368 gallons. This is adequate containment for each of the tanks and the rainfall from a 25-year, 24-hour storm. Storm water entering this pit is manually pumped out and treated through the wastewater treatment system.

112.7(a)(3)(iv) Countermeasures for Discharge Discovery

Operating procedures of the facility are geared towards minimizing the occurrence of oil spills. However, equipment failure and/or human error can lead to oil releases. In the event of an accidental discharge or spill of oil or hazardous materials, the immediate objective is to contain the spill to the smallest possible area and to properly decontaminate the area prior to resuming operations.

In the event of a spill, facility employees who have been specially trained will form the spill response team. These personnel will respond to the situation with the necessary equipment to control the spill as quickly as possible. The general procedures for spill control and the duties and actions of the spill response team are described below.

General spill response will include the following:

a. Isolate the spill area to prevent further spill migration and surface contamination. (This isolation will also prevent surface waters from flowing from or into the spill area.)

b. Collect the spilled materials by the use of pumps and/or absorbent material.

c. Clean up the spill area by removing the absorbing agents, waste materials, and any contaminated soils. The contaminated soils, absorbing agents, and spilled materials will be managed at an appropriate on-site disposal facility.

d. All equipment employed during the spill response operations will be decontaminated and restored to its pre-emergency state.

The Spring Grove Facility has developed a Facility Contingency Plan to be followed in case of a discharge at any of the oil management areas at the facility. This plan is located on site.

112.7(a)(3)(v) Methods of Disposal of Recovered Materials

Any leaks, or minor spills that accumulate in the diked areas are removed via pump or vacuum truck and then shipped off-site to a licensed facility for disposal.

112.7(a)(3)(vi)Contact List and Phone Numbers

In the event of a spill, discharge, fire, explosion or other emergency, the following company personnel have been designated to serve as "Spill Prevention Control Coordinators". The coordinators are familiar with all aspects of this plan, the activities, operations, and layout of the Spring Grove Facility and the locations of the emergency equipment within the facility. The Coordinators are authorized to commit the full resources needed to respond to an emergency situation and are listed in the order which they are to be notified.

Spill Prevention Control Coordinator:

Steve Vasse	(Home) 513-932-0919 (Cell) 513-200-7572
Alternate Stephen Bley	(Home) 513-941-3827 (Cell) 513-616-7248

Other Telephone Numbers:

Fire/Police/Ambulance	911
Ohio Environmental Protection Agency	800-282-9378

National Response Center	800-424-8802
U.S. Coast Guard	513-684-3295
Clean Harbors (Cincinnati) after hours	513-681-6242 800-343-4244

112.7(a)(4) **Response Plan**

A Response Plan is not required for this Facility. However, related information and requirements for mitigating and reporting a discharge are found in the Clean Harbors Spring Grove Facility Contingency Plan.

112.7(a)(5) **Plan Organization**

This Plan has been organized such that all appropriate personnel and their phone numbers are easily accessible to other facility personnel in the event of a spill event. All procedures are listed in the Contingency Plan should a discharge occur, and is easily accessible to all facility personnel

112.7(b) **Spill Potential**

All storage tanks at the facility containing oil/PCB related products are located within diked areas. A listing of all storage tanks, grouped by location, including the tank contents and capacities is included in Section 112.7(a)(3)(i) above. A description of the spill potential from each of these areas is discussed in Section 112.7(a)(3)(iii) above. Should a failure occur which led to a discharge beyond the containment systems, it would follow local contours and flow into locked storm drains.

112.7(c)(1) **Containment and/or Diversionary Structures**
(Onshore Facilities)

All tanks have epoxy sealed concrete, secondary containment dikes around them. Absorbent is used to contain and remove minor spills. Larger spills, once contained by dikes, are removed with on site pumps and or vacuum trucks. Sorbent materials to contain minor spills are kept in spill control supply areas. The containment and/or diversionary structures in place at the facility are fully described in Section 112.7(a)(3)(iii) above.

112.7(c)(2) **Containment and/or Diversionary Structures**
(Offshore Facilities)

Not Applicable

112.7(d) **Practicability of Installed Containment Structures**

The containment systems described herein have been designed and constructed so that any discharge from a primary containment vessel, such as a tank or pipe, will not escape the containment system before cleanup occurs. In addition, the Spring Grove Facility has developed a Contingency Plan.

112.7(e) **Inspections, Tests, and Records**

Company personnel shall make continuous visual inspection of all seams, gaskets, etc. while they are in the process of performing their routine functions. One employee is assigned to visually inspect the tanks and all related equipment (i.e., valves, pipelines) at least once a week. A signed record is kept of these inspections. See the sample Inspection Form, Attachment 1.

112.7(f) **Personnel, Training, and Discharge Prevention Procedures**

112.7(f)(1) **Personnel Training**

The Clean Harbors Spring Grove Facility has a SPCC Plan Log that is maintained as part of the facility RCRA inspection plan. It is signed by the inspector and kept on site for at least three years. See Attachment 3.

All plant personnel are trained to operate and maintain the plant equipment properly. This is the responsibility of the Spill Prevention Control Coordinator (Emergency Coordinator). Most important, all employees are required to call to attention of the coordinator through the supervisor, immediately all malfunctioning equipment and any other potential cause of a spill. All equipment throughout the plant is inspected for malfunction on a regular basis and recorded in the Inspection Form. Review and safety meetings are held monthly for all employees and are recorded on the training Record, Attachment 2. Spill prevention briefings are held simultaneously with monthly safety meetings.

112.7(f)(2) **Designated Person**

The Facility Manager is responsible for ensuring that all workers complete the training program outlines above. The individual is responsible for oil spill prevention. The current Facility General Manager is Steve Vasse.

112.7(f)(3) Discharge Prevention Briefings

All personnel receive an annual refresher course on the SPCC Plan and the Contingency Plan, spill clean-up procedures and other specific topics, which is documented on the Training Record, Attachment 2.

112.7(g) Security

Clean Harbors maintains a Site Security Plan , which is required by and included in the facilities RCRA Part B Permit. This Plan describes the general security measures taken by Clean Harbors in order to preclude unauthorized entry to the site. Specific security measures are discussed below.

112.7(g)(1) Perimeter Fencing

The site is fully fenced with a guard stationed at the main entrance. A guard is present at the gate at all times.

112.7(g)(2) Master Flow and Drain Valves

There are no master flow or drain valves that if opened would permit direct outward flow of the products stored to the surface ground, or dike floor.

112.7(g)(3) Pump Controls

Starter controls for all pumps are located in secure areas, accessible only to authorized personnel.

112.7(g)(4) Loading and Unloading Connections

All pipes that are not in service are either removed from the pipe racks or capped.

112.7(g)(5) Facility Lighting

The facility is well lit by yard floodlights to permit after sunset operations and enable discovery of spills and deter vandalism.

112.7(h) Facility Tank Truck Loading/Unloading

112.7(h)(1) Containment Systems

Tank truck loading/unloading procedures meet the minimum requirements of the Department of Transportation. Copies of the procedures are available by the appropriate company personnel. Transfer operations are to

be performed only in designated areas designated for such activities. Tank truck loading and unloading activities are only conducted within areas having berms, which are designed to contain the maximum volume that could be spilled from any tank truck.

112.7(h)(2) Disconnection of Transfer Lines

All drivers are required to do a circle check of the vehicle before departing with a vehicle. This includes checking to ensure transfer lines have been disconnected.

112.7(h)(3) Tank Truck Inspection

Prior to filling and departure of any tank car or tank trunk, the lowermost drain of all outlets of such vehicles are closely examined for leakage, and if necessary, tightened, adjusted or replaced to prevent leakage while in transit. All drivers are required to do a circle check of the vehicle before departing with a vehicle.

112.7(i) Brittle Fracture Evaluation

If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture, an evaluation of such risks will be made and appropriate actions taken as necessary.

112.7(j) Additional Discharge Prevention and Containment Procedures

In addition to the discharge prevention and containment procedures described in this Plan, a complete discussion of conformance with the applicable State and local rules and regulations may be found in the Clean Harbors Spring Grove Facility Contingency Plan.

Electronic security systems are in operation throughout the facility to aid in the discovery of potential discharges. All tanks contain monitoring systems such as ultrasonics, liquid gauge, and visual gauges to prevent discharge. The level controls and instrumentation is described in detail in section 112.8(c)(8) below.

Subpart B- Additional Requirements for Petroleum Oils and Non-Petroleum Oils

112.8(a) General Requirements for the SPCC Plan

The Clean Harbors Spring Grove Facility has met the requirements for the SPCC plan under 112.7.

112.8(b) Facility Drainage

112.8(b)(1) Drainage From Diked Storage Areas

No engineered or "hard piped" drainage exists from diked areas (process areas). Rainwater collected in containment areas is removed via a manual control pumps no later than 24 hours after the cessation of a rain fall event. In most cases, the rainwater will be processed in the on site wastewater treatment plant.

112.8(b)(2) Manual Valve Use For Diked Areas

There are no "flapper" type or automatic drain valves used to drain diked areas of the facility.

112.8(b)(3) Drainage from Undiked Areas

Facility drainage from undiked areas beyond the containment systems would follow local contours and flow into locked storm drains.

112.8(b)(4) Control of Drainage from Undiked Areas

The storm drains at the facility that collect drainage from undiked areas are equipped with valves that will prevent rainwater (or discharges) from exiting the facility. These valves are kept in the closed and locked position. Accumulated waters are inspected for the presence of oil before being opened.

112.8(b)(5) Treatment of Drainage Waters

Drainage waters collected from diked storage areas are treated on site through the waste water treatment system.

112.8(c) Bulk Storage Containers

112.8(c)(1) Compatibility

All bulk storage containers used for the storage of oil are of material and construction that is compatible with the material stored and conditions of storage, such as pressure and temperature.

112.8(c)(2) Secondary Means of Containment

Refer to 112.7(a)(3)(iii) above for complete descriptions of the secondary containment systems.

112.8(c)(3) **Drainage of Uncontaminated Rainwater**

No uncontaminated rainwater from diked containment areas is drained or discharged into a storm drain, into an open lake or pond or bypassing the facility treatment system. All rainwater contained by dikes is collected and transported offsite for disposal. There are no bypass valves from diked areas.

No retained rainwater is discharged or drained at the facility. It is all collected and transported offsite for disposal.

There are no bypass valves from diked containment areas.

All records of any discharge events are filled and any records required under permits are issued in accordance with 122.41 (j) and 122.41(m)(3).

112.8(c)(4) **Buried Tanks**

There are no buried tanks at the Clean Harbors Spring Grove Facility.

112.8(c)(5) **Partially Buried Tanks**

There are no partially buried tanks at the Clean Harbors Spring Grove Facility.

112.8(c)(6) **Tank Integrity Testing**

The aboveground tanks are continuously inspected by facility personnel for signs of possible deterioration, leaks that may cause a spill, or accumulation of oil inside diked areas during their normal work activities. Records of these inspections are kept in the facility operating records in the compliance department office. All valves to individual tanks are valved-off after working hours. Non-destructive thickness tests of steel bulk tanks are performed annually.

112.8(c)(7) **Heating Coils**

There are no internal heating coils at this facility.

112.8(c)(8) **Instrumentation**

The wastewater-receiving tank and the diesel tank each have a visual level gauge. To reduce the possibility of overfilling, the reserve of any tank to be filled must be checked before filling. A portable frac tank located on the tanker pad may also be used for temporary storage. The volume is checked manually measuring the outage prior to filling.

112.8(c)(9) Effluents from Treatment Facilities

The water treatment facility is monitored to detect possible system upsets that could cause a discharge.

112.8(c)(10) Visible Discharges

Any visible discharges will be promptly corrected including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. Any accumulation of oil in diked areas will be promptly removed.

112.8(c)(11) Mobile Storage Containers

All mobile or portable oil storage containers (55 gallon drums) have a secondary means of containment by either being stored within buildings providing containment, or by being placed on containment pallets. A frac tank used for storage (which is considered a mobile storage container) is staged in an area that provides secondary containment.

112.8 (d) Facility Transfer Operations, Pumping, and Facility Process

In the event that a release from a tank had occurred, the removal of the released material from the secondary containment structure would be conducted. Major equipment maintained on-site for containment and cleanup of released materials in the event of a spill/failure consists of pumps, vacuum equipment and adsorbents. Spill control equipment will include solidification reagent, rakes, shovels and empty 55-gallon drums. Other spill equipment will include chemical resistant boots and gloves, eyewear, hard hats, respirators, safety lights, and combustible gas indicators. These materials will be used whenever a spill or leak of tank contents occurs to both control and contain the spill. The spill control equipment is located in key areas of the facility.

Clean Harbors has developed standard procedures to follow when unloading materials on the Tanker Pad. These procedures were established to decrease the likelihood of a spill caused by human error or equipment malfunction. These procedures are as follows:

a. Verify the tanker volume to be transferred.

b. Measure tank that material will be transferred to, and record starting measurement on the transfer ticket.

c. Verify by these two measurements that sufficient space exists in the designated tank to accommodate the tanker volume.

d. Ensure vehicle is braked securely.

e. Line up valves on appropriate pump to unloading tank.

f. Hook up flex hose to truck and appropriate pump.

g. Confirmation by supervisor that hose, piping, and valve configuration is correct.

h. Open valves on truck making sure there are no leaks.

i. Activate pump and monitor flow of material to verify material is pumped.

j. Monitor tank until truck is empty.

k. Rinse truck to the same tank that material was unloaded, as appropriate, once truck is empty.

l. Disconnect flex hose and rinse with water.

m. Shut all valves.

n. Take measurement on tank, record on transfer ticket. Calculate gallons and compare to manifest for accuracy.

Spills or drips that occur during this operation are collected within the spill containment trench or cleaned up by the use of adsorbents. Any material collected is properly processed for on-site or off-site disposal. A supply of absorbent materials is available for cleanup of spilled materials. Shovels and open-top drums are available for use in cleaning up chemicals, absorbent materials, and soil from the spill area.

The most likely scenario for a release would be a small leak that would spill onto the base before the personnel could completely shut off all the transfer mechanisms. Such a release would easily be contained within the confines of the truck pad.

112.8(d)(1) **Underground Piping**

There is no buried piping in use at this facility.

112.8(d)(2) **Out of Service Piping**

See 112.7(a)(3)(ii)

112.8(d)(3) **Pipe Supports**

See 112.7(a)(3)(ii)

112.8(d)(4) **Inspection**

See 112.7(e)

112.8(d)(5) **Vehicle Warning**

There are no aboveground pipelines which would be accessible to incoming traffic associated with the oily waste tanks. The flexible vacuum hose lines used to transfer wastes from tanker trucks to the building interior are not put out or connected to the appropriate flanges/hookups until the delivery vehicle is properly positioned, parked and shut-off. There is no exposed piping that can be inadvertently damaged by vehicular traffic.

END

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B & O RAILROAD

ACTIVE RIGHT OF WAY

FENCE

IRON PIPE

RCRA FENCE

EXISTING ROLL-OFF PAD

90 DAY ACCUMULATION

246.77'

S32° 16'E

252.23'

S45° 49'W

275.0'

S42° 39'W

IRON PIPE

CHICKERING AVE.

10.00'

RCRA FENCE

GATE

EQUIPMENT PARKING

EMPLOYEE PARKING (GRAVEL)

MODULAR OPERATIONS CENTER

LOCKERS /SHOWERS

OFFICES

STORM SEWER

ELECTRICAL BUILDING

ELECTRIC TRANSFORMERS

NITROGEN STORAGE PAD

BERM

(BUILDING H)

FLAMMABLES PAD

25' RAD.

TANK (TYP.)

OWH

FUELS BLENDING ROOM

GENERAL PROCESSING (BUILDING F)

0.15'E

TANKER LOAD/ UNLOAD

TRUCK BAY LOAD/ UNLOAD

RAMP DOWN

TANK FARM

DOCK

DFC.

0.90'E

VASTEWATER TREATMENT (BUILDING D)

MAINTENANCE (BUILDING E)

BOILER ROOM

HIGH BAY (BUILDING B)

VEHICLE STORAGE AREA (BUILDING B)

FIREWALL

OFFICE

"C"

LAB

LOCKER ROOM

OFFICES

0.33'E

0.60'N

EXISTING PARKING (29) EMPLOYEE (3) VISITOR

DM OFFICE

EXISTING HOT STARTS(4)

EXISTING HOT STARTS

MAIN GATE

GRAVEL

SWALLEN'S

SWALLEN'S

FENCE

262.87'

S73° 55'E

295.82'

353.12'

200.95'

IRON ROD

305.70'

N45° 40'E

287.54'

N45° 40'E

50.00'

57.50'

100.00'

240'

ENTRANCE

SPRING GROVE AVENUE

522.00'

574.18'

N32° 36'W

N32° 36'W

LEGEND

PROPERTY LINE

ROADWAY CENTER

RCRA PLANT BOUNDARY FENCE

P PERSONNEL DOOR

OWH OVERHEAD DOOR

NOTE:

1. THE DISPERSION UNIT, INCLUDING TANK 11, IS LOCATED IN THE AREA MARKED FUELS BLENDING ROOM.

0 10 20 40 80 120 160

GRAPHIC SCALE

FIGURE F.1

B	RCRA PART B SUBMITTAL UPDATE	M.C.	M.C.	M.C.	12/18/01
A	RCRA PART B SUBMITTAL	M.M.C.	J.A.K.	J.A.K.	12/18/01
REV.	DESCRIPTION	BY	CHK	APP	DATE

CleanHarbors

ENVIRONMENTAL SERVICES, INC.

SPRING GROVE RESOURCE RECOVERY

REDUCED COPY

APPENDIX A

CONTINGENCY PLAN

CONTINGENCY PLAN

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CONTINGENCY PLAN
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CONTINGENCY PLAN

1.0 GENERAL INFORMATION

Spring Grove Resource Recovery (SGRR) is a hazardous waste treatment and storage facility operating under a hazardous waste Part B permit issued by the Ohio Environmental Protection Agency (OEPA). The name, facility address, EPA Identification Number and owner/operator of the facility is:

Facility Name: Spring Grove Resource Recovery

Facility Address: 4879 Spring Grove Avenue
Cincinnati, OH 45232

EPA ID Number: OHD000816629

Owner/Operator: Spring Grove Resource Recovery
4879 Spring Grove Avenue
Cincinnati, OH 45232

Currently, the facility offers the following services: storage of hazardous waste in containers and tanks; stabilization/ fixation and solidification of chemical wastes and shipping to approved off-site storage areas; blending, storing and shipping materials to approved off-site incineration facilities; treatment in containers; drum crushing; decommissioning of PCB transformers and shipment of PCB liquids and solids to approved off-site disposal facilities; and RCRA exempt wastewater treatment. **Figure G.1** provides a map describing major facility structures, and adjacent land uses and features

A detailed description of facility activities is provided in Section 2.0, below.

2.0 FACILITY DESCRIPTION

The SGRR facility is designed to serve small and medium-sized waste generators who require off-site recycling, bulk storage, and treatment programs. Typical process materials include paints, solvents, acids, resins, metal sludge, inks, and wash waters.

The facility is approximately 5 acres in size and 90,000 square feet of building presently exists; however, only specific portions of the property and building space are utilized for handing, treatment or storage of hazardous wastes. Non-waste management areas are presently used to house the administrative, maintenance, and laboratory departments, and store process raw materials.

2.1 Hazardous Waste Storage, Accumulation and Treatment Areas

The buildings and areas on-site where solid and hazardous waste management areas are discussed in the following sections.

2.1.1 Building F

This Building is sub-divided with berms to separate potentially non-compatible wastes. Wastes managed in this area typically include PCB liquids (drums, capacitors, transformers), inert wastes, non-reactive sludge, acids, bases or oxidizers, laboratory packaged materials (lab packs), water reactives, and organics. In addition to waste storage, Building F may also be used for treating waste sin containers, consolidation and lab pack repackaging operations. Lastly, the drum crusher may be operated in this Building.

The area is equipped with fire isolation doors and self-activating sprinkler system.

2.1.2 Flammables Pad

This area is located between Building F and Building H. It is used primarily for the storage and treatment of ignitable wastes. In addition to ignitable wastes, PCB liquids (drums, capacitors, transformers), inert wastes and aqueous wastes may be managed in this area.

Drum compaction, blending via the dispersion unit, and all treatment in container methods can be performed in this area.

The area is bermed and equipped fixed and portable foam systems.

2.1.3 Building H

This Building is used for the storage of organic waste including PCBs, aqueous wastes and inert wastes. In addition to container storage, stabilization/fixation, carbon adsorption using the portable carbon system, and solidification can be conducted in this Building. Drum compaction can also be performed.

Building H It is equipped with a self-activated sprinkler system.

2.1.4 Tanker Load/Unload Pad

This concrete pad is an outdoor area used for the unloading of tanker trucks carrying liquid hazardous wastes and PCBs. The pad may also be used for the storage and treatment of wastes in containers. Treatment employed at this location may include solidification, blending, and

other methods of treatment in containers. The pad is equipped with a portable 30-gallon fire extinguisher.

2.1.5 Truck Bays

The Truck Bays are located adjacent to the outside dock of Building F and allow room for six (6) trucks. The easternmost bay is covered and is walled on both sides, while the remaining bays are completely open. The truck bays are used for the storage of containerized waste within trailers parked at the bays. They are adjacent to a fixed foam system.

2.1.6 Tank Farm

The Tank Farm consists of ten (10) storage and treatment tanks resting within an enclosed sealed concrete floor and containment walls. The storage and treatment tanks within this area include:

Four (4) 10,000-gallon wastewater tanks (RCRA-exempt)
Two (2) 7,000-gallon tanks for storage of liquid organic wastes
Four (4) 15,000-gallon mixing tanks for organic liquid wastes

Fire protection for the Tank Farm is provided by a nearby fixed foam system.

2.1.7 High Bay

This building is completely enclosed. Organic wastes including PCBs, ignitable wastes, aqueous wastes and inert wastes may be stored in this area. The High Bay may also be used

for the treatment of hazardous wastes in containers and is also the primary location for the drum crusher. A sunken truck bay at this building is used for the loading, unloading and storage of solid and hazardous wastes. The building is equipped with a sprinkler system.

2.1.8 Building D

This Building houses the RCRA-exempt wastewater treatment units and is used for the processing of on-site wastewater and off-site non-flammable, non-reactive, aqueous wastes.

The treatment process includes a tanks, a filter, and activated carbon beds and discharges to the Metropolitan Sewer District of Cincinnati (MSD). The wastewater treatment system is isolated from other active areas within the Building. The wastewater treatment area is equipped with a sprinkler system. This system is exempt from the requirements of the hazardous waste facility standards under 40 CFR 264.1(g)(6) and OAC 3745-54-01(G)(6) of the respective federal and state regulations.

Some hazardous wastes, which are recycled as wastewater treatment chemicals or wastes needing treatment in container, may be stored in containers in the bermed area.

2.1.9 Roll-Off Pad

This outdoor area is used for the temporary staging inbound or outbound bulk containers (e.g., roll-offs, intermodals) of solid (i.e., containing no free liquid) wastes. It is also used for the on-site accumulation of hazardous waste generated on-site by SGRR.

2.2 Waste Processes

Various methods of waste processing and treatment are employed at the facility. The various processing and treatment methods are briefly described below.

2.2.1 Containerized Treatment Methods

Methods of treatment in containers may include: neutralization; phase separation and decanting; stabilization/fixation; solidification; product adulteration, blending of compatible wastes, and other methods necessary for proper treatment of hazardous wastes. Lab pack repacking is another method employed. In this operation, lab packs are removed from their shipping containers and blended, solidified, otherwise treated, or repacked with compatible lab packs for off-site treatment disposal.

2.2.2 Fuel Blending

The fuels blending process is designed to separate and blend various waste solvents into acceptable fuels for incinerators or other waste burning equipment. Liquids that are acceptable for fuels are processed through a dispersion unit and pumped into the 7,000-gallon cone bottom tanks, or 15,000 gallon tanks prior to transportation an approved and permitted treatment facility (i.e., incinerator, cement kiln, etc.).

2.2.3 Drum Compaction

This process involves the crushing in volume of empty waste containers prior to landfill. The empty containers may have held PCB's, acute toxic hazardous wastes or other hazardous or non-hazardous wastes. The process incorporates the mechanical compaction of containers.

The drum compaction unit is portable and may be in the flammable pad, Building H, Building F, or the High Bay.

2.2.4 PCB Transformer Decommissioning

In this process, PCB transformers which are full of PCB contaminated dielectric fluid are brought into the facility, drained of the PCB contaminated dielectric fluid, filled with a suitable flush solvent, stored with the flush solvent inside the transformer and then drained of the PCB-contaminated flush solvent. Once this process has taken place, the empty PCB transformer carcass is shipped to a secure chemical management facility. The PCB-contaminated dielectric fluid and flush solvent is ultimately sent to an EPA approved incinerator. This activity is not subject to RCRA; information on this process is provided for information purposes only.

2.2.5 Wastewater Treatment

The RCRA-exempt wastewater treatment process employed is designed to pre-treat various waste streams prior to discharge to the Cincinnati Metropolitan Sewer District (MSD) at a level that complies with SGRR's industrial discharge permit. This system is capable of treating secure landfill leachate, dilute organic aqueous waste and PCB-contaminated water. Like PCB transformer decommissioning, the wastewater treatment process is not subject to RCRA. Information on this process is provided for information purposes only.

amounts (e.g., drips from hoses or sampling devices) encountered during routine hazardous waste handling activities; or (b) controlled accumulation of hazardous waste into a containment device (e.g., bucket, drip pan, etc.) used to collected and control the release of waste during routine processing or maintenance activities such as draining hoses or disassembling and repairing a pump.

The term "to the environment" shall include air, water and soil. For the purpose of this Plan, spills from a hazardous waste tank or container into their secondary containment are not considered releases "to the environment" and may not require implementation of the Contingency Plan.

3.2.1 Reportable Spills and Implementation of the Plan

The following types of releases/spills of hazardous waste must still be reported to OEPA and USEPA even though they may not present a threat to human health or the environment and may not require implementation of the Contingency Plan:

(1). Releases of hazardous wastes from tanks/tank systems to the environment that are greater than one (1) pound;

(2). Releases from tanks/tank systems to the environment that are not immediately cleaned up; and

(3). Releases from containers to the environment in excess of the established CERCLA Reportable Quantity (RQ) .

The notification and reporting requirements for spills and releases are described in greater detail in Section 5.2 of this Plan.

3.2.2 Bulging Containers and Implementation of the Plan

Occasionally, containers of hazardous or non-hazardous waste may arrive at SGRR showing signs that their contents are under pressure (i.e., the container is bulging at the top, bottom or sides). In addition, containers may also shows signs of pressurization while in storage at the facility.

"Bulging" containers may be caused by a number of factors including, but not limited to, the freezing of an aqueous waste inside a container , reactions of the container's contents (chemical degradation, polymerization, etc.) or aerobic/biological activity.

Although this is an uncommon occurrence, SGRR has developed standard procedures for investigating and addressing bulging containers. Detailed procedures for addressing bulging containers are provided in **Appendix G.I.** In general these procedures include:

(1). A review and evaluation of the hazardous waste manifest, waste material profile (including the Highly Hazardous Profile Addenda (if applicable), waste analysis information and/or Material Safety Data Sheet (MSDS) (if applicable) and any other information available from the waste generator or manufacturer of the material to determine the cause of the pressurized container;

(2). In the event the bulging has been caused by a container which has become frozen, placing the bulging container in an over pack drum or heating unit such as a Sahara Box to thaw its contents. Sahara boxes are metal boxes in which four (4) 55-gallon drums can be placed. Steam is passed into the boxes to thaw frozen containers;

(3). If the bulging of the container appears to have been caused by a pressurization of the container's contents, SGRR may either: (1) relieve the pressure by loosening the bung; (2) relieve the pressure within the container using a specially designed remote opening device mounting on a specially equipped forklift; or (3) depending on the material present in the container and the potential reaction that may be occurring, contact a team that has extensive experience in remotely opening highly hazardous material.

(4). If necessary based on the wastes present in the container, capturing and treating any gases that might be emitted when the container is punctured.

In most cases SGRR will address bulging containers itself using on-site staff and equipment. The decision to use specially trained and experienced "highly haz" experts will be based on SGRR's assessment of the material.

Bulging drums will not require implementation of the Contingency Plan and therefore would not require notification to regulatory agencies or local emergency response organizations. In the event SGRR's evaluation of a bulging container indicates that the container holds flammable or ignitable materials or could undergo violent reaction or explosion, SGRR will immediately notify the Fire Department and discuss the situation and the need, if any, for support or assistance from the Fire Department.

4.0 CONTENT OF THE PLAN

4.1 Emergency Response Procedures

Section 5.0 of this Plan describes in detail the procedures SGRR will take in response to an event which requires implementation of the Contingency Plan.

4.2 Coordination Agreements

SGRR has and will continue to will distribute copies of this Contingency Plan to the emergency response organizations noted in **Table G-1**. In addition, SGRR will, on an annual basis or more frequently as changes in the facility or plan warrant, sponsor informational meetings at the facility to provide the agencies with the opportunity to tour the facility and discuss emergency response procedures.

SGRR has contacted the emergency response organizations and requested their assistance in helping SGRR respond to Contingency Plan emergencies. Copies of all correspondence related to these emergency response coordination agreements between SGRR and the above-noted organizations, including an organization's refusal to enter into an agreement, will be maintained on file at SGRR.

SGRR has provided a layout of the facility to the local Fire Chief, the Director of the Office of Civil Defense, the Cincinnati Police Chief, and the Chief of the Ohio EPA Emergency Response Team. This layout indicates working areas, locations of hazardous waste storage, treatment, and handling, evacuation routes, and emergency equipment. The facility has also provided those individuals listed above with a listing of the types of hazardous wastes handled at the facility, properties of these wastes, and potential hazards associated with them. SGRR has requested that the Fire Department respond to fires at the facility when contacted and implement evacuation of surrounding areas if required. Additional information regarding arrangements with the fire department are described in Sections 4.6.1 and 5.0 of this Plan.

SGRR has requested that the local hospital accepts and treats any persons exposed to hazardous materials or injured in any way while at the facility. SGRR has arranged to familiarize the

hospital with the types of injuries, illnesses or exposures that might occur at the facility. The facility has been given a list of all hazardous wastes accepted at the facility, along with a listing of the most harmful of these wastes and a listing of those wastes managed in the greatest quantities. The hospital has been given a description of the hazardous properties of some of these wastes, including corrosivity and toxicity data, and a description of some of the specific injuries or exposures that may result, such as inhalation of harmful vapors from specific wastes, and skin damage from contact with corrosives.

4.3 Copies of the Plan

A copy of the Contingency Plan and all revisions and amendments will be maintained on-site and will be sent to the emergency response organizations listed in **Table G-1**.

4.4 Emergency Coordinators

The SGRR personnel listed in **Table G-2** have been designated to act as Emergency Coordinators. At least on the Emergency Coordinators will, at all times, be either on-site or on call and available to respond to an emergency by reaching the facility within a short period of time. The Emergency Coordinators are responsible for coordinating all emergency response measures. The Emergency Coordinators are thoroughly familiar with all aspects of the Contingency Plan, all operations and activities at the facility, the location and characteristics of the wastes handled, the location of all records within the facility, and the facility layout. In addition, the Emergency Coordinators have the authority to commit the resources needed to carry-out the Contingency Plan. If an emergency situation develops at the facility, the discoverer should contact the Emergency Coordinator as listed in **Table G.2**. The primary Emergency Coordinator will be called first and if he is not available, the others should be

called (in order listed) until someone is reached. The primary Emergency Coordinator and alternate have complete authority to commit all resources of the company in the event of an emergency. This includes staffing of all operations.

If none of the designated Emergency Coordinators are on-site, the On-duty Operations Manager will be responsible for contacting the Emergency Coordinator. The Operations Manager will assume the duties of the Emergency Coordinator until such time as one of the designated Emergency Coordinators has arrived at the scene. The responsibilities of the Emergency Coordinators are provided in greater detail in Section 5.0 of this Plan.

4.5 Emergency Response Equipment

SGRR employs several mechanisms for fire control. Internal plant areas are equipped with sprinklers and fire doors. Two (2) hydrants are present in the external areas and a fixed foam system is installed and routed to the Flammables Pad and Truck Dock. In addition, several portable pieces of fire suppression equipment are located throughout the facility. All extinguishers are inspected after each use and on a monthly basis. A listing of the types and locations of all fire-fighting equipment is provided in **Table G-3**.

Spill control supplies are located in the buffer zone outside of Building F. Locations of spill response equipment are shown on **Table G-4.** First-aid supplies are located at two first-aid stations. Emergency eyewash fountains and showers are located in three locations on-site.

Each unit consists of a drench shower head with "panic bar", frost-proof valve and eyewash with dust cover. A sign reading "Emergency Shower and Eyewash Station" is posted at each unit. Hose stations for the foam system are located in two areas of the process area.

Protective clothing and equipment is provided to protect employees during normal and

emergency operations. Personnel protection equipment is listed on **Table G-5.**

Locations of emergency response equipment are provided in **Figure G-1.**

4.6 Evacuation Plan

4.6.1 Interaction with Local Fire Departments

SGRR will conduct facility tours for the Fire Department to familiarize them with the facility personnel, structures, equipment, types of wastes managed, the location of the various waste management units, and emergency response procedures. In addition, SGRR and the Fire Department may participate in joint training exercises. The Fire Department will also conduct regular inspections of the facility.

It is essential that an open line of communication be established and kept open between SGRR and the district fire department. Changes in operation, new processes and changes in personnel will also be provided the Fire Department.

4.6.2 Facility Evacuation Procedures

In the event of a fire, explosion, spill or other situation that is deemed by the Emergency Coordinator to be an emergency, the Emergency Coordinator will assume control and, if deemed necessary, initiate evacuation procedures to protect employee health and safety. Evacuation will be conducted by routes shown in **Figure G-2**

In the event on an emergency, an initial announcement will be made over the facility's intercom system to alert the Emergency Coordinator and emergency personnel. The words **"CODE RED"** will be announced and repeated three (3) times over the intercom for any

fire or explosion and **"CODE BLUE"** announced and repeated three (3) times for a spill or release.

The announcement will also alert all plant personnel to a potential evacuation. All employees in non-operational areas will remain at their assigned work areas unless otherwise directed by the Emergency Coordinator; however, these employees should be prepared to evacuate if requested.

If the Emergency Coordinator deems it necessary, the Emergency Coordinator (or designee) will announce a general facility evacuation or evacuation of a specific area over the intercom system. All affected personnel will then evacuate by the designated routes and gather at the designated assembly points. The supervisor for each area within the facility will conduct a roll call at the assembly point designated for his/her area.

Entry into the facility is controlled by the operator/receptionist/guard. Upon evacuation, the operator /receptionist/guard will take the daily site visitor/contractor logs. The Emergency Coordinator or designate will review these records to assure that all plant personnel and visitors are accounted for after evacuation. No person shall remain or re-enter the location unless specifically authorized by the Emergency Coordinator. No attempt to find persons not accounted for will involve endangering lives of others by re-entry into emergency area.

Immediate supervisors will be held responsible for those persons reporting to them. Visitors will be the responsibility of those employees they are seeing. Contractors are the responsibility of those persons administering individual contracts. Truck drivers are the responsibility of the process foreman.

Re-entry into all plant areas will only be allowed after the Emergency Coordinator gives the clearance. At his direction, a signal or notification will be given for re-entry into the plant.

Drills will be held to practice evacuation procedures to ensure that all personnel are familiar with the alarms, evacuation routes, and designated assembly points.

5.0 EMERGENCY PROCEDURES

5.1 Activation of Alarms

Whenever there is fire, explosion, release or other an imminent or actual emergency situation, the Emergency Coordinator shall immediately:

(1). Notify affected facility personnel verbally or by using the facility intercom system;

(2). Activate internal facility alarms, if necessary; and

(3). Contact federal/sate/local agencies having designated response roles for assistance, if necessary

5.2 Notifications

5.2.1 General Notifications

If the Emergency Coordinator's assessment of the imminent or actual emergency situation determines that the facility has experienced or is likely to experience, a release, fire or explosion which requires implementation of the Contingency Plan or that external emergency

response assistance is needed, the Emergency Coordinator shall immediately notify the Cincinnati Fire Department and the Ohio Environmental Protection Agency (OEPA) at the following phone numbers:

Cincinnati Fire Department
911, 513-241-2525 or 513-352-2338

OEPA Hazardous Waste Section
937-285-6888

OEPA Emergency Response
800-282-9378

The Fire Department will function as the primary response agency for all emergency situations.

If traffic control or other assistance (e.g., evacuation measures, emergency medical treatment, etc.) the Emergency Coordinator may also contact the Cincinnati Police Department, the Life Squad or Good Samaritan Hospital at the following numbers:

Cincinnati Police Department
911 or 513-352-3578

Life Squad
911 or 513-241-2525

Good Samaritan Hospital
513-872-1400

Other appropriate federal, state, or local agencies listed in **Table G-6** may also be notified as may be necessary. For example, if a spill from SGRR threatens to enter the Metropolitan Sewer District (MSD) sewer system, the Emergency Coordinator will contact MSD.

5.2.2 Fires or Explosions which Threaten Human Health or the Environment Off-site

If the Emergency Coordinator determines that the facility has had a fire or explosion which could threaten human health or the environment outside the facility and his/her assessment indicates that an evacuation of local areas is necessary, the Emergency Coordinator shall immediately notify the following agencies:

Cincinnati Fire Department
911, 513-241-2525 or 513-352-2338

Cincinnati Police Department
911 or 513-352-3578

OEPA Hazardous Waste Section
937-285-6888

OEPA Emergency Response
800-282-9378

USEPA- Region V
513-684-7931

USEPA National Response Center
800-424-8802

5.2.3 CERCLA Reportable Release Notifications

In accordance with the requirements of the National Contingency Plan (NCP), 40 CFR Part 302, SGRR will notify USEPA and OEPA and undertake appropriate response actions in response to any reportable release or threat or release of oil and hazardous materials to the environment. A release shall be considered "reportable" under this Section if the amount of the release to the environment exceeds the Reportable Quantity (RQ) for that material as listed in Table 302.4, the List of Hazardous Substances and Reportable Quantities (CERCLA List) codified in 40 CFR Part 302.

SGRR will report a CERCLA reportable release to OEPA and USEPA National Response Center as soon as possible, but not more than two (2) hours after obtaining knowledge of a release or threat of a release. SGRR will contact OEPA and USEPA at the following numbers:

OEPA Hazardous Waste Section
937-285-6888

OEPA Emergency Response
800-282-9378

USEPA National Response Center
800-424-8802

5.2.4 SARA Emergency Planning/Notification

Notification under Section 304 of the SARA is required when:

(1). A CERCLA "hazardous substance" (listed in 40 CFR 302, Table 302.4) or a SARA "extremely hazardous substance" (listed in 40 CRR Part 355, Appendix A) is released in an amount in excess of its RQ; **and**

(2). The release threatens the environment or public beyond the boundaries of the facility.

For a release reportable under SARA, a verbal notification to the following organizations and agencies will be made as soon as possible after learning of the release:

Cincinnati Fire Department
911, 513-241-2525 or 513-352-2338

Cincinnati Police Department
911 or 513-352-3578

OEPA Hazardous Waste Section
937-285-6888

OEPA Emergency Response
800-282-9378

Hamilton County Civil Defense
513-821-1092

USEPA National Response Center
800-424-8802

5.2.5 Content of Initial Notifications

In general, as part of any notification, the Emergency Coordinator shall provide the following minimum information:

(1) Name and telephone number of the person making the report:
(2) Name and address of facility;
(3) Time and type of incident (e.g., release, fire);
(4) Name and quantity of material(s) involved to the extent known;
(5) The extent of injuries, if any; and
(6) The possible hazards to human health, or the environment, outside the facility.

In addition, if the release is being reported in accordance with SARA requirements (as discussed in Section 5.2.4), the following information is to also be provided to the extent known at the time of the initial notification:

(1) Any known or anticipated acute or chronic health risks associated with the emergency, and, where appropriate, advice regarding the medical attention necessary for exposed individuals;

(2) Proper precautions to take as a result of the release, including evacuation; and

(3) The names and phone numbers of the person or persons to be contacted for further information.

5.3 Identification of Hazardous Materials

Whenever there is a release, fire or explosion, the Emergency Coordinator will immediately take all appropriate steps to determine the character, exact source, amount and extent of any releases materials. The initial determination may be made by visual observation, discussions with SGRR personnel and review of facility records including manifests, waste profile information, waste analysis and waste tracking reports. Present standard operating procedures at the facility will facilitate further evaluation because:

(1). The facility is subdivided into storage and treatment areas which process specific types of wastes.

(2). All drums are coded with process codes and product codes, which indicate material composition and properties. Furthermore, all analytical data is available on file in areas of the facility remote to the operating areas.

(3). An on-site laboratory is available to analyze samples.

Due to the nature of the activities performed at the facility, small quantities of a variety of waste types are routinely present. SGRR has developed a comprehensive program to track these wastes during routine operation. The same systems are ideal for application in an emergency situation. Waste tracking information identifies the area on-site in which specific wastes are being managed, would be used as a reference in an emergency.

5.4 Assessment of Potential Hazards

The Emergency Coordinator will assess hazards both direct and indirect to human health or to the environment to the best of his ability. Internal sources of information available to the emergency coordinator include:

(1). Knowledge and experience of facility personnel;

(2). Analytical results including air monitoring of the release area and laboratory analysis of the released waste(s);

(3) Waste profile/characterization information including MSDSs and other information;

(4). Reference Documents, including but not limited to:

- DOT emergency response guide
- NIOSH guide to chemical hazards
- ACGIH guidelines for selection of chemical protective clothing
- NFPA fire protection guide on hazardous materials
- NIOSH personnel protective equipment for hazardous materials incidents
- Merck Index
- Physicians Desk Reference
- ACGIH threshold limit values

The initial priority for Emergency Coordinator will be to perform an assessment of the emergency situation with regards to possible hazards to the environment and human health and safety. This assessment will consider both direct and indirect effects of the release, fire or explosion. Based on this assessment, the Emergency Coordinator will determine whether the incident meets one of the criteria listed in Section 3.2 for implementing the Contingency Plan

and will make all necessary notification. Furthermore, if the situation warrants the evacuation of the facility, the Emergency Coordinator will activate the evacuation plan.

5.5 Control Procedures

Incidents requiring implementation of this Contingency Plan may be grouped into two (2) broad categories: (1) fires or explosions; and (2). material spills or releases.

For purposes of clarity, these categories will be discussed separately; however, real emergency situations could result in both fires and materials release.

5.5.1 Fire and/or Explosions

All active areas are easily accessible to fire suppression equipment. All internal areas are equipped with sprinkler systems and fire doors. Some external areas as identified in **Figure G-1** are equipped with foam fire suppression systems. An internal intercom system exists in all areas to be utilized as a notification alarm in case of emergency. Copies of emergency telephone numbers are posted by all telephones in processing areas. Furthermore, the internal sprinkler system, if activated, sounds an alarm and the fire department is automatically called.

An inactive zone is designed around the processing areas to allow adequate set-up of emergency equipment depending on the scope of the fire. All process areas are individually bermed to minimize the spread of fire to adjacent areas and to reduce surface flow of contaminated firewaters. All sanitary/storm sewer outlets can be plugged to prevent site run-off to the sewer system. The presence of streams or waterways in the immediate area of the plant site does not exist.

The facility has a trained emergency response team to respond to the incipient stage of a fire. Furthermore, the emergency response team members work in the active areas of the facility and are immediately available to respond. The primary object of the emergency response team is to suppress or contain the fire prior to the arrival of the Fire Department. Response time for the Fire Department is estimated to be five minutes after notification.

The following events will take place in the event of a fire or explosion (or the threat of an explosion):

(1). Personnel discovering the fire or explosion will immediately notify the area supervisor or as the situation requires, activate the internal alarm.

(2). The supervisor will immediately proceed to the alarm intercom system and repeat three times "**CODE RED**" and give the plant location of the fire, explosion or potential explosion.

(3). Personnel may attempt to render assistance to injured personnel and remove the from further exposure or injury only if there is no risk of exposure or injury to themselves.

(4). The Emergency Coordinator and emergency response team members will proceed directly to the area to assume control. Estimated implementation time for Steps 1 through 4 is 15 to 90 seconds.

(5). After a brief assessment, the Emergency Coordinator will direct the emergency response team leader to implement Emergency Fire Control Plans A or B (as described below) and then he will designate a person to call the Fire

Department, giving the name and location of the facility, the type of fire, and the location on the entry point of the facility.

(6). If necessary, the Emergency Coordinator will implement the evacuation plan.

(7). The Emergency Coordinator will notify company officials, federal, state and local agencies as required and update these parties during the course of the fire. If the duration of the incident is prolonged, the Emergency Coordinator may appoint a qualified person to act as a liaison between the facility and the appropriate agencies to effectively remain in continuous contact to relay information.

(8). The Emergency Coordinator will work directly with the Fire Department to provide data on the nature and potential hazards of the materials involved in the fire. Data exchange will be utilized to develop a plan of action for evacuation of surrounding areas of the facility. The Emergency Coordinator will rely on the Fire Department and Police Department to effectively implement the evacuation of surrounding areas if necessary.

(9). The Emergency Coordinator will announce an "**ALL CLEAR**" signal after the fire has been extinguished and the safety of the plant personnel is no longer endangered.

(10). The Emergency Coordinator will implement cleanup procedures to return the site to operation and all emergency equipment will be decontaminated prior to removal from the affected areas. Operations will not commence in affected

areas until cleanup is complete and all emergency equipment is replaced and ready to be utilized. The regulatory agencies will be notified that cleanup is complete before operations are restarted.

5.5.1.1 Emergency Fire Control Plan A.

Plan A is to be activated by the Emergency Coordinator with the objective of isolating a site fire. The emergency response team leader and members will complete the following procedures:

(1). Designate a person to proceed and open entry gate and standby to direct fire department to the source of fire and be available to locate hydrants, equipment, or any requests made by the fire department.

(2). Evacuate all non-essential personnel from area to nearest safe exit from the facility.

(3). Shut down all operations in the affected area including all process equipment, feed lines, etc.

(4). If possible without endangering themselves, remove all injured personnel to remote areas and arrange for transfer to a medical facility.

(5). Secure and plug all sanitary sewer lines in plant area.

(6). Close all fire doors in affected areas.

(7). Evacuate area and await further instructions for the Emergency Coordinator.

5.5.1.2 Emergency Fire Control Plan B.

Plan B is designated to isolate and suppress a site fire. As determined by the Emergency Coordinator and the emergency response team leader, Plan B will be activated to directly utilize site personnel in suppressing an incipient stage fire. Plan B will only be activated if active fire suppression is determined to represent a low risk to site and emergency response team personnel.

Under direction of the emergency response team leader, the team will complete the following procedures:

(1). Steps 1 - 6 of Plan A.

(2). Deploy emergency fire suppression equipment.

(3). Proceed to fire site and fight fire using foam system, portable foam, or dry chemical CO_2 extinguishers. As possible, heat-exposed containers should be kept cool with water spray. If a tank pressure disc ruptures or a container begins to discolor or expand, evacuate area.

(4). Fire suppression will proceed until:

a). The fire is extinguished.

b). The emergency response team leader or the Emergency Coordinator orders withdrawal due to potential risk or injury to response personnel.

c). The Cincinnati Fire Department arrives and assumes control of fire fighting activities.

(5). The emergency response team will proceed to a safe area and await further instructions from the Emergency Coordinator.

5.5.2 Spills or Material Release

The SGRR facility has been engineered to minimize the environmental impact of spill occurrences. All drums and container storage areas have concrete floors and are bordered by six-inch containment berms. Furthermore, incompatible wastes are separated in designated bermed areas as per waste type.

A concrete containment wall, capable of containing the stored materials encloses the tank farm.

All transfer lines and tank truck transfer operations are located in bermed, sumped concrete areas, or use double-walled wipe. All plant operating areas are free of drain points to the sanitary sewer system. Three access points to the sanitary system do exist outside of operating areas to channel surface rainwaters to the storm sewer system.

The facility has three (3) sewer outfalls to the rear of the building. None of these are located in an active area. The location and means of plugging is as follows:

1. Truck Bay Area - Expandable plug
2. Adjacent to wastewater and Tank Pad - Vertical sliding trapdoor
3. Back parking lot near Building L - No blocking device due to high elevation of terrain.

Note: Several site maps show a sewer next to Building H. This sewer was plugged and covered with asphalt..

The sewer outfalls discharge to the combined system operated by Cincinnati Metropolitan Sewer District. **Appendix G.II** contains sewer diagrams showing that the water flows in the combined sewer to a point north of where the Mill Creek goes under Spring Grove Avenue and then flows southerly. Should sampling be required, several manholes could be sampled to verify any contamination.

The availability of qualified personnel and equipment to respond to any contingency is immediate. In the event of a spill or release, the area around the spill will be evacuated. Spill response personnel will congregate at the direction of the Emergency Coordinator in the spill control supply area. This area contains equipment and supplies to respond to most spill occurrences. Furthermore, a series of vacuum trucks and excavation equipment is available to the Emergency Coordinator. The Emergency Coordinator will determine a plan of action and cleanup will proceed. If the spill results in the formation of a toxic vapor cloud, a further area will be evacuated. In the event of a spill of flammable volatile materials, the Emergency Coordinator will remove any sources of ignition that could result in flashback to the spill area.

The Emergency Coordinator will assess the clinical components and degree of hazard to site personnel and the public of any gas or fume emissions. Based on his assessment, the proper safety equipment will be issued to assure adequate protection to plant personnel. Emergency equipment is on standby and ranges from half-face cartridge respirator to SCBA and encapsulated suits. Also, the Emergency Coordinator will apply suppression techniques to reduce the potential of emissions. If possible, the affected area will be covered with foam or a synthetic cover to minimize gaseous release and to reduce the potential of fires resulting from remote ignition sources.

If the release requires implementation of the Contingency Plan, the Emergency Coordinator will contact federal, state, and local authorities as required by regulation and relate information to coordinate area evacuation as decided. Because winds in the area tend to vary, the National

For large spills or reportable leaks, the following guidelines will be applied:

(1). If a leak develops or a spill occurs from a waste storage tank, pipeline, pump, transportation vehicle, etc., the employee discovering the discharge will immediately contact the area supervisor. The supervisor will proceed to the emergency intercom system and announce three times "**CODE BLUE**" and give the plant location of the spill.

(2). The Emergency Coordinator will proceed to the area and organize the spill response team to proceed with cleanup/containment.

(3). The Emergency Coordinator will evaluate:

a). Personnel injured and the degree of injury.
b). Location, source, direction, quantity, rate, and type of material spilled.
c). Determine if an actual or potential fire or explosion is involved.

(4). Next the Emergency Coordinator will:

a). Shut down all processes in the area and evacuate all personnel. Spill response personnel will congregate in the spill control area to await instructions from the Emergency Coordinator.
b). Obtain medical attention for any injured person(s).
c). If a fire is involved, the Emergency Coordinator will activate the fire/explosion contingency plan.

d). Contact the proper authorities if the spill or release is reportable. Local and state authorities will be contacted first to develop evacuation programs if necessary.

(5). The Emergency Coordinator will organize the spill response team to:

a). Equip with the appropriate degree of personal safety equipment and cleanup supplies, enter the area.

b). Assure evacuation of all unauthorized persons has occurred from spill area.

c). Plug all sewer drains.

d). Remove all ignition sources. Limit use of only non-spark tools and explosion proof equipment, if flammable wastes are involved.

e). Assure that reactive materials are not located in spill area.

f). Apply absorbents (clay, pads, and booms) to spill materials or direct spilled materials to sump for transfer to containers.

g). Collect and place all contaminated absorbent in appropriate containers and subsequent disposal.

h). Remove residuals by rinsing with water/detergents or solvent application.

i). Small quantities of spilled materials will be placed in containers for subsequent disposal; larger quantities may be placed in tanker trucks or roll-off boxes. All wastes may undergo laboratory evaluation to develop a disposal plan for that waste, if necessary.

j). If applicable, use on-site activated carbon system to treat aqueous wastes prior to discharge to POTW (i.e., fire suppression waters).

(6). In the event of a spill from a tank system, the Emergency Coordinator will:

a). Immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

b). Remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed. If the material released was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

c). Immediately conduct a visual inspection of the released and, based upon that inspection:

i) Prevent further migration of the leak or spill to soils or surface water; and

ii) Remove, and properly dispose of, any visible contamination of the soil or surface water.

5.6 Prevention of Recurrence or Spread of Fire/Explosion

The SGRR facility is designed to isolate incidents to prevent spreading of fires or spills; however, during the activation of the Contingency Plan, the Emergency Coordinator will monitor the facility for conditions that could adversely impact the remedial actions being taken. Prior to evacuation, operators are required to shut down equipment and this shut down is re-checked by emergency personnel upon entering the area. In the case of fire, the emergency response team leader will advise the Emergency Coordinator of any changes in conditions

resulting in leaks, pressure build-up, gas generation, rupture in pipes, valves or process equipment. The Emergency Coordinator will rectify these occurrences if possible, or relate the potential hazard to emergency personnel and the fire department.

5.7 Storage and Treatment of Released Material

Immediately after the emergency, the Emergency Coordinator will provide for the treatment, storage, or disposal or recovered waste, contaminated soil, water, or any other contaminated material. Solid wastes such as fire debris or soils will be shipped to an approved off-site treatment, storage and/or disposal facility.

Material destined for off-site disposal will be manifested and packaged as required by the Department of Transportation. Liquids that may be collected during fire fighting incidents will be analyzed on-site and treated by the wastewater treatment system on-site. The wastewater treatment system should not be adversely affected by fires due to its location, and therefore should be operational for the management of liquids that may be collected. If on-site analysis determines the waste cannot be managed on-site, the waste will be shipped to an approved off-site treatment, storage and/or disposal facility for management.

5.8 Incompatible Waste

The facility is separated into subsections by a system of berms; therefore, incompatible wastes cannot be stored together. Reactive chemicals are stored away from other materials.

A complete inventory record of materials and their location on-site is on file in the office area.

In the event of a spill or release, all operations in the area of the release will cease. The Emergency Coordinator is responsible for ensuring those operations cease and that no wastes

will be treated, stored, or disposed of until cleanup of the release is completed. Absorbent booms are maintained in the spill control area and will be immediately placed around the release in order to contain it and prevent released waste from contacting other containerized waste. Released material will be collected as soon as possible using pumps and other equipment. The efficiency with which these operations are conducted will prevent incompatible wastes from coming into contact.

In addition, berms within Building F serve to separate incompatible wastes. The containment capacity within these berms is at least 10% of the storage capacity. Thus, up to 10% of wastes can be released before incompatible wastes have a chance of mixing. In addition, the facility is implementing procedures for inspection of container condition each workday (see Section F-2). This will ensure that only containers in good condition are used to store waste at the facility. The daily inspection procedures will also identify and correct any releases as they occur, thereby minimizing the potential for a release outside of the bermed area. The possibility of several drums (that equivalent to 10% of the total drums stored) leaking simultaneously within the same workday is very, very low.

5.9 Post Emergency Equipment Maintenance

After an emergency event, all emergency equipment used will be cleaned so that it is fit for use or it will be replaced. Before operations are resumed, an inspection of safety equipment will be conducted. The Emergency Coordinator is responsible for ensuring that all personal safety, decontamination, and emergency equipment is clean and fit for its intended use. Furthermore, the Regional Administrator and state and local authorities will be notified that post emergency equipment maintenance has been performed and prior to resuming operations. Decontamination procedures and methods are discussed in the next section.

5.10 Post Emergency Cleanup

After an emergency has been controlled (i.e. spill contained, fire extinguished, etc.), the Emergency Coordinator must insure the following steps are taken prior to resuming operations in the affected areas:

(1). All spilled partially combusted or contaminated materials (absorbent, wastes or foam used to fight fire) must be collected and placed in appropriate storage.

(2). The above material must be evaluated to determine the proper treatment and/or disposal method. This may include analytical tests (BTU's, % chlorine, pH, etc.) as well as bench scale (solidification, isotherms) testing.

(3). All floors, berms, sumps, and concrete pads will be cleaned with an appropriate cleaning agent. The cleaning agent will be chosen after testing to determine solubility, compatibility and any other parameters necessary to insure the best cleaning agent. These items will be cleaned using mops and will be rinsed until the rinsewater is clear.

(4.) The user will decontaminate all personal safety equipment. Boot covers, tyvek suits, and respirator cartridges will be discarded and managed in containers as a hazardous waste. Rubber gloves, rubber boots, safety glasses, face shields and respirators will be submerged in a solution containing an appropriate compatible cleaning agent for a length of time dependent on the degree of contamination. They will be submerged in water and rinsed three times.

(5). All contaminated emergency equipment and decontamination equipment will be placed in a roped-off area of the facility. A sign will be posted in this area which states "contaminated equipment - do not use". This equipment will be cleaned and decontaminated as soon as possible and within 24 hours of the incident. Procedures for decontamination will be partially based on the type of equipment. Small items will be submerged in cleaning agent unless this may damage the interior of the item. Items likely to be damaged by submersion will be washed off by hand. Larger items will be sprayed with a cleaning agent at high pressure. SGRR maintains a steam jenny, which can be used to steam clean equipment such as forktrucks. The steam jenny can also be used as a high-pressure sprayer.

(6). The cleaning solution and rinsewater will be sampled and analyzed in accordance with SW-846 for constituents with the potential to be present based on the types of wastes known to have been released or managed as if it was the spilled product. The above cleaning agent will be collected, tested and disposed of in a proper manner (e.g., incineration, wastewater treatment, landfill).

a). Extraction and/or wipe tests will be done if appropriate with analytical tests for whatever specific compounds were involved with the emergency on-site. Analytical capabilities include phenols, cyanides, % Chlorides, metal analysis via atomic absorption, gas chromatography, etc. Capabilities not available on-site will be covered by use of certified outside laboratories (i.e., NET Labs, Dayton, etc.).

(7). The results of sampling and analysis of equipment will be recorded in the facility operating record.

(8). When all items have been successfully decontaminated, the Emergency Coordinator will certify that they are clean using the form provided in **Figure G-3**. This form will be placed in the operating record. The Emergency Coordinator will ensure that the items are inspected. Items which pass inspection will be released for use. Items, which are damaged or need recharging, will be fixed, recharged, or discarded if the damage cannot be repaired.

6.0 REPORTING REQUIREMENTS

Within fifteen (15) days of any incident requiring implementation of the Contingency Plan, , SGRR will submit a written incident report to the OEPA Director as described in OAC 3745-54-56(j). A similar report as required by 40 CFR 264.56(j) will be filed with the USEPA Region V Administrator. The Emergency Coordinator will supply information for the report. A copy of these reports will be maintained as part of the facility operating record. These reports will include the following information:

(1). Name, address, and telephone number of the owner or operator;
(2). Name, address, and telephone number of the facility;
(3). Date, time, and type of incident (i.e. fire explosion);
(4). Name and quantity of material(s) involved;
(5). The extent of injuries, if any;
(6). An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
(7). Estimated quantity and disposition of recovered material that resulted from the incident.

7.0 PLAN AMENDMENTS

Persons involved in this plan and persons receiving a copy of the plan will be notified immediately of any plan changes. They will receive a copy of all amendments.

Specifically, the plan will be amended any time there is a change in our facility permit, a change in facility personnel, a change in the availability of on-site emergency equipment or a change in facility operation, construction, design, maintenance, etc., which may increase the potential for fires, explosions or release of hazardous waste of hazardous waste constituents, or may affect the response necessary in an emergency. This plan will be amended if it or any portion fails during an emergency, or if implementation of the plan during an emergency shows that the plan may be improved.

The effectiveness of the plan will be re-evaluated by the Emergency Coordinator and the Environmental Department after each implementation or test-run. The plan will be amended or updated as required.

Table G-1

Emergency Response Organizations

Organization	Number of Copies of the Plan
Chief, District #3 Cincinnati Fire Department 301 Ludlow Avenue Cincinnati, Ohio 45232	1
Director, Hamilton County Emergency Management Agency 2377 Civic Center Drive Cincinnati, Ohio 45231	1
University Hospital Department of Occupational Health 234 Goodman Street Cincinnati, Ohio	1
Cincinnati Police Department 310 Ezzard Charles Drive Cincinnati, Ohio	1
Ohio EPA Emergency Response Lazarus Government Center, PO Box 1049 Columbus, Ohio 43216-1049	1
Hamilton County Environmental Services 250 William Howard Taft Rd. Cincinnati, Ohio 45219	1
Ohio EPA Southwest District Office 401 East Fifth St. Dayton, Ohio 45052-2911	1

Table G-2

SGRR Emergency Coordinators

Name	Title	Address	Office Phone	Home Phone
PRIMARY EMERGENCY COORDINATOR				
Andy Hudson	Facility Mgr.	3459 Upper Tug Fork Rd Alexandria, KY	x6305 513-383-5262	859-694-3523 (cell phone)
SECONDARY EMERGENCY COORDINATOR				
John Murphy	Operations Mgr.	4860 Deer Ridge Ct. Hamilton, OH	x6337	513-895-7208 888-780-0945
Mike Crisenbery	Compliance	225 W. Main St. Lebanon, OH	x6382	513-932-6572 888-203-7279
Mark Arriens	H&S	6380 Tylers Crossing West Chester OH	x6380	513-755-6003 800-391-3805

Table G-3
Fire Suppression and Fighting Equipment

II. Sprinkler System

Location	Capability
Throughout Building	165 Degree Fahrenheit Heads

III. Foam System

Location	Capability
F-Building	10,000 cubic foot coverage

Table G-3
Fire Suppression and Fighting Equipment

I. Fire Extinguishers

Number	Location	Weight	Type
1	Upstairs office	10 lbs.	Halon 1211
2	Furnace Room	5 lbs.	ABC Dry
3	Accounting	5 lbs.	Halon 1211
4	Lunch	20 lbs.	ABC Dry
5	Lab	10 lbs.	Halon 1211
6	Shower/Lockerroom	20 lbs.	ABC Dry
7	Lab	10 lbs.	Halon 1211
8	Lab	10 lbs.	ABC Dry
9	Main Office	10 lbs	Halon 1211
10	Main Office	10 lbs.	Halon 1211
11	Tool Room	5 lbs.	ABC Dry
12	Maintenance	20 lbs.	ABC Dry
13	Garage	20 lbs	ABC Dry
14	Garage	20 lbs.	ABC Dry
15	High Bay	30 lbs	Class D
16	High Bay	20 lbs.	ABC Dry
17	High Bay	20 lbs.	ABC Dry
18	High Bay	20 lbs.	ABC Dry
19	Boiler room	20 lbs.	ABC Dry
20	Waste water	20 lbs.	ABC Dry
21	Building E	10 lbs.	ABC Dry
22	Building E	20 lbs.	ABC Dry
23	Building F	30 lbs.	Class D
24	Building F	20 lbs.	ABC Dry
25	Building F	20 lbs.	ABC Dry
26	Building F	20 lbs.	ABC Dry
27	Flammables Pad	10 lbs.	ABC Dry
28	Flammables Pad	20 lbs.	ABC Dry
29	Building H	20 lbs.	ABC Dry
30	Building L	20 lbs.	ABC Dry
1-F	High Bay	33 gallons	AFFF Mobile
2-F	High Bay	33 gallons	AFFF Mobile
3-F	Spill Supply	33 gallons	AFFF Mobile
4-F	Building F	33 gallons	AFFF Mobile
1-P	High Bay	50 lbs.	ABC Dry
2-P	Tool Cage (on welder)	5 lbs.	ABC Dry
3-P	Tool Cage	5 lbs.	ABC Dry
4-P	Building F	30 lbs.	Class D
N/A	Forklifts	2.5 lbs.	ABC Dry
N/A	Bobcats	2.5 lbs.	ABC Dry

Table G-4
Spill Response Equipment

Description	Quantity	Location	Capability
2-inch Gear Pump (3-phase)	1	Processing Area	50 gpm @ 80 psig 220V
1 1/2-inch Air-Powered Diaphragm Pump	2	Processing Area	15 gpm @ 10-ft head 60 lbs air pressure
3-Inch Air Powered Diaphragm Pump	1	Processing Area	100gpm @ 40-ft head 100psi
2-inch Plastic Hose w/fittings	100 ft.	Bermed Areas	
1 1/2-Inch Plastic w/fittings	100 ft..	Bermed Areas	
Lime	1,200 lbs.	Spill Control Area	
Sodium Carbonate	1,200 lbs.	Spill Control Area	Neutralizing Caustic Spills & Stabilizing Alkali Metal Spills
Clay Absorbent	1,200 lbs.	Spill Control Area	
Empty 55-Gallon Drums	4	Spill Control Area	
Large Scoop Shovels	2	Spill Control Area	
Floor Brooms	2	Spill Control Area	
Absorbent Boom	100 ft.	Spill Control Area	
Forklift	1	Processing Area	3,000 lbs Lifting Capacity; Drum Grabber Attachment
Sewer Line Plug	1	Catch Basin Area	Plug Sewer Line
SCBA	1	Spill Control Area	45 cubic feet of air
	1	Adjacent to Building F	

Table G-4
Spill Response Equipment

Description	Quantity	Location	Capability
2-inch Gear Pump (3-phase)	1	Processing Area	50 gpm @ 80 psig 220V
1 1/2-inch Air-Powered Diaphragm Pump	2	Processing Area	15 gpm @ 10-ft head 60 lbs air pressure
3-Inch Air Powered Diaphragm Pump	1	Processing Area	100gpm @ 40-ft head 100psi
2-inch Plastic Hose w/fittings	100 ft.	Bermed Areas	
1 1/2-Inch Plastic w/fittings	100 ft..	Bermed Areas	
Lime	1,200 lbs.	Spill Control Area	
Sodium Carbonate	1,200 lbs.	Spill Control Area	Neutralizing Caustic Spills & Stabilizing Alkali Metal Spills
Clay Absorbent	1,200 lbs.	Spill Control Area	
Empty 55-Gallon Drums	4	Spill Control Area	
Large Scoop Shovels	2	Spill Control Area	
Floor Brooms	2	Spill Control Area	
Absorbent Boom	100 ft.	Spill Control Area	
Forklift	1	Processing Area	3,000 lbs Lifting Capacity; Drum Grabber
Sewer Line Plug	1	Catch Basin Area	Plug Sewer Line
SCBA	1	Spill Control Area	45 cubic feet of air
	1	Adjacent to Building F	

Table G-5

Personnel Protective Equipment

Description	Location	Capability
Air Purifying Full-Face Respirator	Store room	Respiratory Protection
Air Purifying Half-Face Cartridge	Store room	Respiratory Protection
Self-Contained Breathing Apparatus: Scott Pressure Pak II	Spill Control Area	Respiratory Protection
Spare Air Cylinders, 45 cubic feet	Spill Control Area	Spare for Scott SCBA
Respirator Cartridges:		
Organic Vapor/Acid Gases	Store Room	For Respirators
Organic Vapor, Dusts, Mists	Store Room	For Respirators
Ammonia, Methyl Amine	Store Room	For Respirators
Gloves (cotton, vinyl, neoprene PVC)	Store Room	Hand Protection
Disposable Cover All	Store Room	Splash Protection
Fully Encapsulated Suits	Store Room with SCBA	Complete Protection
Aprons	Store Room	Splash Protection
Goggle, Chemical Splash	Store Room	Eye Protection

Table G-6

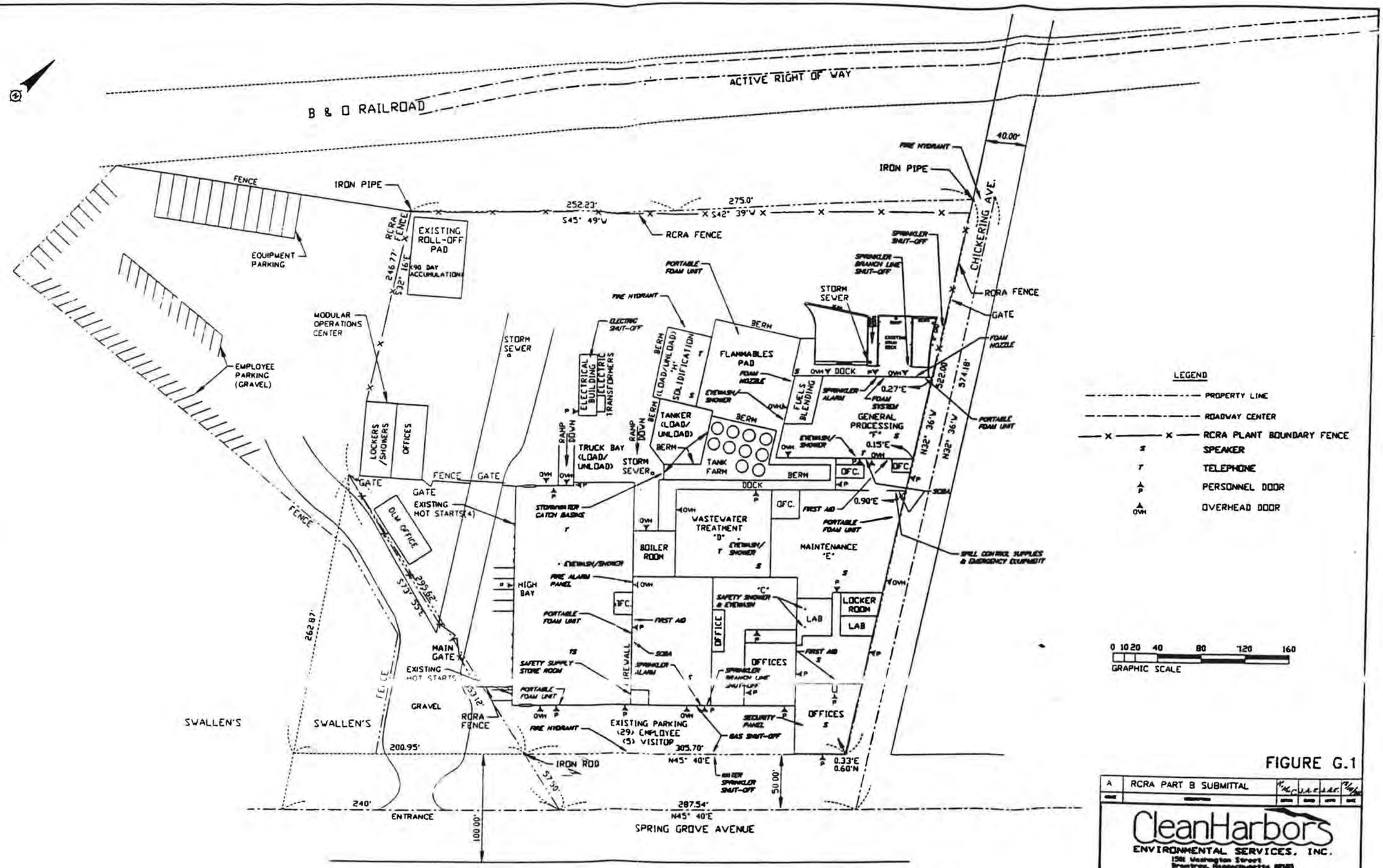
Emergency Phone Numbers

The following agencies are to be notified when, in the opinion of the Emergency Coordinator, it is proper to do so or is required under 40 CFR, Part 264.56(d) or OAC Chapter 3745-54-564.

Agency	Phone Numbers**
Life Squad	(513) 241-2525*
Fire Department	(513) 241-2525*
Engine Company 38	(513) 352-2338
Good Samaritan Hospital	(513) 872-1400
Cincinnati Police	(513) 352-3578*
Ohio EPA Emergency Response	(800) 282-9378
Hamilton County Emergency Management Agency	(513) 851-7080
Hamilton County Environmental Services	(513) 946-7777
U.S. Coast Guard	(513) 684-3295
U.S. EPA	(513) 684-7931
Ohio Disaster Services Agency	(614) 889-7150
National Response Center	(800) 424-5510
State Fire Marshall	(614) 889-7150
Cincinnati Water Works	(513) 352-2000
Metropolitan Sewer District	(513) 352-4900 or (513) 352-4800
Poison Center	(513) 872-5111
CG&E Emergency Number	(513) 381-2000
Chem-Trek	(800) 424-9300
National Weather Service	(513) 283-3195
Cincinnati International Airport	(513) 283-3616

*May also be reached by dialing 91911.

**All numbers require dialing "9" to obtain an outside phone line.



REDUCED COPY
DO NOT SCALE PRINT

FIGURE G.1

A	RCRA PART B SUBMITTAL				

CleanHarbors
ENVIRONMENTAL SERVICES, INC.
1501 Washington Street
Braintree, Massachusetts 02185
Telephone (781) 849-1800

SPRING GROVE RESOURCE RECOVERY
4879 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

CONTINGENCY PLAN MAP

GW-5384
1"=40'

5384-C-13

B & O RAILROAD

ACTIVE RIGHT OF WAY

CHICKERING AVE.

FENCE

EQUIPMENT PARKING

RCRA FENCE

EXISTING ROLL-OFF PAD (90 DAY ACCUMULATION)

ASPHALT AND GRAVEL

NITROGEN STORAGE PAD

MODULAR OPERATIONS CENTER

EMPLOYEE PARKING (GRAVEL)

ELECTRICAL BUILDING

ELECTRIC TRANSFORMERS

FLAMMABLES PROCESSING (BUILDING H)

FLAMMABLES PAD

DOCK

FUELS BLENDING ROOM

TANK (TYP.)

TANKER (LOAD/UNLOAD)

GENERAL PROCESSING (BUILDING F)

LOCKERS /SHOWERS

OFFICES

GRAVEL

TANK FARM

(BUILDING M)

GATE

FENCE

GATE

GATE

DLW OFFICE

WASTEWATER TREATMENT (BUILDING D)

BOILER ROOM

MAINTENANCE (BUILDING E)

HIGH BAY (BUILDING B)

VEHICLE STORAGE AREA (BUILDING B)

"C"

OFFICE

LAB

LOCKER ROOM

LAB

OFFICES

FIRE WALL

MAIN GATE

FENCE

SWALLEN'S

SWALLEN'S

GRAVEL

RCRA FENCE

ENTRANCE

SPRING GROVE AVENUE

LEGEND

- PROPERTY LINE
- ROADWAY CENTER
- RCRA PLANT BOUNDARY FENCE
- P — PERSONNEL DOOR
- OVH — OVERHEAD DOOR
- EVACUATION ROUTE

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DO NOT SCALE PRINT

FIGURE G.2

A	RCRA PART B SUBMITTAL				

CleanHarbors
ENVIRONMENTAL SERVICES, INC.

SPRING GROVE RESOURCE RECOVERY
4879 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

EVACUATION ROUTES

Figure G-3

Certification for Items Used during a Contingency Plan Event

Date and Time of Event: _____

Date and Time of Decontamination: _____

Items Decontaminated:

Items Involved	Status: Clean	Status: Not Clean	If Not Clean, State Action Taken (Discarded, etc.)
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____

I certify that the items listed above are clean and can be released for use.

_____ _____

Signature of Emergency Coordinator Date

APPENDIX D-2

CONTAINMENT CALCULATIONS

Table D-1

Secondary Containment For Storage of Containers Holding Liquids

LOCATION	AREA	SECONDARY CONTAINMENT VOLUME (GALLONS)	MAXIMUM RAINFALL (GALLONS)	AVAILABLE CONTAINMENT*	MAXIMUM NUMBER OF 55-GAL EQUIVALENT CONTAINERS
High Bay	Area I	5,491	N/A	5,491	998
	Area II	1,870	N/A	1,870	340
	Area III	2,445	N/A	2,445	444
	Area IV	3,374	N/A	3,374	613
Building H		1,403	N/A	1,403	255
Building F	Area I	358	N/A	358	65
	Area II	1,730	N/A	1,730	314
	Area III	696	N/A	696	126
	Area IVA	6,540	N/A	6,540	1,189
	Area IVB	**	**	**	**
	Area V	26,036	N/A	26,036	4,733
Building D		31,537	N/A	31,537	5,734
Flammables Pad		27,150	N/A	27,150	4,936
Tanker Load/ Unload Area		8,450	8,818		1,966
Truck Dock	Ramp	21,470	6,134	15,336	2,788
	Elevated Dock	11,062	N/A	11,062	
	Truck Bays	10,700	N/A	10,700	1,958
	North Dock (P)	6,805	N/A	6,805	1,245

Notes:

* Represents the size of the largest container holding free liquids that may be stored in each area.

** The containment and storage capacities listed for Area IVA includes the capacity of Area IVB.

(P) Proposed area.

The total hazardous waste container storage capacity for the facility is 120,000 gallons or 2,181 55-gallon equivalents. SGRR will not store more than 2,181 55-gallon equivalent containers on-site at any one time.

Overflow from the Tanker Load/Unload Area would flow approximately 129,000 gallon secondary containment of the Tank Farm.

The Truck Dock Area provides additional secondary containment for Building F, the Flammables Pad and Building H..

WOOLPERT CONSULTANTS

Client: CASE - SPRING GROVE POWERING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALCULATIONS Project No. 17167-C

Computed By: Date: 9/15/99 Checked By: Date:

TABLE OF CONTENTS FOR CALCULATIONS

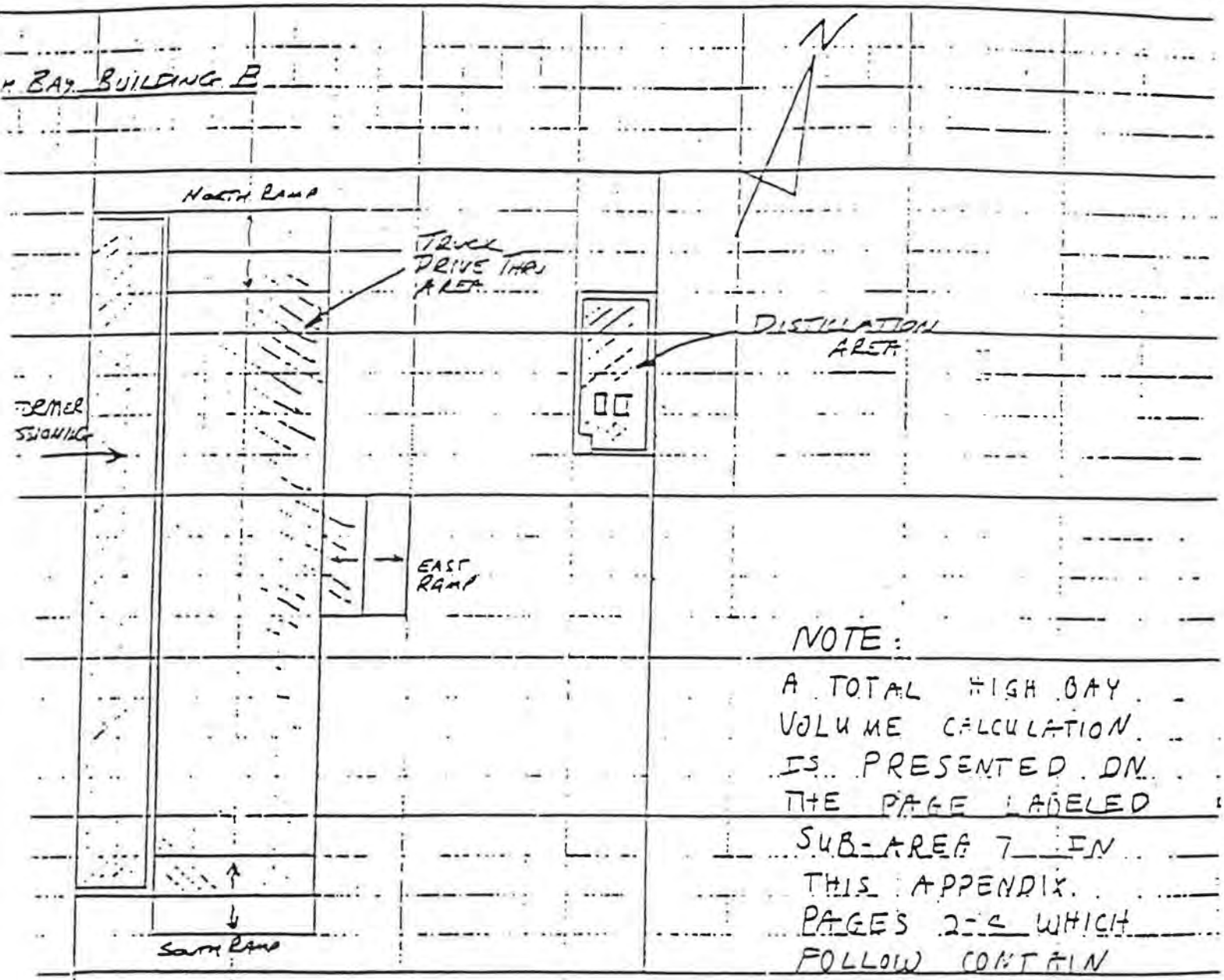
HIGH BAY BUILDING B	D-III-4 THRU 5
SOLIDIFICATION BUILDING, BUILDING A	D-III-9 THRU 11
FLAMMABLES PAD	D-III-12 THRU 14
TANKER LOADING/UNLOADING AREA	D-III-15 THRU 21
[illegible] FARM	D-III-50 THRU 53
ICE DOCK	D-III-54 THRU 58
BUILDING F	D-III-59
WASTE WATER BERM	D-III-117 THRU 119

WOOLPERT CONSULTANTS

Client CETOS - SPRING GROVE PROCESSING FACILITY

Subject SECONDARY CONTAINMENT VOLUME CALC - PART Order No 17K7-01

Computed by Date 9/89 Checked by Date



NOTE:

A TOTAL HIGH BAY VOLUME CALCULATION IS PRESENTED ON THE PAGE LABELED SUB-AREA 7 IN THIS APPENDIX. PAGES 2-6 WHICH FOLLOW CONTAIN CALCULATIONS OF THE CONTAINMENT VOLUMES OF THE INDIVIDUAL BERMED AREAS WITHIN BUILDING B

WOOLPERT CONSULTANTS

Client CECOS - SPRING GROVE PROCESSING FACILITY

Subject SECONDARY CONTAINMENT VOLUME CALCS - PREL. Order No. 17147-

Computed By _____ Date 9/29 Checked By _____ Date _____

=N BAY, BUILDING "B"

TRANSFORMER DECOMMISSIONING AREA

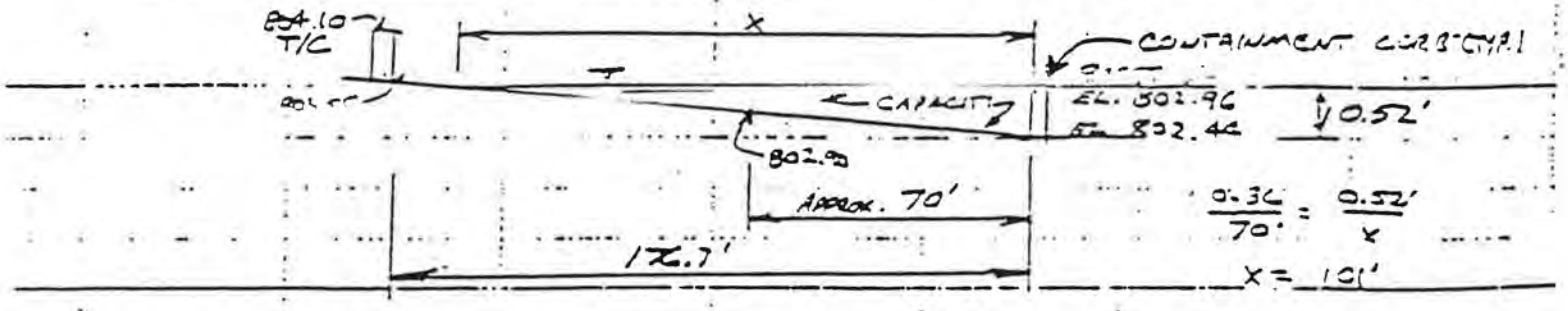
LENGTH = [(180'-9") - (3'-6") + (6")] = 176'-8" or 176.7'

WIDTH = 9'-6" or 9.5'

CURB HEIGHT (Avg)	TOP/CURB	GRADE/CURB (FLOOR EL.)	LOCATION	HEIGHT
	803.01	802.46	SW CORNER	0.55'
	802.96	802.15	SE CORNER @ S. RAMP	0.81'
	803.49	802.90	E CURB	0.59'
	804.10	803.55	NE CORNER	0.55'
	803.56	803.19	E CURB @ N. RAMP	0.37'

LOWEST T/C = 802.96

NORTH TO SOUTH CROSS-SECTION (LOOKING TOWARDS DISTILLATION AREA)



SECONDARY CONTAINMENT STORAGE VOLUME = ½ (0.52')(101')(9.5') = **250 ft³ or 1870 GAL. CAPACITY**

WOODWARD-CLYDE CONSULTANTS

Client CECOS - SPRING GROVE PROCESSING FACILITY

Subject SECONDARY CONTAINMENT VOLUME CALCS - PAGE Order No 17451-C

Computed by Date 9/89 Checked by Date

H BAY BLDG B (CON'T)

TRUCK DRIVE-THRU AREA

LENGTH = 160'-0"

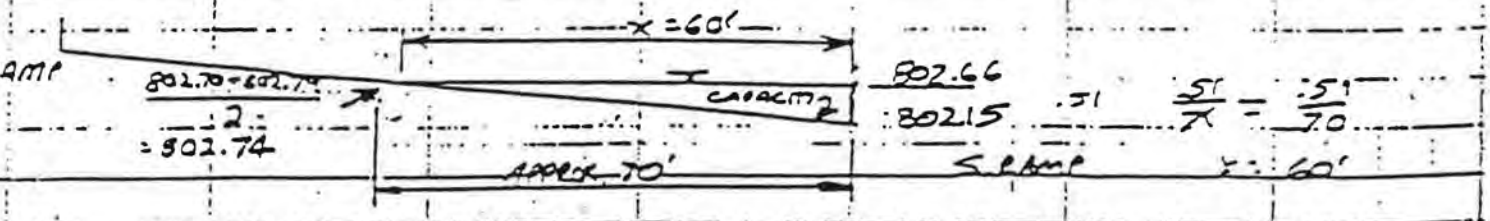
WIDTH = 24'-6"

CURB HEIGHT:

LOCATION	TOP ELEV.	FLOOR ELEV.
NORTH RAMP	803.52 T/RAMP	803.21 T/C/RAMP
"	—	803.92 GUTTER
WEST CURB	803.49 T/C	802.70
EAST RAMP	803.12 T/RAMP	—
"	803.28 T/C RAMP	802.79
"	803.17 T/C RAMP	—
SOUTH RAMP	802.66 T/RAMP	802.15
EAST CURB RAMP	802.67 T/C	—
		AVG 802.75

LOWEST T/C = 802.66
OR T/RAMP

NORTH TO SOUTH CROSS SECTION (LOOKING TOWARDS DISTILLATION AREA)



VOLUMES: $\frac{1}{2}(.51')(60')(24.5')$ = + 374.8 FT³

S. RAMP: $\frac{1}{2}(.51')(7')(24.5')$ = - 43.7 FT³

E. RAMP: NONE = + ~

SECONDARY

WOOLPERT CONSULTANTS

Client: CECOS - SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOL. CALCS - PRE-EL Order No. 17147-C

Computed By: Date: 9/99 Checked By: Date:

BAY BLDG B (CONT.)

DISTILLATION AREA

~~TOTAL AREA = AREA BOUNDED BY CURBS - (2 x EQUIPMENT PAD) - CORNER PAD~~ SW

~~AREA BOUNDED BY CURBS~~

~~[20' x 37' (SCALED)] - [12' (SCALED) x 2 (SCALED)]~~ = ~~716~~ =

~~EQUIPMENT PADS~~

~~2 x [7' x 4']~~ = ~~56~~ =

15'-3"

~~SW CORNER PAD~~

~~2.4 x 3.8'~~ = ~~9~~ =

37'-3"

~~650~~ =

21'-0"

CURB HEIGHT,

LOCATION	TOP (CURB)	BOTTOM (FLOOR ELEV.)
~~SW CORNER PAD (CURB)~~	~~803.18~~	~~802.69~~
NE CORNER	803.36	~~802.68~~
		AVG = 802.68

CURB HEIGHT NOMINAL 8" = .667'

~~TOP OF CURB = 803.18~~

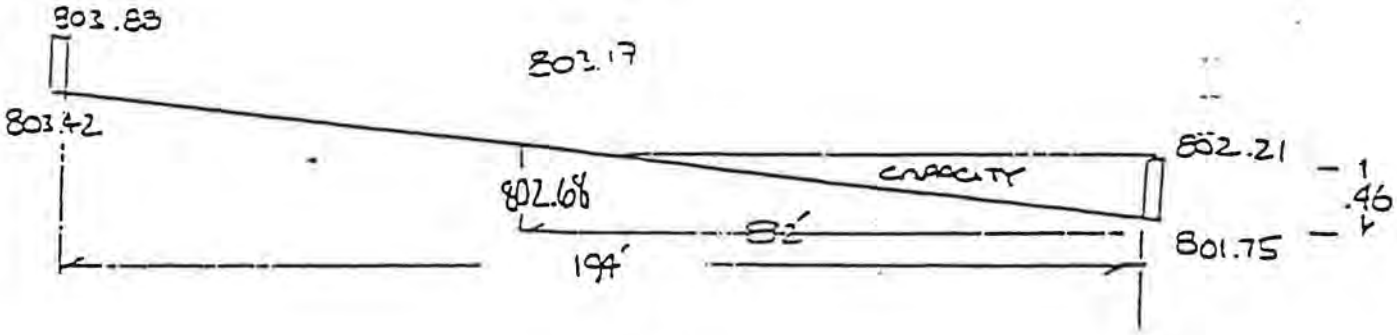
~~AVERAGE CURB HEIGHT = 803.18 - 802.68 = 0.5'~~

SECONDARY CONTAINMENT STORAGE VOLUME = ~~650 FT² x 0.5'~~ = ~~325 FT³ OR 2430 GAL~~

19.25' x 16.375' x .667' x 7.48 + 18.208' x 19.83' ✓

Building B - Center Storage Area

Based on elevations gathered; the containment volume slopes to the southeast from a high elevation to the northwest at 803.88 top of curb to 802.21 top of curb at the southeast.



$$\frac{.93'}{82'} = \frac{.46'}{x}$$

$x = 40.56'$

Volume = $\frac{1}{2}(.46)(40.56')(83') = 774.29 ft^3 \times 7.48052 = 5792.05 gal$

Stoop area $4' \times 6' \times .51 = 12.24 ft^3 \times 7.48052 = 91.58$ gal

containment volume	5700.53 gal

Small Footer removes 209.35 gal from total

5700.53 gal − 209.35 gal = 5491.18 gal.

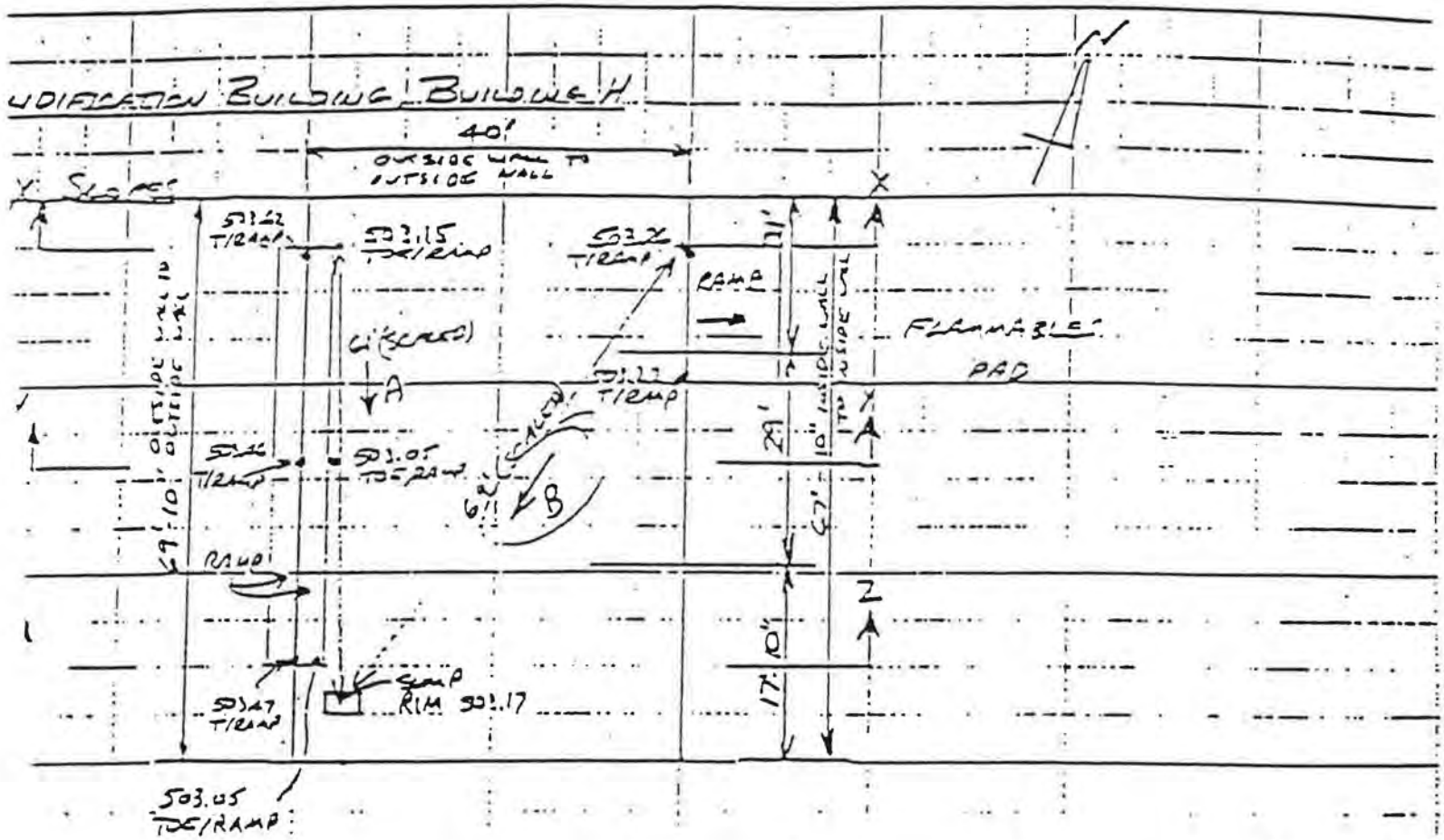
WOODPETI CONSULTANTS

Client: CERCS - SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALCS

Order No. 17147-01

Computed By: Date: 9/89 Checked By: Date:



SLOPE: A: T/RAMP ELEV. < SUMP RIM ELEV. SLIGHTLY

B: $\frac{503.26 - 503.17}{69} = 0.0013'$ or 0.1%

WOOLPERT CONSULTANTS

Client CECIL-SPRING GROVE RECEIVING FACILITY

Subject SECONDARY CONTAINMENT VOLUME CALCS-PRE Order No 17167-0

Computed by Date 9/89 Checked by Date

MODIFICATION BUILDING, BUILDING H (CON'T)

CONTAINMENT VOLUME (NOTE: NO CONTAINMENT CURB PRESENT)

ASSUME 1' THICK BUILDING WALLS: (FROM CONSTRUCTION DWG:)

LENGTH = (69'-10") - (2x1') = 67'-10"

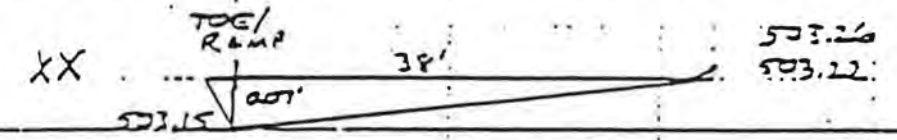
WIDTH = (40'-0") - (2x1') = 38'-0"

CONTAINMENT HEIGHT:

LOWEST TOP/RAMP ELEV = 503.22
LOWEST FLOOR ELEV = 503.05
SUMP, RIM ELEV = 503.17

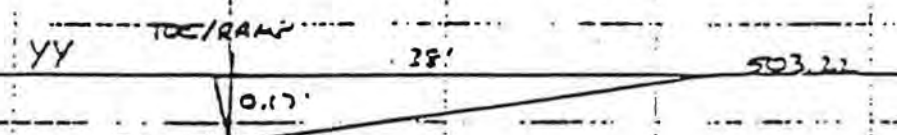
CROSS SECTIONAL AREAS (ASSUME FLOOR ELEV. @ E. WALL = 503.22

XX



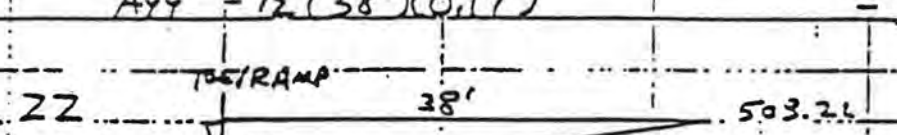
$A_{XX} = \frac{1}{2}(38')(0.07)' = 1.3 \text{ FT}^2$

YY



$A_{YY} = \frac{1}{2}(38')(0.17') = 3.2 \text{ FT}^2$

ZZ



WOOLPERT CONSULTANTS

Client: CECOS SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALCULATION Order No 17147-C

Computed By Date 9/19 Checked By Date

MODIFICATION: BUILDING BUILDING H (CONT)

VOLUMES BASED ON CROSS-SECTIONAL AREAS:

$21' \times A_{xx} = 21' \times 1.3\,Ft^2 = 27.3\,Ft^3$

$29' \times A_{yy} = 29' \times 3.2\,Ft^2 = 92.8\,Ft^3$ NOD LIC

$(17-10') \times A_{zz} = (17'-10') \times 3.2\,Ft^2 = 57.07\,Ft^3$

SUMP VOLUME = $2.3' \times 2.3' \times (503.17 - 501.20) = 10.4\,Ft^3$

$\Sigma = 187.57\,Ft^3$

SECONDARY CONTAINMENT STORAGE VOLUME = 187.57 Ft³ OR 1403 GAL CAPACITY

Additional berm height to bring up to 10" increases containment additional 14,653.52 gallons

14,653.52 g + 1403 = 14,766.9

Containment Calculations for the Solidification Building H

Berm alteration to comply with TSCA requirements regarding PCB storage shown on drawing 5384-S-04. New concrete will be sealed with sealant as specified in section D-III of the permit.

Using the survey data and original containment volume calculations from Woolpert Consultants:

The lowpoint of the building's containment -or where the overflow would occur, is presently at the door opening to the flammables pad, at elevation 503.22' . At this time there is no containment berm across this opening.

Adding a new 10" high speed bump here, and raising the existing curb height across the front of the building to 10" minimum (from 5 1/2" average height currently) will make the new lowpoint of the containment be across the front of the building, at elevation 503.98'.

This increases the current containment volume by an additional (503.98 - 503.22)= .76' across the entire floor area of the building:

.76'x (67'-10") x (38') = 1959.03 cubic feet

which equates to an additional 14,653.52 gallons.

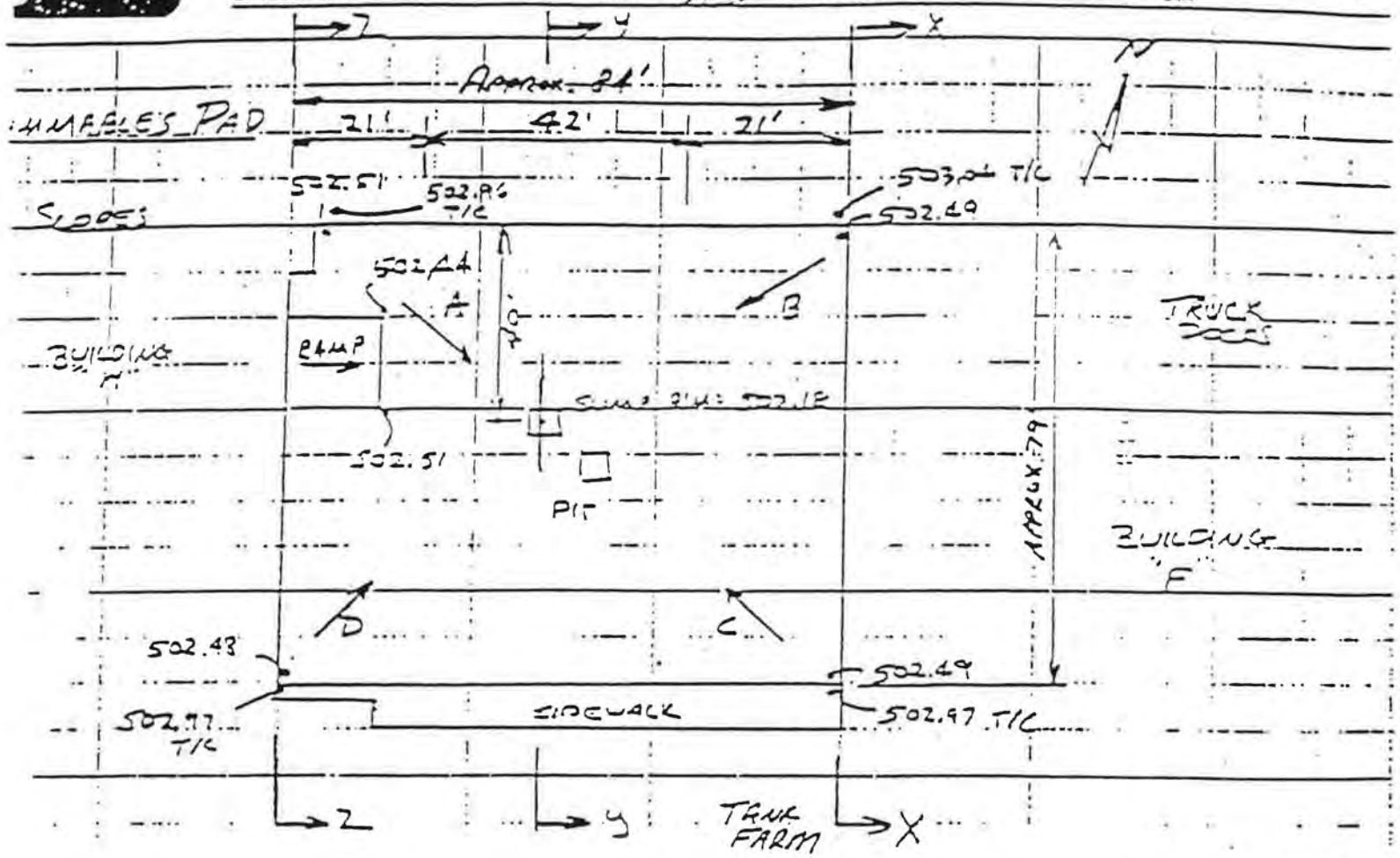
This volume gets added to the existing volume of 1403 gallons. The sump is included in this figure. A deduction is made on the drawing for the volume displaced by the ramps and new 6" wide by 10" high curb around the inside of the remaining walls, resulting in a net volume of 14,766.9 gallons. Preceding pages are accordingly revised.

WOODPERT CONSULTANTS

Client: CECOS - SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALCS - PAD Order No. 17167-0

Computed by: Date: 9/29 Checked by: Date:



A: $\frac{502.51 - 502.18}{54'\ (\text{SCALED})} = 0.0056'/' = 0.6\%$

B: $\frac{502.49 - 502.18}{58'\ (\text{SCALED})} = 0.0053'/' = 0.5\%$

C: $\frac{502.49 - 502.13}{52'\ (\text{SCALED})} = 0.0060'/' = 0.6\%$

D: $\frac{502.48 - 502.18}{55'\ (\text{SCALED})} = 0.0054'/' = 0.5\%$

Client: CECOS - SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOL. CALCS - PRE-... Order No. 17167-01

Computed by: Date: 9/29 Checked by: Date:

IMMACLES PAD (CON'T)

CONTAINMENT VOLUME

PAD LENGTH & WIDTH FROM CONSTRUCTION DRAWING & RECORD DRAWING MEASUREMENTS

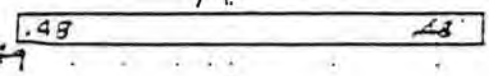
LENGTH ≈ 84'
WIDTH ≈ 79'

CONTAINMENT HEIGHT:

LOWEST TOP/CURB OR CONTAINMENT HEIGHT = 502.96 @ NW CORNER

CROSS-SECTIONAL AREAS

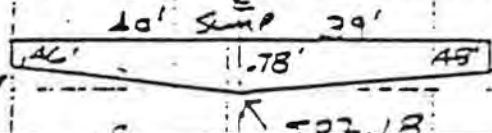
XX



502.49 502.96 502.49 SIDEWALK/TANK FARM SIDE

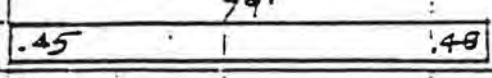
$A_{XX} = (79')(.48') = 37.9\ ft^2$

YY



$A_{YY} = \left(\frac{.46 + .78}{2}\right)(40') + \left(\frac{.78 + .48}{2}\right)(39') = 49.4\ ft^2$

ZZ (NEAREST SLOPE H RAMP)



$A_{ZZ} = \left(\frac{.45 + .48}{2}\right)(79') = 36.7\ ft^2$

WOOLPERT CONSULTANTS

CLIENT: CELOTEX SPRING GROVE PROCESSING FACILITY

SUBJECT: SECONDARY CONTAINMENT VOLUME CALCS - PE-1 ORDER NO. 17167-

COMPUTED BY _____ DATE: 9/89 CHECKED BY _____ DATE _____

WORKSHEET PAD X (CONT.)

CONTAINMENT VOLUMES BASED ON CROSS-SECTIONAL AREAS

$21' \times A_{XZ} = 21' \times 37.9\ ft^2 = + 795.9\ ft^3$

$42' \times A_{YY} = 42' \times 49.4\ ft^2 = - 2074.8\ ft^3$

$21' \times A_{22} = 21' \times 36.7\ ft^2 = - 770.7\ ft^3$

SUMP VOLUME $= 2.3' \times 2.3' \times (502.18 - 499.58) = - 13.8\ ft^3$

*SPRINKLER PIT $= 3' \times 3' \times (502.86 - 502.18) = - 6.1\ ft^3$

2 LOW RAMP $= \frac{1}{2}\left[502.96 - \left(\frac{502.44 + 502.51}{2}\right)\right](\cong 6')(12') = - 17.5\ ft^3$

NW CORNER $= (5.7)(1.3)(502.96 - 502.51) = - 3.3\ ft^3$

$\Sigma = 3628.3\ ft^3$

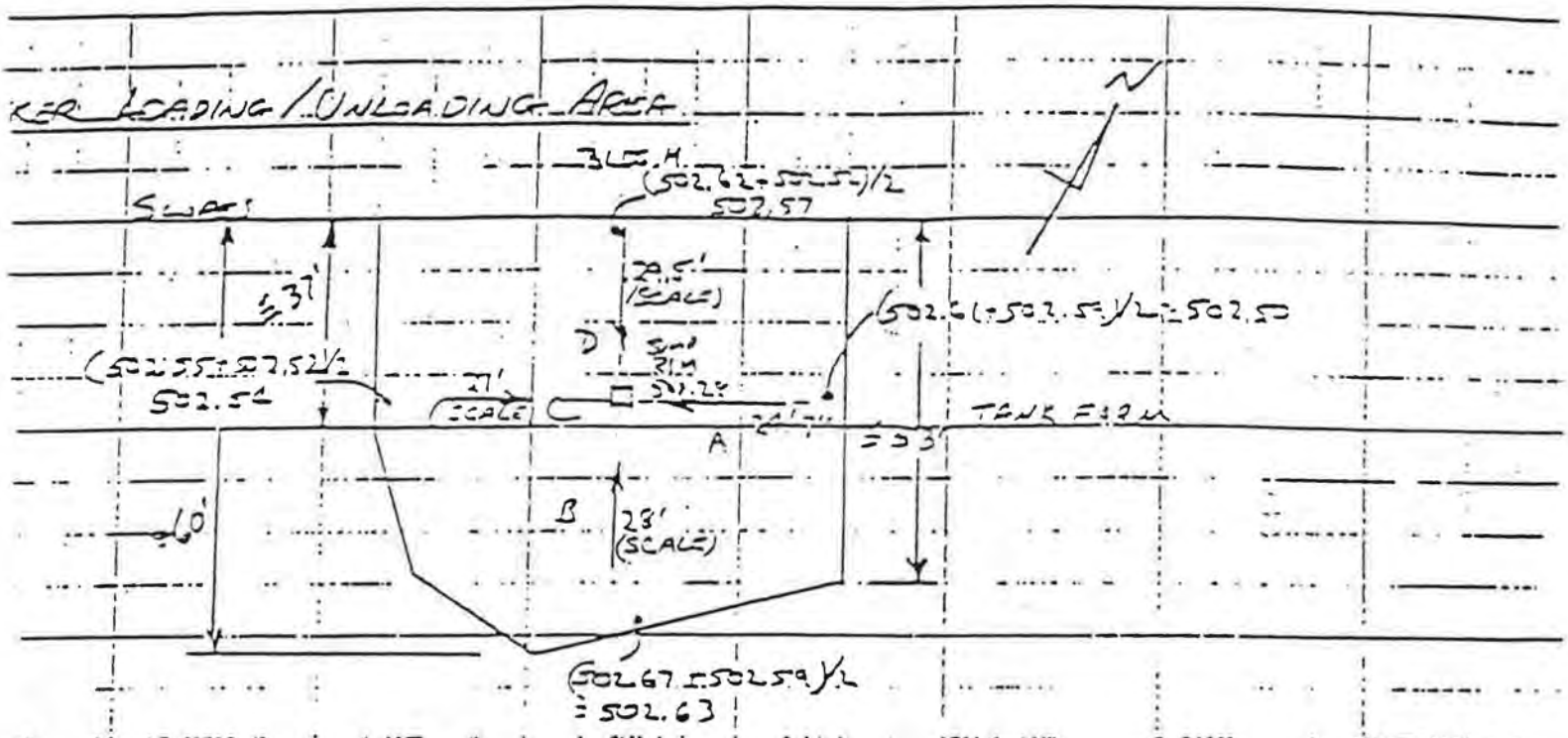
SECONDARY CONTAINMENT STORAGE VOLUME = **3630 ft^3 OR 27150 GAL CAPACITY**

Client CEAS - SPRING GROVE PROCESSING FACILITY

Subject SECONDARY CONTAINMENT VOLUME CALCS - PSEL Order No 17167-A.1

Computed by _____ Date 9/1/99 Checked by _____ Date _____

KER LOADING / UNLOADING AREA



A: $\frac{502.50 - 502.28}{(24'-7")} = 0.0089'' = 0.9\%$

B: $\frac{502.63 - 502.28}{28'} = 0.0125'' = 1.2\%$

C: $\frac{502.54 - 502.28}{21'} = 0.0124'' = 1.2\%$

D: $\frac{502.57 - 502.28}{29.5'} = 0.0098'' = 1.0\%$

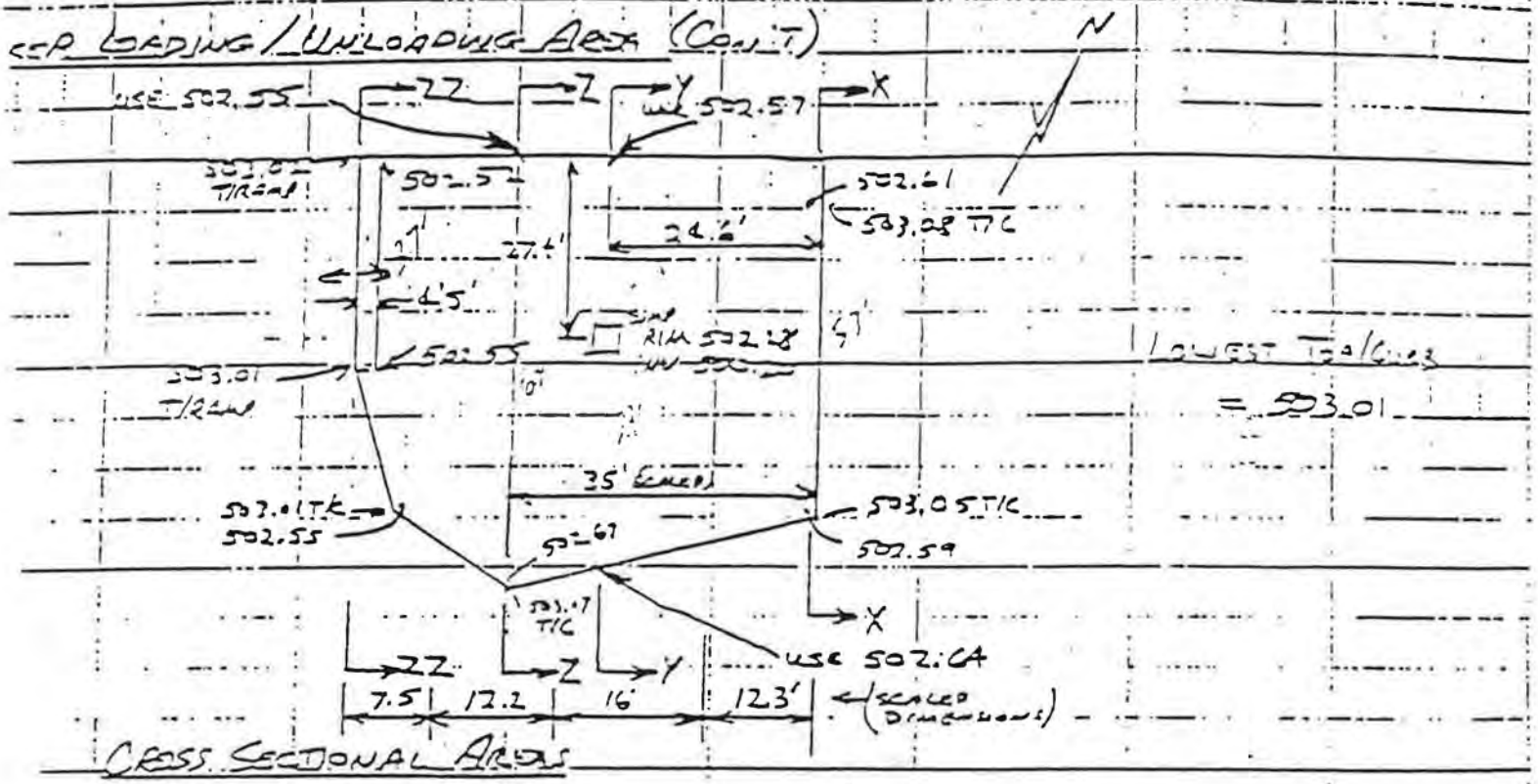
WOODPLAN CONSULTANTS

Client: CETCO - SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALCS-PRE- Order No: 17147-01

Computed by: Date: 9/29 Checked by: Date:

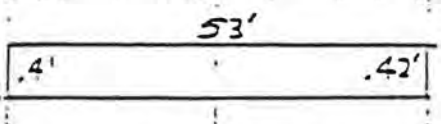
CCP LOADING / UNLOADING AREA (CONT)



CROSS SECTIONAL AREAS

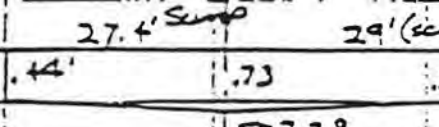
BLOCK H SIDE

XX



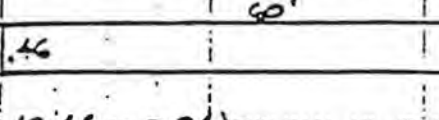
$A_{XX} = \left(\frac{0.4 + 0.42}{2}\right)(53') = 21.7\ ft^2$

YY



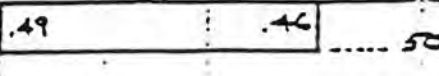
$A_{YY} = \left(\frac{.44 + .73}{2}\right)(27.4') + \left(\frac{.73 + .37}{2}\right)(29) = 32.0\ ft^2$

ZZ



$A_{ZZ} = \left(\frac{0.46 + 0.34}{2}\right)(60') = 24.0\ ft^2$

22-22



WOODPETH CONSULTANTS

Client: CERES SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALCS-PRE- Order No. 17167-0

Computed By: Date: 9/09 Checked By: Date:

KER LOADING/UNLOADING AREA (CONT.)

VOLUMES BASED ON CROSS-SECTIONAL AREAS:

12.3 x A_R = 12.3 x 21.7 = + 266.9 ft³

16.0 x A_{YY} = 16.0 x 32.0 = + 512.0 ft³

12.2 x A_{ZZ} = 12.2 x 24.0 = + 292.8 ft³

7.5 x A_{RZ} = 7.5 x 17.6 = + 132.0 ft³

SUMP VOLUME = 2' x 2' x (502.28 - 500.20) = + 8.3 ft³

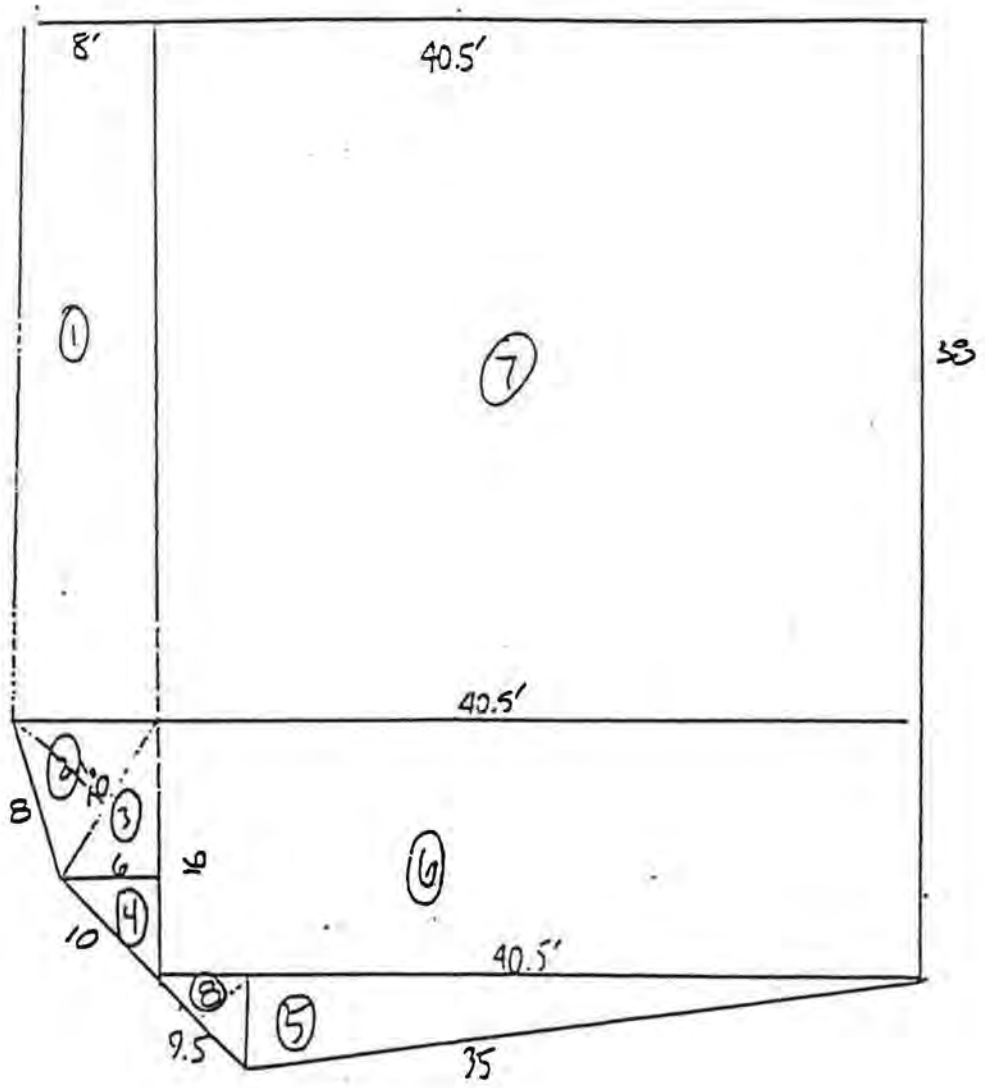
RAMP = $\frac{1}{2}\left[\frac{503.02 - 503.07}{2} - \frac{502.52 - 502.57}{2}\right](4.5')(37')$ = -79.9 ft³

Σ = 1132.1 ft³

SECONDARY CONTAINMENT STORAGE VOLUME = 1130 ft³ or 8450 GAL CAPACITY

Tanker Pad - Rainfall 25 year 24 hour storm.

Area of Tanker Pad



① = 8×38 =	304 ft²	Rainfall = 4.7" = .39167 ft
② ≈ (3)(10)	30	
④ = (½)(6)(16) =	48	2729.75 ft² × .39167 ft = 1069.16
⑦ ≈ (½)(½)(7)(81) =	141.75	1069.16 ft³ × 7.48052 = 7997.87
⑥ = (16)(40.5) =	648	

Maximum Capacity Tanker Pad	8450 gal
Rainfall	− 7997.87 gal
Available Capacity	452.13 gal

assuming largest container was 8,000 gal
and total stored was 15,000 gal
÷
8000 gal secondary containment must be shown

overflow goes to tank farm
$(35\ ft)(8ft)(4.95') = 1386\ ft^3$
$1386\ ft^3 \times 7.48052 = 10,368\ gal$

rainfall in this area
$(35\ ft)(8ft)(.3916 ft) = 109.67\ ft^3 \times 7.48052 = 820.37\ gal$

(Tanker Pad containment + tank farm) − (TP rain + TF rain)
(816.7 + 8450 + 10,368) − (7997.87 + 820.37)
~~(18,818~~ 19,634.7) − (8818.24) = ~~9999.76~~ 10,816.46 gal
addition of berm height to 6" adds 816.7 gals of containment
9999.76 gal + 816.7 gal = 10,816.46 gal
∴ ~~9,999.76~~ 10,816 gal maximum size container that could be stored a
~~99,997.6~~ gal maximum spill (10% of total)

Containment Calculations for the Tanker Loading/Unloading Area

Berm alteration to comply with TSCA requirements regarding PCB storage shown on drawing 5384-S-04. New concrete will be sealed with sealant as specified in section D-III of the permit.

Using the survey data and original containment volume calculations from Woolpert Consultants:

The low point of the area's containment - or where the overflow would occur, is presently at the South end of the ramp used to drive into the area, at elevation 503.01' .

Raising this existing ramp to a new height of 6" minimum (from 5 1/2" average height currently) will raise the low point elevation to 503.05'. This increases the current containment volume by an additional (503.05 - 503.01) = .04' across the entire Tanker Loading/Unloading Area, which equates to an additional 816.7 gallons.

This volume gets added to the existing volume of 8450 gallons. The sump and ramp are included in this figure. An addition is made on the drawing to include the additional volume provided by the portion of the Tank Farm dike area along the Southern edge of the Tanker Loading/Unloading Area. Preceding pages are accordingly revised.

Affected on Containment Volume Tank Farm
With Tanker Pad Overfill to Area (a)

area 5 has different floor elevation than rest

$(147.5\,ft^2)(3.42\,ft)$ $2556.45\,ft^3 \times 7.48052$ 19123.58 gal

all others

$(4103.5\,ft^2)(4.63\,ft) = 18{,}999.205\,ft^3 \times 7.48052$ = 142123.93 gal

161247.51 gal

assuming no loss of tank volume in this area.

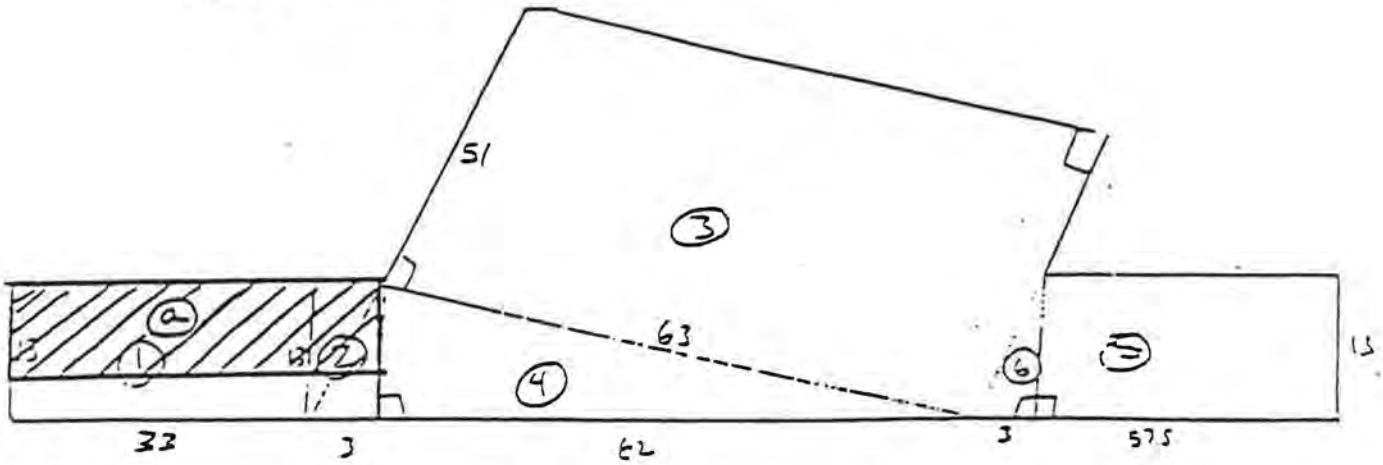
if area @ is given up to tanker pad volume would be.

161,247.51 gal
− 9,999.76 gal area @

151,247.75 gallons

∴ negligible loss of retainment volume < 6%

Tank Farm



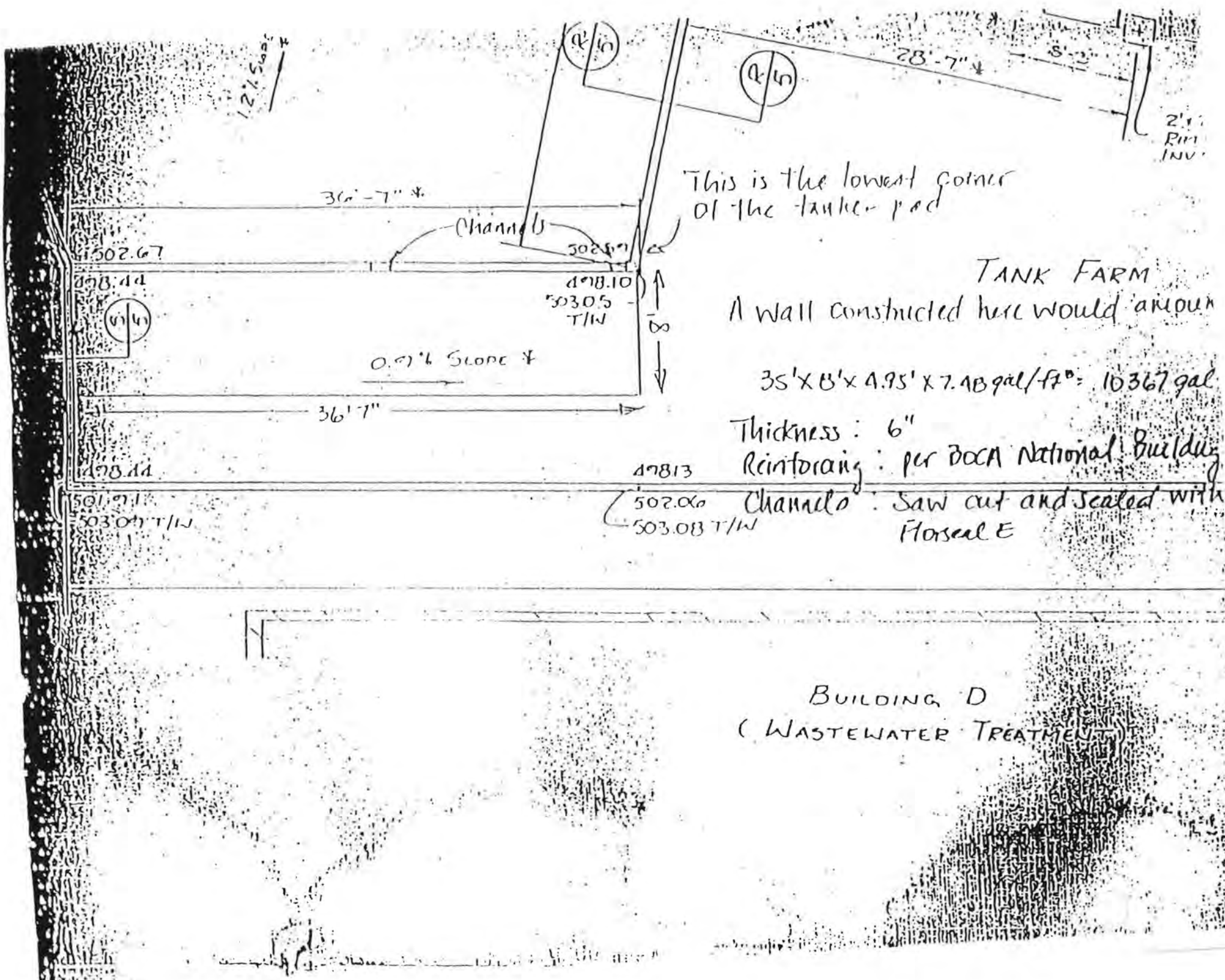
Areas:

① (13)(33) = 429 ft²
② (3)(13) = 39 ft²
③ (51)(63) = 3213 ft²
④ (½)(13)(62) = 403 ft²
⑤ (13)(57.5) = 747.5 ft²
⑥ (½)(13)(3) = 19.5 ft²

Σ 4851 ft²

Rainfall (gal) =
(4851 ft²)(.39167 gal)(7.48052)

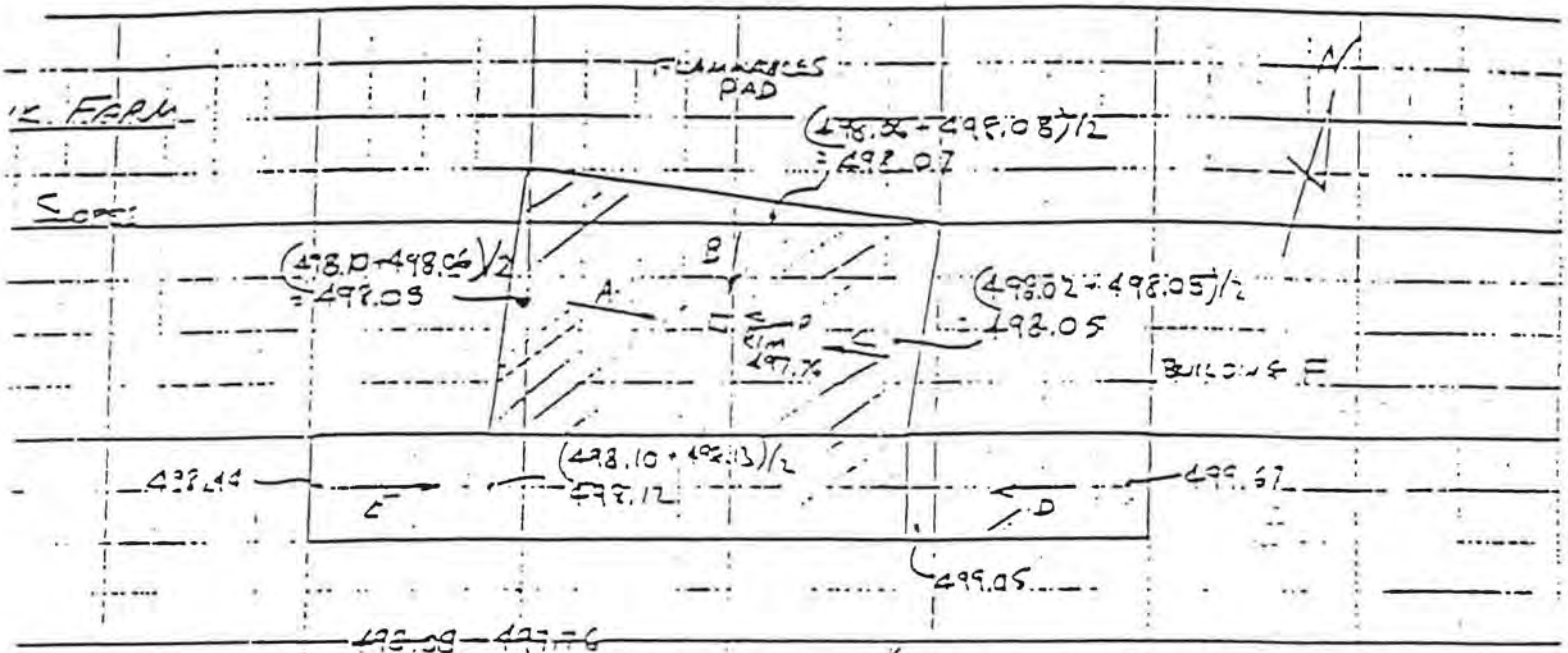
= 14,212.92 gal


12.1% Slope
28'-7"
8'-2"
36'-7"
Channel
502.67
498.44
498.10
503.05
T/W
8'-0"
0.7% Slope
36'-7"
498.44
501.91
503.01 T/W
498.13
502.06
503.03 T/W
This is the lowest corner of the tanker pad
TANK FARM
A wall constructed here would amoun
35'x8'x4.95'x7.48 gal/ft³ = 10367 gal
Thickness: 6"
Reinforcing: per BOCA National Buildi
Channels: Saw cut and sealed with
Flexseal E
BUILDING D
(WASTEWATER TREATMEN

Job CELCO - SPRING GROVE PACKING FACILITY

Subject SECONDARY CONTAINMENT VOLUME CALCS - PRE Order No 17247-J

Computed by Date 9/99 Checked by Date



A: $\frac{498.83 - 497.76}{(28'-7")} = 0.0112'/' = 1.1\%$

B: $\frac{498.94 - 497.76}{(28')} = 0.0111'/' = 1.1\%$

C: $\frac{498.54 - 497.76}{63' - (28'-7")} = 0.0084'/' = 0.8\%$

D: $\frac{499.67 - 499.05}{(55'-4")} = 0.0112'/' = 1.1\%$

E: $\frac{498.44 - 498.12}{(36'-7")} = 0.0087'/' = 0.9\%$

WOOLPERT CONSULTANTS

7/11/91

Client: CECOS - SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALCS - PART

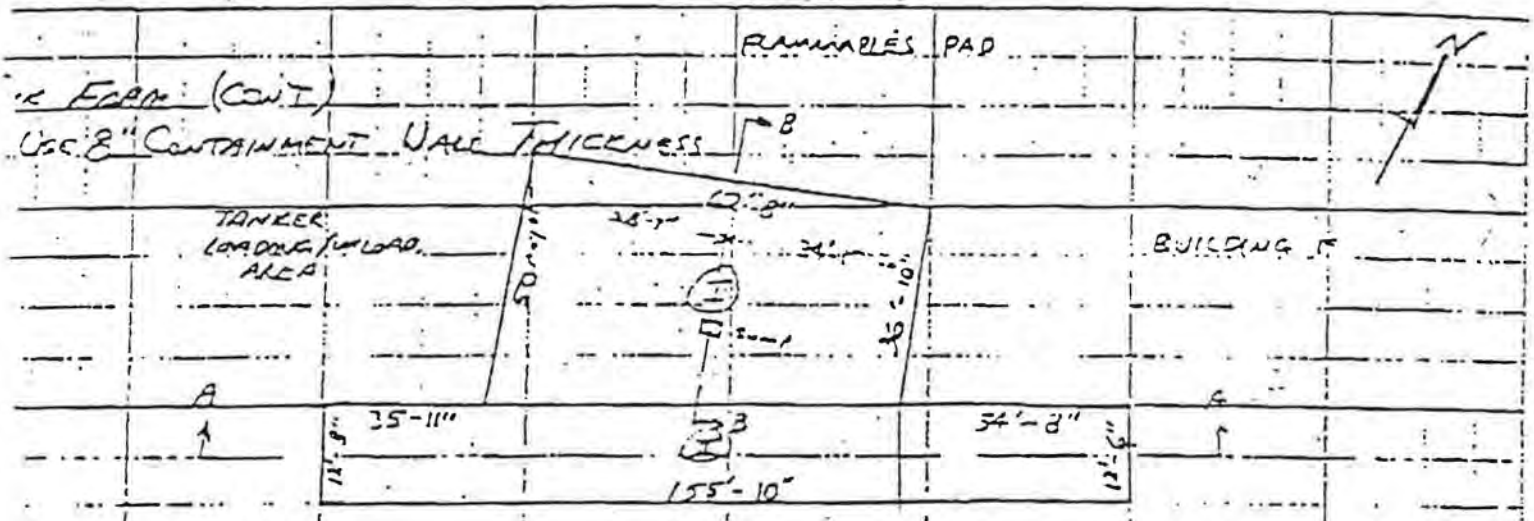
Order No. 7147-01

Computed By: Date: 9/89 Checked By: Date:

RAILROAD PAD

K FARM (CONT.)

USE 8" CONTAINMENT WALL THICKNESS



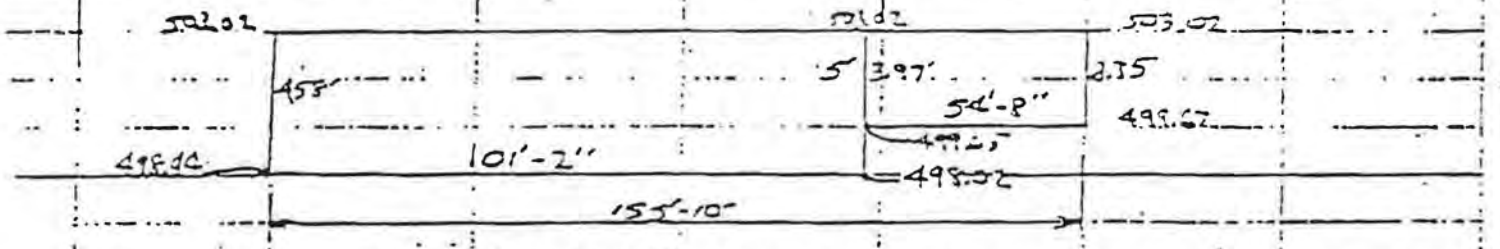
PLAN AREA I = $(62'-8") \times \left[\frac{(36'-10")+(50'-11")}{2}\right]$ = 2723 ft²

PLAN AREA II = $(155'-10") \times \left[\frac{(12'-9")+(12'-6")}{2}\right]$ = 1960.9 ft²

LOWEST TOP/WALL = 503.02

VOLUMES:

CROSS-SECTION A-A



VOLUME II = $\left(\frac{3.97+3.35}{2}\right) \times (54'-8") \times (12'-6")$

$+ \left(\frac{4.58+3.97}{2}\right) \times (101'-2") \times (12'-8")$

= 2500.7 + 5475.3 = 7976 ft³

7/11/91

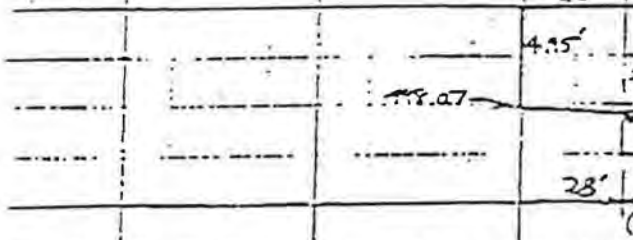
Client CEDOS - SPRING GROVE PROCESSING FACILITY

Subject SECONDARY CONTAINMENT VOLUME CALCS - PE Order No 17167-01

Computed by Date 9/89 Checked by Date

TANK FARM (CONT.)

CROSS-SECTION B:B & SUMP



$$\text{Volume I} = \left(\frac{4.95-5.26}{2}\right)(28')(62'-8") + \left(\frac{5.26-4.98}{2}\right)(16')(62'-8")$$

$$= 8958.0 - 5123.9 = +14081.9 \text{ ft}^3$$

$$\text{Sump Volume} = 2' \times 2' \times (497.76 - 495.26) = +10.0 \text{ ft}^3$$

STRUCTURES OCCUPYING CONTAINMENT VOLUME

4 CONC PADS FOR TK-1 THROUGH TK-4

TANK DIAMETER = 10'-6"

TANK RADIUS, r = 5'-3"

CONC. PAD RADIUS, R, 5'-7"

PAD HEIGHT, H = 10"

VOLUME

$4 \times \pi R^2 H = 4 \times \pi \times (5'-7")^2 \times 10"$ $= -326.4 \text{ ft}^3$

4 - 10'-6" DIA TANKS

ASSUME FLOOR ELEV BETWEEN THE 4 TANKS = 497.91

PAD HEIGHT, H = 10"

∴ ELEV @ BOTTOM OF 4 TANKS = 497.91 + (10") = 498.74

VOLUME = $4 \times \pi r^2 h$ = $4\pi (5'-3")^2 \times (503.02 - 498.74)$ $= -1482.4 \text{ ft}^3$

WOOLPERT CONSULTANTS

7/11/91

Client COORS - SPENT GRAIN PROCESSING FACILITY

Subject SECONDARY CONTAINMENT VOLUME CALC - PRELIM Order No 17167-01

Computed by Date 9/89 Checked by Date

WIL FARM (CONT.)

8 CONC PADS FOR TK5 & TK-6

$8 \times (1'\times 11'') \times (1'\times 11') \times (5'') = 12.8\ ft^3$

2 ~10' DIA. TANKS

TANK SECTION OCCUPYING STORAGE CAPACITY IS A CONE:

$$\text{VOLUME} = \frac{1}{3}\left(\frac{\pi D^2}{4} h\right)$$

DIAMETER OF CONE @ ELEV 503.0 FROM CONTOURS DOES, $D \cong 6'$

HEIGHT OF CONE, $h \cong 2'$

$$2 \times \text{VOLUME} = 2 \times \frac{1}{3}\left(\frac{\pi 6^2 \times 2}{4}\right) = 37.7\ ft^3$$

SECONDARY CONTAINMENT STORAGE AREA $= 7976 + 1408.9 + 10.0 - 326.4 - 482.4 - 12.8 - 37.7$

$= \boxed{20200\ ft^3 \text{ or } 151,100 \text{ GAL. CAPACITY}}$

Subtract volume for pad under 4 x 15K tanks

$30' \times 30' \times 1' = 900\ ft^3$ or 6752 gal

Piping, tank legs & app. are negligible (assume 1000 gal)

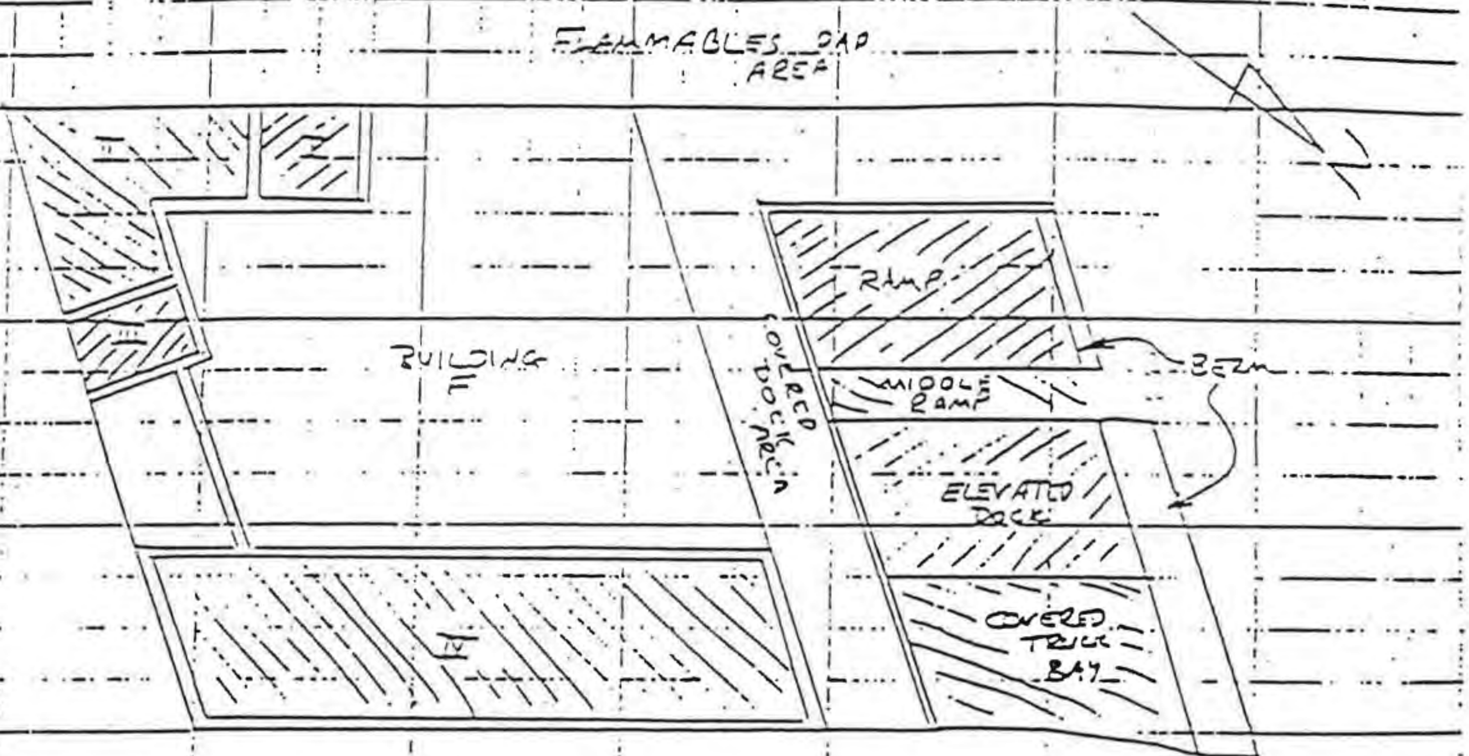
Recalculated total: 103,368 gal

Client: CECOS - Spring Grove Processing Facility

Subject: Secondary Containment Volume Calcs - Prel Order No. 1747-01

Computed by: Date 9/89 Checked by: Date

Building "F" & Truck Dock



WOOLPERT CONSULTANTS

Com: CROSS - SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALC - Project No 17167-01

Computed By: Date: 9/89 Checked By: Date:

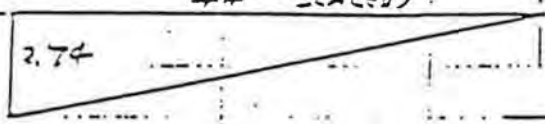
BUILDING

TRUCK DOCK AREA

RAMP

AVERAGE SLOPE (TAKEN TO BERM): $\frac{501.23 - 498.71}{40'} = 0.063$ OR 6.3%

CROSS-SECTIONAL AREA OF RAMP:



AREA = $\frac{1}{2}(2.74')(44') = 60.3\ FT^2$

RAMP WIDTH = 47'-7" = 47.6 FT

VOLUME = $60.3\ FT^2 \times 47.6\ FT = 2870\ FT^3$

SUMP VOLUME = 2' × 2' × UNKNOWN = ASSUME 0

SECONDARY CONTAINMENT STORAGE VOLUME = 2870 FT^3 OR 21470 gal CAPACITY

WOOLPERT CONSULTANTS

Client: CECOS · SPRING GROVE PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALCS - PRE

Order No. 17167-01

Computed by: Date: 9/89 Checked by: Date:

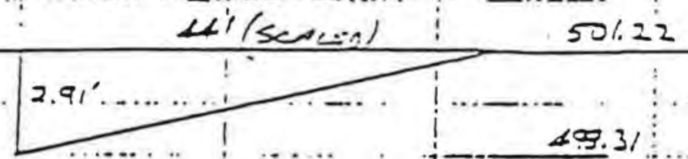
BUILDING

~~FRONT DOCK AREA~~

~~MIDDLE RAMP~~

~~AVERAGE SLOPE = (501.22 - 499.31) / 40' = 0.0475 ft/ft ≈ 3%~~
(TAKEN TO BERM END)

~~CROSS-SECTIONAL AREA OF MIDDLE RAMP:~~



~~AREA = ½ (2.91')(44') = 64.0 ft²~~

~~RAMP WIDTH = 8'6" = 8.5 ft~~

~~VOLUME = 64.0 ft² × 8.5 ft = 544 ft³~~

~~SUMP VOLUME = 3.3' × (498.31 - 496.2) = 18.7 ft³~~

~~SECONDARY CONTAINMENT STORAGE VOLUME = 544 + 18.7 = 563 ft³ or [illegible] CAPACITY~~

Client: CERRO SPOUT STEAM PROCESSING FACILITY

Subject: SECONDARY CONTAINMENT VOLUME CALC - PLT Order No. 7167-C

Computed by Date: 9/89 Checked by Date

"F" BUILDING

TRUCK DOCK AREA

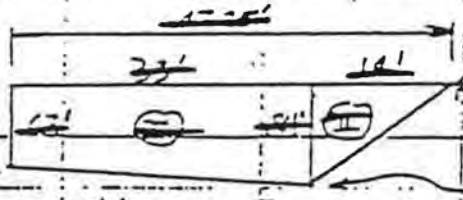
"ELEVATED DOCK"

AVERAGE SLOPE: ~~[illegible]~~ ≈ 0%
(TAKEN TO ZERO)

AVERAGE LENGTH = ~~[illegible]~~ 45.58'

WIDTH = ~~3' 6"~~ 29'10" ~~29.8~~ 29.8'

~~CALC SECTION AREA OF ELEVATED DOCK FOR~~
~~RISE TO CARGO DOOR AREA~~



~~(500.71 + 500.52)/2 = 500.62~~

VOLUME (I) = ~~[illegible]~~ = ~~[illegible]~~

45.58' * 29.8' * 0 = 0 ~~[illegible]~~ NO fill

~~VOLUME (II) = 1/2 (0.81)(45)(31') = 1008.9 FT³~~

No berm on East side
— flows to truck bay

~~Σ 924.8 FT³~~
~~912.27~~

SUMP VOLUME = 2' x 2' x (500.52 - 498.77) = 7 FT³

SECONDARY CONTAINMENT STORAGE VOLUME = ~~924.8~~ - 7 = ~~937 FT³~~ or ~~6970 gal~~ CAPACITY
~~912.27~~ ~~6818.82~~
~~917.27~~
71.3

WOOLPERT CONSULTANTS

Client: CECOS Spring Grove Processing Facility

Subject: Secondary Containment Volume Calcs-Peel Order No. 1747-01

Computed by: Date: 9/89 Checked by: Date:

Building

Truck Dock Area

TO BE ELIMINATED AT TIME OF North Dock INSTALLATION

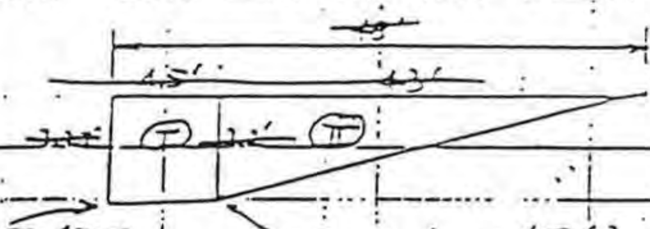
~~Covered Truck Bay~~

~~Average Slope (Berm end to sump) = (501.13 − 496.05)/2 / 43' = 499.63 = 0.075 ≈ 7.5%~~

~~Average Ramp Width = (15' + 20')/2 = 17.5'~~

~~Average Ramp Length = 45'~~

~~Cross-Sectional Area @ Middle of Covered Truck Bay From Berm To Covered Dock Area:~~



~~Volume I = ((3.2 + 3.2)/2)(4.5)(15') = 216.4 ft³~~

~~Volume II = ½(3.2')(43')(17.5') = 1204.0 ft³~~

~~Sump Volume: 2' × 2' × (499.63 − 496.12) = 7.6 ft³~~

~~Σ = 1430 ft³~~

~~Secondary Containment Storage~~ = ~~1430 ft³ or 10700 gal Capacity~~

PROJECT CONCEPTS

CONT: CROSS SPRING GROVE PROCESSING FACILITY

SUBJ: SECONDARY CONTAINMENT VOLUME CALC - POL ORDER NO 17167-C

COMPUTED BY _____ DATE: 9/89 CHECKED BY _____ DATE _____

"BUILDING"

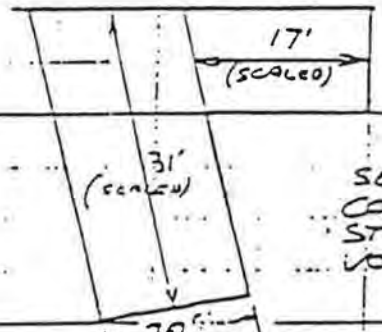
INSIDE BUILDING

FLOOR ASSUMED FLAT @ ELEV 592.99 ; CURB HEIGHT = 6"

CONTAINMENT AREA I

SECONDARY CONTAINMENT STORAGE VOLUME = (8'-11") × (10'-9") × (6") = ~~57.0~~ 47.93 FT³ OR ~~425~~ 358.5 gal CAPACITY

CONTAINMENT AREA II



SECONDARY CONTAINMENT STORAGE VOLUME = {[(17') × (8'-11")] + [(31') × (10')]} × 6"

= 231 FT³ OR 1730 gal CAPACITY

CONTAINMENT AREA III

SECONDARY CONTAINMENT STORAGE VOLUME = (18'-8") × (10') × 6" = 93 FT³ OR 696 gal CAPACITY

CONTAINMENT AREA IV

SECONDARY CONTAINMENT STORAGE VOLUME = (79'-6") × (22') × 6" = 874 FT³ OR 6540 gal CAPACITY

TOTAL VOLUME = 8390 GAL

Waste Water Treatment Area

Total Available Containment

Area is rectangular in shape with sidewalls
average dimensions are 59'11" x 37'10.5" x 2'.5"

59.917ft x 37.875ft x 2.042 ft

$= 4634.0257\ ft^3$

$\approx 4634\ ft^3$

$4634\ ft^3 \times 7.48052 =$ **34,664.73 gallons**

Reduction in Available Containment

flat bottom tank

circumference $= 2\pi r = 48'8" = 48.67$

$r = 7.746$ ft

area $= \pi r^2 = \pi(7.746)^2$

$= 188.5\ ft^2$

volume = area x vertical height affecting containment:

$22.09\ ft^3 \times 7.48052 = 165.25$ gallons

2 pumps each take up ∠ 5 gallons each

$5\ gal \times 2 =$ 10 gallons

Summary

Total Useable Secondary Containment

(34,664.73 gallons) = (2,878.88 gallons) − (63.37 gallons) −

(9.63372 gallons) = (165.25 gallons) − (10 gallons)

= 31,537.5 gallons

Largest Container = 31,537 gallons

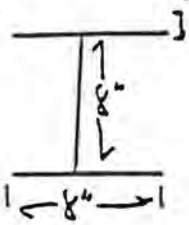
Total Containers (assuming 55 gallon in size) $= \left(\frac{31,537}{109}\right) \div 55$

$= 573.4$

$384.85\ ft^3 \times 7.48052 = \boxed{2{,}878.88 \text{ gallons}}$

Steel support structures for core bottom tanks

Horizontal



$3 \times 8" \times \tfrac{1}{2}" = 12\ in^2$

$= .083328\ ft^2$

$10.167\ ft \text{ linear run} \times .083328\ ft^2 = .847168\ ft^3$

$2 \text{ per tank} \times 5 \text{ tanks} \times .847168\ ft^3 = 8.47168\ ft^3$

$8.47168\ ft^3 \times 7.48052 = \boxed{63.37 \text{ gallons}}$

di... same dimension as horizontal

4 supports/tank x 5 tanks x vertical run 1.292ft x .083328ft

$= 2.1532\ ft^3$

$2.1532\ ft^3 \times 7.48052 = \boxed{9.63372 \text{ gallons}}$

Pipe and pumps

estimate 200 linear feet w/ .375ft outside diameter pipe

$\text{area} = \pi r^2 = \pi (.1875)^2 = .11045\ ft^2$

APPENDIX B

RCRA Facility Inspection Plan

CONTAINER STORAGE AREA
DAILY FACILITY INSPECTION SHEET

Spring Grove Resource Recovery

FormCode SGCMPFRM12

Full Name:		**Date:**	1/14/2008
Location:	10 Day Pad	**Military Time:**	

Instructions: Inspections must be conducted daily when the facility is in operation. Note condition of inspection items. If item does not apply to a storage area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

INSPECTION ITEM	PASS	FAIL	N/A	REASON FOR FAILURE	WORK TICKET STAT
Container Placement and Stacking	◉	○	○		
Sealing of Containers	◉	○	○		
Labeling of Containers	◉	○	○		
Containers	◉	○	○		
lets	◉	○	○		
ndoors area)	◉	○	○		
ndation	◉	○	○		
Berm	◉	○	○		
Debris and h	◉	○	○		
Warning Signs	◉	○	○		

Aisle Space	◉	○	○		
Loading and Unloading Areas	◉	○	○		
Sumps	◉	○	○		
On-Demand Work Ticket (please describe reason below)					
Select Overall Assessment of Inspection Results	Pass				

Submit

Supervisor's Signature _____

CleanHarbors
ENVIRONMENTAL SERVICES

Spring Grove Resource Recovery

TANK SYSTEMS
DAILY FACILITY INSPECTION SHEET

FormCode SGCMPFRM02

Full Name:		**Date:**	1/14/2008
Location:	TANK Farm	**Time:**	

Instructions: Inspections must be conducted daily. Note condition of inspection items. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

ITEM	PASS	FAIL	REASON FOR FAILURE	WORK TICKET STATUS
Tanks	●	○		
Pipes	●	○		
Valves	●	○		
Fittings	●	○		
Liquid Level	●	○		
Secondary Containment System	●	○		
Sump	●	○		
On-Demand Work Ticket (please describe reason below)				

Select Overall Assessment of Inspection Results	Pass

Submit

Supervisor's Signature _____

SECURITY AND EMERGENCY EQUIPMENT MONTHLY FACILITY INSPECTION SHEET

Spring Grove Resource Recovery

FormCode

Full Name:	Jeff LineBacK	**Date:**	10/1/2008
Location:	Boneyard	**Military Time:**	8:00:00 AM

Instructions: Inspections must be conducted monthly when the facility is in operation. Note condition of inspection items. If item does not apply to a storage area, mark N/A. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

INSPECTION ITEM	PASS	FAIL	N/A	REASON FOR FAILURE	WORK TICKET STAT
Portable Fire Extinguishers	●	○	○		
Fire Suppression on Shredder	●	○	○		
Self-Contained Breathing Apparatus	●	○	○		
Respirators and Cartridges	●	○	○		
Industrial Absorbents	●	○	○		
Shovels	●	○	○		
55-Gallon Drums	●	○	○		
First Aid Equipment and Supplies	●	○	○		
Protective Clothing (overalls, gloves, boots)	●	○	○		
Pumps, Hoses, Other Equipment	●	○	○		

On-Demand Work Ticket (please describe reason below)		
Select Overall Assessment of Inspection Results	Pass	

Submit

Supervisor's Signature _____

CleanHarbors
ENVIRONMENTAL SERVICES®

SECURITY AND EMERGENCY EQUIPMENT
WEEKLY FACILITY INSPECTION SHEET

Spring Grove Resource Recovery

FormCode SGCMPFRM14

Full Name:		**Date:**	1/14/2008
Location:	Pegasus Room	**Military Time:**	

Instructions: Inspections must be conducted weekly when the facility is in operation. Note condition of inspection items. All unsatisfactory findings must be explained below. Include any repairs, changes or other remedial actions required or performed.

INSPECTION ITEM	YES	NO	REASON FOR FAILURE	WORK TICKET STATUS
Fence	●	○		
Gates and Locks	●	○		
Warning Signs on Gates	●	○		
Emergency Shower and Eyewash	●	○		
On-Demand Work Ticket (please describe reason below)				

Select Overall Assessment of Inspection Results	Pass

Submit

Supervisor's Signature _____

SPRING GROVE I .SOURCE RECOVERY
SPRING GROVE FACILITY
INSPECTION SHEET

Inspector's name_____ Date_____ Time_____
Type of Inspection: ____Workday ____Weekly ____Monthly ____Other_____

Equipment Item	Types of Potential Problems	Frequency	Status (See Notes)	Observations/ Comments	Action Taken
** SECURITY AND EMERGENCY EQUIPMENT**					
Doors and Alarms	Unsecured, Unlocked	Each Workday	_____	_____	_____
Fence	Corrosion, damage to chain-link fence	Weekly	_____	_____	_____
Gates and Locks	Corrosion, damage to chain-link fence; sticking or corroding gate	Weekly	_____	_____	_____
Warning signs on gates	Missing or illegible	Weekly	_____	_____	_____
Sprinkler system and Foam System	Water pressure, leaking, structural damage	Annually	_____	_____	_____
Portable fire extinguish-ers	Needs recharging	Monthly/ after each use	_____	_____	_____
Fire Suppression on shredder	Needs recharging	Monthly/ after ea. use	_____	_____	_____
Self-Contained Breathing Apparatus	Air quantity in reserves, air delivery system	Monthly/ After each use	_____	_____	_____
Respirators and Cartridges	Out of stock	Monthly/ After each use	_____	_____	_____
Industrial Absorbents and Booms	Out of stock	Monthly/ After each use	_____	_____	_____
Shovels	Missing or damaged	Monthly/ After	_____	_____	_____
55-gallon drums	Corrosion, structural damage	Monthly	_____	_____	_____

SPRING GROVE RESC JRCE RECOVERY
SPRING GROVE FACILITY
INSPECTION SHEET

Inspector's name_____ Date_____ Time_____
Type of Inspection: ____Workday ____Weekly ____Monthly ____Other_____

Equipment Item	Types of Potential Problems	Frequency	Status (See Notes)	Observations/ Comments	Action Taken
Emergency shower and eyewash	Water supply, leaking, not draining	Weekly			
First aid equipment and supplies	Items out of stock, inoperative	Monthly/ after each use			
Protective Clothing (Overalls, gloves, boots)	Damaged, out of stock, dirty	Monthly/ after each use			
Telephone and PA system	Not working	Each Workday			
Pumps, hoses, other equipment	Not clean, improperly stored, cracks, missing fittings	Monthly/ after each use			
Contingency phone list	Not posted at lab, processing and receptionist's phone	Each workday			
** TANK SYSTEMS**			Tank Status (See Notes) TK-5 TK-6 TK-7 TK-8 TK-9 TK-10 TK-11		
Tanks	Corrosion, leaking, deterioration	Daily			
Pipes	Corrosion, leaking, deterioration	Daily			
Valves	Corrosion, leaking, deterioration	Daily			
Fittings	Corrosion, leaking, deterioration	Daily			
Liquid Level	Above operating level	Daily			
Secondary containment system	Cracks, evidence of leaks Coating Integrity Color Change	Daily			
Sump	Water in sump	Daily			
Overfill alarm	Inoperable, power failure	Monthly			

SPRING GROVE ..ESOURCE RECOVERY
SPRING GROVE FACILITY
INSPECTION SHEET

Inspector's name_____ Date_____ Time_____ __ __
Type of Inspection: ____Workday ____Weekly ____Monthly ____Other_____ __ __

Equipment Item	Types of Potential Problems	Frequency	Status (See Notes)	Observations/ Comments	Action Taken
			Tank Status (See Notes)		
			TK-5 TK-6 TK-7 TK-8 TK-9 TK-10 TK-11		
Internal	Pitting or corrosion	Annually	__ __ __ __ __ __ __	_____	_____
CONTAINER STORAGE AREAS			Storage Status (See Notes)		
			BD BF TB FP BH TL HB		
Container placement and stacking	Height of stacks, location of and incompatible wastes, ignitable liquids within 50 feet of property line, wastes outside berm.	Each Workday	__ __ __ __ __ __ __	_____	_____
Sealing of containers	Open lids	Each Workday	__ __ __ __ __ __ __	_____	_____
Labeling of containers	Improper identification, storage data or product code missing	Each Workday	__ __ __ __ __ __ __	_____	_____
Containers	Corrosion, leakage, structural defects	Each Workday	__ __ __ __ __ __ __	_____	_____
Pallets	Damaged (e.g., broken wood, warping)	Each Workday	__ __ __ __ __ __ __	_____	_____
Doors (indoor area)	Corrosion or damage	Each Workday	__ __ __ __ __ __ __	_____	_____
Base or foundation	Cracks, uneven settlement, erosion, wet spots, spills or leakage, Coating Integrity Color Change	Each Workday	__ __ __ __ __ __ __	_____	_____
Berms	Cracks, Deterioration, Coating Integrity Color Change	Each Workday	__ __ __ __ __ __ __	_____	_____
Debris and Refuse	Hazard	Each Workday	__ __ __ __ __ __ __	_____	_____
Warning Signs	Damaged, Missing	Each Workday	__ __ __ __ __ __ __	_____	_____
Aisle Space	2 feet between double rows of drums	Each Workday	__ __ __ __ __ __ __	_____	_____

SPRING GROVE RESOURCE RECOVERY
SPRING GROVE FACILITY
INSPECTION SHEET

Inspector's name_____ Date_____ Time_____
Type of Inspection: ____Workday ____Weekly ____Monthly ____Other_____

Equipment Item	Types of Potential Problems	Frequency	Status (See Notes)	Observations/ Comments	Action Taken
			Storage Status (See Notes) BD BF TB FP BH TL HB		
Loading and Unloading areas	Spillage, hazards	Daily when in use	___ ___ ___ ___ ___ ___ ___	_____	_____
Sumps	Water in Sumps	Each Workday	___ ___ ___ ___ ___ ___ ___	_____	_____
MISCELLANEOUS EQUIPMENT					
Shredder	Ova Air Monitoring	Monthly/ Annually	_____	_____	_____

Notes:

BD -- Building D Pad
BF -- Building F
TB -- Truck Bays
FP -- Flammable Pad
BH -- Building H
TL -- Tanker Loading/Unloading Pad
HB -- High Bay

A -- Acceptable
U -- Unacceptable
NA -- Not Applicable

TK-5 -- 7,000 Gallon Tank
TK-6 -- 7,000 Gallon Tank
TK-7 -- 15,000 Gallon Tank
TK-8 -- 15,000 Gallon Tank
TK-9 -- 15,000 Gallon Tank
TK-10 -- 15,000 Gallon Tank
TK-11 -- 1,000 Gallon Dispersion Tank

Appendix 12

Appendix 12

December 6, 2000

HEALTH AND SAFETY PLAN
TABLE OF CONTENTS

LIST OF TABLES, AND APPENDICES

1.0 PERSONNEL TRAINING PROGRAM

Spring Grove Resource Recovery, Inc. (SGRR) has prepared a written personnel training plan designed to familiarize personnel with the properties and hazardous nature of the PCB waste stored and handled at the facility, with the procedures to operate and maintain the facility in a safe manner, and with the procedures and equipment to be used in the event of an emergency at the facility.

The purpose of the Training Plan is to promote efficient and safe performance of all facility operations, to ensure rapid and effective response to emergency events, and to protect SGRR employees, the environment, and the public. It will be SGRR's policy to emphasize accident prevention through training employees in the use of safe management practices.

SGRR's Training Program combines pre-employment Introductory Training in a classroom setting with facility-specific instruction and on-the-job training. Training subjects are reinforced through Continuing Training conducted on a periodic (e.g., weekly, monthly, annual) or as-needed annual basis. The content of the entire training program is described in Section 1.2, below. All training sessions are prepared and conducted by qualified supervisors, managers, and in-house personnel experienced in PCB waste management practices, and facility operations and procedures.

1.1 Job Title/Job Description

The type and degree of training provided to an individual is directly related to the individual's work responsibilities and potential for contact with hazardous wastes. The job functions at SGRR, along with Employee Group Numbers assigned by the Corporate Training Manager, include the following:

Job Title	Employee Group Number
General Manager	3.1
Facility Compliance Manager	3.2
Operations Manager	3.1
Senior Plant Operator	3.1
Operator Trainee	3.1
Maintenance I	3.2

Job Title	Employee Group Number
Maintenance II	3.2
Chief Chemist - Plant	3.1
Chemist	3.1
Laboratory Technician	3.1
Truck Clerk/Sample Taker	3.1
Sales Representative	1.0
Sales Assistant - Plant	1.0
Clerical	1.0
Secretary/Bookkeeper - Plant	1.0
Office Administrator	1.0

The Employee Group Number assigned by the Corporate Training Manager to the various job titles identifies the particular training curriculum for each job position at the facility. The program is designed to achieve an overall level of training, which meets the particular needs of each job position at the facility. The various training programs are described in Section 1.2, below.

Detailed job descriptions for each job title are included in **Appendix H.I.** SGRR may modify, delete or add job titles and/or descriptions without prior notification to OEPA in the event a job description changes, a job description is found to be obsolete, or a new job descriptions are created. In the event a job title or description is modified, deleted or added, SGRR will assign an Employee Group Number to that title and/or description and ensure that that employee is trained in accordance with the requirements of their Employee Group Number.

A list of personnel employed at SGRR at the time of the submittal of the Part B renewal application (December 1998) is included in **Appendix H.II.** The list of employees in **Appendix H.II** may change during the life of the TSCA permit. SGRR does not need to notify EPA any time there is a change in the list of employees found in **Appendix H.II.** The list in does not prohibit SGRR from hiring new employees or terminating employees without notification to EPA.

Other Personnel may be authorized to work in the plant (e.g. other Clean Harbors employees) upon completion of training relative to the responsibilities they are to assume.

1.2 Training Content, Frequency, and Techniques

The content of the SGRR's Training Program is listed in **Table H-1.** As discussed in Section 1.1 above, employees receive varying level of training based on their job title, job description, and Employee Group Number. Administrative and other support personnel assigned to Employee Group Number 1.0 (i.e., those individuals who are not directly involved in PCB waste handling activities) receive a reduced level of training which includes Company Orientation, Right-to-Know/Hazard Communication, Contingency, and Nature and Properties of Hazardous Waste. All other employees at SGRR are assigned to Employee Group Number 3.1 or 3.2 and receive instruction on the training topics listed in Table H-1. A summary of the training topics relevant to each Employee Group Number is presented in
Table H-2. Training is reviewed on an annual basis.

Training is accomplished through a combination of classroom instruction, on-the-job training, mock exercises, or other training techniques appropriate for each topic.

1.3 Training Director

Richard Griffiths directs the Clean Harbors Corporate Training Program. Mr. Griffith has several years experience in PCB waste facility management operations/compliance and commercial environmental training

1.4 Relevance of Training to Job Position

Each new employee that is involved in hazardous waste management activities is required to attend the pre-employment Introductory Training program. New employees also receive Facility-Specific training, which is tailored to meet their specific job duties and responsibilities. No employee may work without supervision without having completed the Introductory Training program. All employees must complete the Facility-Specific Training program within six months of hire. Continuing Training in the form of an annual review session will be mandatory for all facility personnel. The annual review will focus on the topics covered as part of the employee's introductory training. Other training in the form of weekly or monthly safety meetings and compliance updates will be conducted on an as-needed basis at the discretion of the General Manager, the Facility Compliance Manager and the Corporate Training Manager. The purpose of the periodic training sessions will be to review and reinforce previous training topics, and to instruct employees on new techniques, procedures, regulations, or other relevant topics.

In addition, optional Continuing Training sessions on topics such as such as cardiopulmonary resuscitation (CPR) will be given periodically on an as-needed basis at the discretion of the General Manager, the Facility Compliance Manager and the Corporate Training Manager. Instructors may be drawn from in-house expertise or a qualified outside contractor, such as a certified CPR instructor. Training may use classroom, on-the-job, drills and/or other techniques as appropriate for the particular training topic. Courses may be conducted either on-site or off-site.

1.5 Training for Emergency Response

In an effort to ensure that facility personnel are able to respond effectively to emergencies at the facility, SGRR has structured the Introductory Training Program to include a detailed review of the facility's Contingency Plan. Contingency Plan training is required for all facility employees regardless of Employee Group Number. Refer to Item B.2 of Table H-1 for a complete listing of the topics discussed as part of the emergency response training session.

2.0 IMPLEMENTATION OF THE TRAINING PROGRAM

Each new employee will complete the required Site-Specific Training within six months of hire. No new employee involved in PCB waste handling operations, or employee transferred to a new position at the facility, will be allowed to work without supervision until the employee completes the Site-Specific training program.

All training sessions will be documented, and all training records will maintained on-site by the Facility Compliance Manager. Attendance at individual training sessions is documented through the use of a standardized Training Documentation Form. Upon completion of the training session, both the attendee and the trainer are required to sign and date the form. A copy of each completed the Training Documentation Form is maintained in the individual's training file maintained by the Facility Compliance Manager; the original copy is forwarded to the Clean Harbors Corporate Training Department for recordkeeping and tracking purposes. A copy of the Training Documentation Form is included in **Appendix H-III.**

Clean Harbors' Corporate Training Department also maintains comprehensive employee training records in a computer data base system. The database includes the employee's name, date of hire, job title, employee category, training topics, and dates attended. Annual update of training is ensured through use of a monthly report which shows which employees must be scheduled for training or training reviews within 30, 60 and 90 days from the date of the report. This monthly reporting system assists the Corporate Training Department in scheduling sessions to meet the appropriate retraining requirements for all employees.

Training records for each employee will be retained at the facility for a minimum of three (3) years after the date of employee termination. In cases where an employee transfers to another Clean Harbors facility, the employee's file, including training records, will be transferred to the other facility.

Table H-1

Training Program Outline

A. Introductory Training Topics

1. Clean Harbors Orientation/Compliance Awareness
   - Company policies and procedures
   - Functions of facility
   - Relationship to other Clean Harbors companies
   - The regulated environment

2. Worker Right to Know/Hazard Communication Training
   - Federal and state laws
   - Basic chemical properties and handling procedures

3. Health and Safety Training/Awareness
   - PCB handling and use of protective gear
   - Rational for use of protective gear
   - Procedures to prevent hazards and exposure
   - Personal hygiene
   - Minimization of exposure to potential contamination

4. Personnel Protective Equipment
   - Use and care of safety and emergency equipment
   - Respirator training including use and care of respirator and personal respirator fit test

5. Dot/PCB Labeling and Manifesting
   - Overview of environmental regulations
   - PCB Waste Manifesting
   - DOT terminology
   - EPA waste codes
   - Labeling and placarding
   - Use of DOT emergency response guide
   - Requirements of Clean Harbors Licenses

B. Facility Specific Training

1. SGRR licenses and approvals

2. Contingency Plan Training
   - Use of communication and alarm systems
   - Emergency coordinators
   - Notification requirements
   - Response procedures in the event of injury, fire, explosions and/or spills
   - Response to potential groundwater and/or surface water contamination incidents
   - Shutdown of operations
   - Location and use of emergency monitoring equipment
   - Automatic and manual waste feed shutdown systems
   - Evacuation and decontamination procedures

3. Properties and Nature of PCB waste
    - Properties and hazards of PCB waste

4. Waste Analysis Plan
    - Sampling Methods
    - Acceptance Criteria

5. Inspection Plan
    - Procedures for using, inspecting, repairing and replacing facility emergency monitoring equipment

6. Standard Operating Procedures
    - Tanker loading/unloading procedures
    - Transfer pump operation and shutdown
    - Use of PCB waste storage and transfer equipment
    - Container handling procedures
    - Waste treatment system operations
    - Operation of Dispersion System

7. Firefighting Training
    - Fire hazard caused by spills. Leaks and other releases of PCB liquids and vapors
    - Containment of contaminated water and runoff
    - Drum fires
    - Bulk container fires
    - Location and use of pull boxes
    - Individual roles and duties during an emergency
    - Incipient stage of fire fighting
    - Chemistry of fire
    - Water as a protective device
    - Use of emergency equipment
    - Use and limitations of portable fire extinguishers
    - Nature and scope of incipient fire fighting

8. Decontamination Procedures
    - EPA protection levels
    - Establishing the decontamination corridor (access control)
    - Types of specialized procedures, techniques for PCBs, cyanides, acids, caustics, chlorinated solvents
    - Choice and use of decontamination solvents
    - Soil and groundwater contamination prevention

C. Other Training Topics

1. On an as needed basis, various topics such as:
   - CPR (given by certified instructors)
   - PCB properties
   - Driver training
   - Forklift training
   - Vacuum container theory and practice
   - PCB handling
   - Confined space entry procedures
   - Respirator protection and fit tests
   - Managers/ compliance meetings

D. Continuing Training Program

1. Special Training Updates
   - Training sessions given on as needed basis to provide employees with new information and/or new skills whenever there are changes in the facility, facility procedures or the employee's job assignment.

2. Annual Training Review
   - Annual Review of all required training to reinforce each employee's previous training experiences in the general and specific training programs and to promote employee safety and level of awareness

Table H-2

Topics	Employee Group Number
1. General	
Clean Harbors Company Orientation	1.0, 3.1, 3.2
Hazard Communication/ Right to Know	1.0, 3.1, 3.2
Health and Safety Training/Awareness	1.0, 3.1, 3.2
Personnel Protective Equipment	3.1, 3.2
DOT/PCB Labeling and Manifesting	3.1, 3.2
2. Site Specific	
Contingency and SPCC plans	1.0, 3.1, 3.2
Nature and properties of PCB waste	1.0, 3.1, 3.2
SGRR licenses and approvals	3.1, 3.2
Waste Analysis Plan	3.1, 3.2
Inspection Plan	3.1, 3.2
Waste Water Treatment Process	3.1, 3.2
Standard Operating Procedures	3.1, 3.2
Fire fighting training	3.1, 3.2
Decontamination	3.1, 3.2

Table H-3
Fire Suppression and Fighting Equipment

I. Fire Extinguishers

Number	Location	Weight	Type
1	Upstairs office	10 lbs.	Halon 1211
2	Furnace Room	5 lbs.	ABC Dry
3	Accounting	5 lbs.	Halon 1211
4	Lunch	20 lbs.	ABC Dry
5	Lab	10 lbs.	Halon 1211
6	Shower/Lockerroom	20 lbs.	ABC Dry
7	Lab	10 lbs.	Halon 1211
8	Lab	10 lbs.	ABC Dry
9	Main Office	10 lbs	Halon 1211
10	Main Office	10 lbs.	Halon 1211
11	Tool Room	5 lbs.	ABC Dry
12	Maintenance	20 lbs.	ABC Dry
13	Garage	20 lbs	ABC Dry
14	Garage	20 lbs.	ABC Dry
15	High Bay	30 lbs	Class D
16	High Bay	20 lbs.	ABC Dry
17	High Bay	20 lbs.	ABC Dry
18	High Bay	20 lbs.	ABC Dry
19	Boiler room	20 lbs.	ABC Dry
20	Waste water	20 lbs.	ABC Dry
21	Building E	10 lbs.	ABC Dry
22	Building E	20 lbs.	ABC Dry
23	Building F	30 lbs.	Class D
24	Building F	20 lbs.	ABC Dry
25	Building F	20 lbs.	ABC Dry
26	Building F	20 lbs.	ABC Dry
27	Flammables Pad	10 lbs.	ABC Dry
28	Flammables Pad	20 lbs.	ABC Dry
29	Building H	20 lbs.	ABC Dry
30	Building L	20 lbs.	ABC Dry
1-F	High Bay	33 gallons	AFFF Mobile
2-F	High Bay	33 gallons	AFFF Mobile
3-F	Spill Supply	33 gallons	AFFF Mobile
4-F	Building F	33 gallons	AFFF Mobile
1-P	High Bay	50 lbs.	ABC Dry
2-P	Tool Cage (on welder)	5 lbs.	ABC Dry
3-P	Tool Cage	5 lbs.	ABC Dry
4-P	Building F	30 lbs.	Class D
N/A	Forklifts	2.5 lbs.	ABC Dry
N/A	Bobcats	2.5 lbs.	ABC Dry

Fire Suppression and Fighting Equipment

II. Sprinkler System

Location	Capability
Throughout Building	165 Degree Fahrenheit Heads

III. Foam System

Location	Capability
F-Building	10,000 cubic foot coverage

Table H-4

Personnel Protective Equipment

Description	Location	Capability
Air Purifying Full-Face Respirator Store room	Respiratory Protection	
Air Purifying Half-Face Cartridge Store room Protection	Respiratory	
Self-Contained Breathing Apparatus: Scott Pressure Pak II Area	Spill Control Protection	Respiratory
Spare Air Cylinders, 45 cubic feet Spill Control	Spare for Scott SCBA Area	
Respirator Cartridges:		
Organic Vapor/Acid Gases	Store Room	For Respirators
Organic Vapor, Dusts, Mists Store Room	For Respirators	
Ammonia, Methyl Amine	Store Room	For Respirators
Gloves (cotton, vinyl, neoprene PVC)	Store Room	Hand Protection
Disposable Cover All	Store Room	Splash Protection
Fully Encapsulated Suits	Store Room with SCBA	Complete Protection
Aprons	Store Room	Splash Protection
Goggle, Chemical Splash	Store Room	Eye Protection

HEALTH/SAFETY EQUIPMENT INSPECTION SHEET

Inspector's name_____ Date_____ Time_____
Type of Inspection: ____Workday ____Weekly ____Monthly ____Other_____

Equipment Item	Types of Potential Problems	Frequency	Status (See Notes)	Observations/ Comments	Action Taken
**** SECURITY AND EMERGENCY EQUIPMENT****					
Doors and Alarms	Unsecured, Unlocked	Each Workday	_____	_____	_____
Fence	Corrosion, damage to chain-link fence	Weekly	_____	_____	_____
Gates and Locks	Corrosion, damage to chain-link fence; sticking or corroding gate	Weekly	_____	_____	_____
Warning signs on gates	Missing or illegible	Weekly	_____	_____	_____
Sprinkler system and Foam System	Water pressure, leaking, structural damage	Annually	_____	_____	_____
Portable fire extinguish-ers	Needs recharging	Monthly/ after each use	_____	_____	_____
Fire Suppression on shredder	Needs recharging	Monthly/ after ea. use	_____	_____	_____
Self-Contained Breathing Apparatus	Air quantity in reserves, air delivery system	Monthly/ After each use	_____	_____	_____
Respirators and Cartridges	Out of stock	Monthly/ After each use	_____	_____	_____
Industrial Absorbents and Booms	Out of stock	Monthly/ After each use	_____	_____	_____
Shovels	Missing or damaged	Monthly/ After	_____	_____	_____
55-gallon drums	Corrosion, structural damage	Monthly	_____	_____	_____

HEALTH/SAFETY EQUIPMENT INSPECTION SHEET

Inspector's name_____ Date_____ Time_____
Type of Inspection: _____Workday _____Weekly _____Monthly _____Other_____

Equipment Item	Types of Potential Problems	Frequency	Status (See Notes)	Observations/ Comments	Action Taken
Emergency shower and eyewash	Water supply, leaking, not draining	Weekly	_____	_____	_____
First aid equipment and supplies	Items out of stock, inoperative	Monthly/ after each use	_____	_____	_____
Protective Clothing (Overalls, gloves, boots)	Damaged, out of stock, dirty	Monthly/ after each use	_____	_____	_____
Telephone and PA system	Not working	Each Workday	_____	_____	_____
Pumps, hoses, other equipment	Not clean, improperly stored, cracks, missing fittings	Monthly/ after each use	_____	_____	_____
Contingency phone list	Not posted at lab, processing and receptionist's phone	Each workday	_____	_____	_____

Figure H-1

B & O RAILROAD

ACTIVE RIGHT OF WAY

CHICKERING AVE.

FENCE

EQUIPMENT PARKING

RCRA FENCE

EXISTING ROLL-OFF PAD (90 DAY ACCUMULATION)

ASPHALT AND GRAVEL

NITROGEN STORAGE PAD

RCRA FENCE

GATE

MODULAR OPERATIONS CENTER

EMPLOYEE PARKING (GRAVEL)

ELECTRICAL BUILDING

ELECTRIC TRANSFORMERS

FLAMMABLES PROCESSING (BUILDING H)

FLAMMABLES PAD

DOCK

FUELS BLENDING ROOM

TANKER (LOAD/UNLOAD)

TANK (TYP.)

GENERAL PROCESSING (BUILDING F)

LOCKERS / SHOWERS

OFFICES

GRAVEL

TANK FARM

(BUILDING M)

FENCE

GATE

GATE

DOCK

O&M OFFICE

WASTEWATER TREATMENT (BUILDING D)

BOILER ROOM

MAINTENANCE (BUILDING E)

FENCE

HIGH BAY (BUILDING B)

VEHICLE STORAGE AREA (BUILDING B)

"C"

OFFICE

LAB

LOCKER ROOM

LAB

FIRE WALL

MAIN GATE

OFFICES

FENCE

SWALLEN'S

SWALLEN'S

GRAVEL

RCRA FENCE

ENTRANCE

SPRING GROVE AVENUE

LEGEND

PROPERTY LINE

ROADWAY CENTER

RCRA PLANT BOUNDARY FENCE

PERSONNEL DOOR

OVERHEAD DOOR

EVACUATION ROUTE

REDUCED COPY
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FIGURE G.2

A	RCRA PART B SUBMITTAL				

Clean Harbors
ENVIRONMENTAL SERVICES, INC.

SPRING GROVE RESOURCE RECOVERY
4679 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

Figure H-2

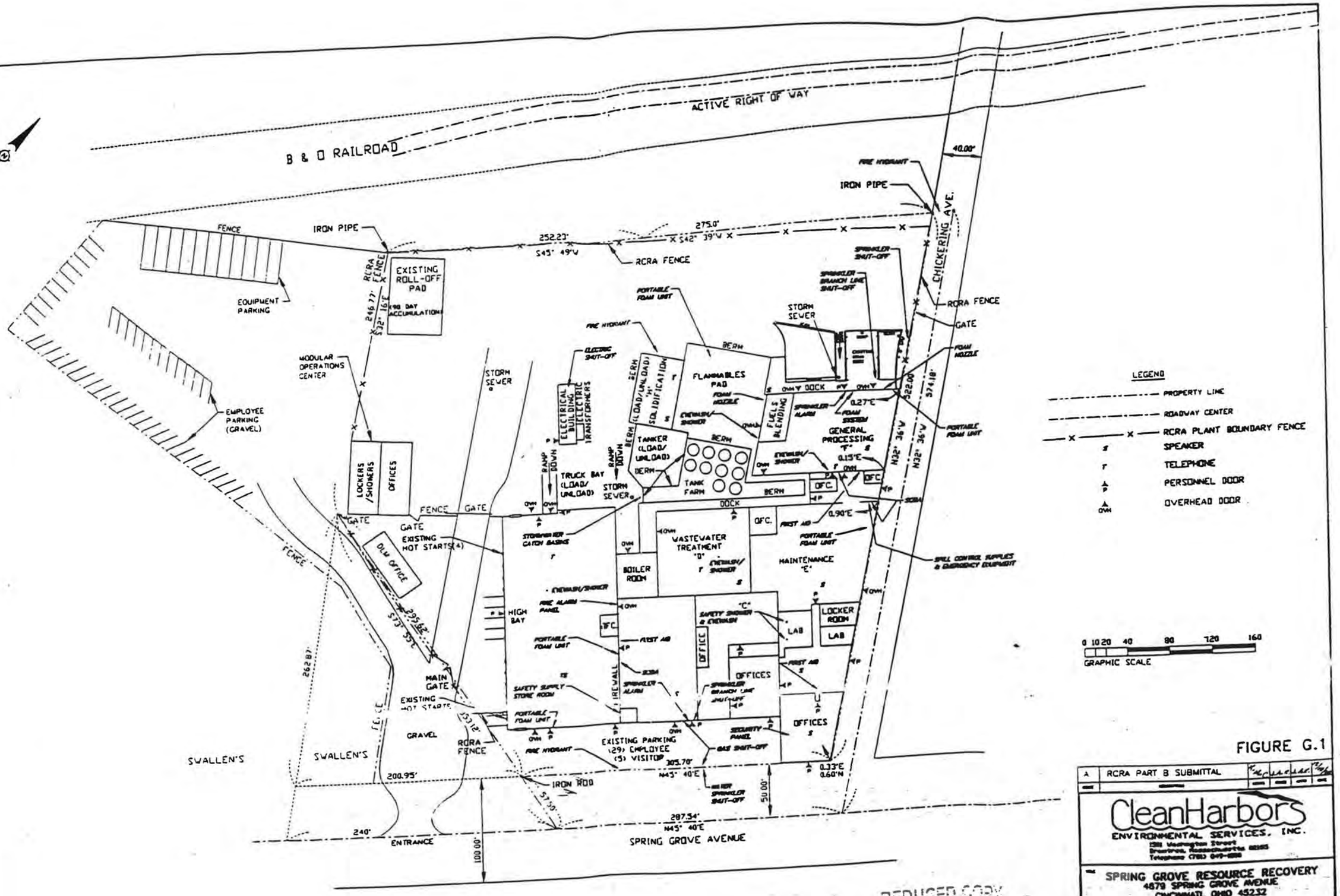


FIGURE G.1

A	RCRA PART B SUBMITTAL				

CleanHarbors
ENVIRONMENTAL SERVICES, INC.

SPRING GROVE RESOURCE RECOVERY
4679 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

CONTINGENCY PLAN MAP

APPENDIX H-I

EXAMPLE JOB DESCRIPTIONS

JOB DESCRIPTION

Vice President/General Manager (3.1)

Education -Graduation from an accredited college or university with a degree in science or engineering.

Experience -Several years industrial experience with at least one year being devoted to work involving the treatment of hazardous industrial wastes.

Duties -Responsible for the day to day operation of the plant which will include the following:

1. Hiring, training, managing, evaluation of personnel.
2. Maintaining quality control in all elements of the company business including air, effluent discharge, and sludge as specified by various local, state and federal regulations.
3. Developing customers who will regularly use Clean Harbors service.
4. Communicating with the corporate headquarters any time an unusual problem develops which might require the assistance of the administrative, engineering, marketing or financial staff.
5. Reporting as required and whatever is required by outside regulatory agencies.
6. Maintaining relations with the community, local business, and the regulatory agencies such that all parties concerned view Clean Harbors as a responsible corporation doing a professional job in the field of waste water treatment and pollution abatement.
7. Generating and maintaining revenues, control of costs and resulting profit based on mutually agreed budgets.

The responsibilities of the plant manager may involve exposure to erials that the EPA classifies as hazardous. However, the Plant anager does not usually come into contact with hazardous material.

JOB DESCRIPTION

Facility Compliance Manager (3.2)

Education - Facility Compliance Manager shall have a degree in Engineering and/or Sciences.

Experience - Minimum of one (1) year in the hazardous waste management/compliance area.

Duties - The Compliance Manager's overall function is to insure that the "day-to-day" regulatory compliance requirements are being met and constantly following up on non-compliance issues discovered during daily inspections and implement action programs to correct the deficiencies:

1. At a minimum, tour the entire facility once in the A.M. and once in the P.M. (High Visibility).

2. Implement the Inspection Plan:

   -- Complete written inspection
   -- Properly file inspection reports
   -- Insure deficiencies that were noted during the inspections are corrected

3. Implement the Personnel Training Plan
   -- Insure Plant Personnel receive the training specified in the Training Plan
   -- Maintain Personnel Training Documents File
   -- Maintain accurate, up-to-date spread sheets

4. Insure that the Plant complies with all applicable regulatory agency's rules and regulations.

5. Insure that the Plant complies with all license, approvals, and permits issued to the facility.

The responsibilities of the compliance manger may involve exposure to materials that the EPA classifies as hazardous. However, the compliance manager does not usually come into contact with hazardous material.

Facility Compliance Manager (Continued)

6. Audit manifest files daily for the following:
   -- When applicable, Generator Landban Certifications are attached to Copy 4
   -- Copy '8' is attached to Copy '3' within 30 days of shipment and a copy of the landban certification is also attached when applicable
   -- There is a manifest in the files for all hazardous waste received and shipped
   -- Manifest discrepancy and/or exception reports

7. Insure deadlines are not missed by using the "Compliance Calendar".

8. Review Compliance Operating Plans monthly, to insure they are up-to-date and are being complied with:

   -- Contingency Plan (i.e., List of Emergency Coordinators)
   -- Inspection Plan
   -- Personnel Training Plan (i.e., Job Titles/ Description, Lists of Employees...etc.)
   -- Closure Plan and Cost Estimate
   -- Security Plan
   -- Waste Analysis Plan
   -- Preparedness and Prevention Plan

9. Submit regulatory permit/license applications as necessary.

10. Health and Safety Representative

11. Landban Compliance
   -- Generator Certification Forms
   -- Generator Demonstration Letters

12. Export Compliance
   -- EPA/Canada Export Notifications
   -- EPA Annual Export Report
   -- Manifest Discrepancy Reports

13. Weekly Status Report to Corporate Facility Compliance Manager (each Wednesday)
   -- Regulatory Activities (correspondence, submittals, inspections...etc.)
   -- Compliance Projects Status
   -- Inspections/Training Compliance Status
   -- Miscellaneous Compliance Issues

JOB DESCRIPTION

Operations Manager (3.1)

Education -Plant Supervisor/Engineer shall have a degree in engineering and or science.

Experience -Several years industrial experience with knowledge of pumps, motors, mechanical and electrical maintenance. At least one year's experience in some phase of waste water treatment.

Duties -Reports to Plant Manager and, under his direction, is responsible for the day to day operation of the plant. His duties shall include the following:

1. Training of plant operating personnel.
2. Transmitting operating instructions to plant personnel so as to maintain smooth plant operation.
3. Providing tools and assistance to those personnel charged with specific duties.
4. Developing and assuring the adherence to a maintenance schedule for all plant operating equipment.
5. Maintaining an adequate stock of spare parts for operating equipment and a supply of tools.
6. Ordering and maintaining an adequate supply of chemicals and other materials required to assure a smooth day to day operation of the plant treatment equipment.
7. Reviewing with the Plant Manager the progress and training of plant operating personnel.

During the course of carrying out plant supervision responsibilities within the plant, the Plant Supervisor/Engineer may come into direct contact with wastes that the EPA classifies as hazardous. However, safety precautions are put into effect and protective equipment utilized in situations where the risk of exposure a hazardous material is high.

JOB DESCRIPTION

Senior Plant Operator (3.1)

Education - Shift Foreman must have successfully completed a high school and/or college education with background and experience in processing hazardous and non-hazardous industrial waste water.

Duties - Reports directly to the Plant Supervisor. Will cooperate and coordinate with Plant Manager, Chief Chemist and Plant Engineer as required.

Requirements - Directly responsible for overseeing the actions of shift personnel according to all rules and regulations in the Employee Handbook. Safety Manuals and requirements assigned by the Plant Supervisor.

- Will be fully aware and capable to enact all emergency procedures for Health and Safety of Plant personnel. All Contingency Plans for accidental environmental release or discharge.

- Required to an responsible for complete and proper maintenance of shift log books and daily record sheets.

- Responsible for proper operation of all waste treatment procedures in the facility according to established procedure or special instructions.

- Responsible for control of the chemical treatment unit and the effluent quality according to pH and suspended solids, within the limits established by the Chief Chemist.

- Required and responsible to maintain clean and safe work area daily. This includes but not limited to Plant, Receiving Area, Tank Farm, Chemical Storage, Trailers, Sample Room, Locker and Lunch Room areas.

- Responsible to provide operators or other shift personnel proper equipment and supplies to complete work.

Senior Plant Operator (continued)

- Responsible for daily attendance records of personnel on shift and to complete paper work for Plant Supervisor approval.

- Responsible for the security of the tool and supply room during hours when Maintenance Supervisor is not on duty.

- "On call" as required.

During the course of carrying out Supervisory duties, the Shift Foreman may come into direct contact with materials the EPA classifies as hazardous. However, safety precautions are put into effect and protective equipment utilized in situations where the risk of exposure to a hazardous material is high.

JOB DESCRIPTION

Operator (3.1)

Education - Successful completion of high school course work.

Experience - At least one year's experience as a Plant Operator in a waste water treatment facility. Additional experience on the maintenance of pumps, motors, mechanical or electrical equipment would be helpful.

Duties - Reports to Plant Supervisor. Duties shall include the following:

1. Operating all transfer pumps within the facility, i.e., waste from holding tanks to chemical treatment unit, treated effluent from discharge tank to sewer.
2. Operating chemical treatment unit.
3. Preparing required chemical solutions for treatment unit.
4. Making required instrumental measurements to assure adequate control of treatment parameters.
5. Operating clarifiers.
6. Operating dewatering filter.
7. Receiving sampling, properly logging waste deliveries when laboratory personnel are not available.
8. Performing minor maintenance on operating equipment to assure smooth plant operation.
9. Inspecting operating equipment, tanks, valves, pipelines for possible sources of waste release into the environment.
10. Maintaining the cleanliness of the operating area during his shift.

Operator (continued)

11. Coordinating the activities of the Plant Operator assigned to his shift in the performance of any of the above listed duties.

During the course of carrying out Operator responsibilities within the plant, the Operator may come into direct contact with wastes that the EPA classifies as hazardous. However, safety precautions are put into effect and protective equipment utilized in situations where the risk of exposure to a hazardous material is high.

JOB DESCRIPTION

Maintenance - I (3.2)

Education -A Clean Harbors Maintenance Foreman must have at least a high school education with at least three (3) years of first class industrial maintenance experience to include maintenance of electrical, piping and pump functions, etc. Must have knowledge of usual industrial maintenance problems together with some supervisory experience.

Duties -The Plant Maintenance Foreman is responsible to the Plant Supervisor/Engineer. Duties to include:

1. Keep all pumps, motors and equipment in good working condition which includes lubricating and oiling of same.

2. Keep all valves and pipes in working condition. Install all new pipe work, valves, electrical motors, pumps and electrical apparatus for equipment.

3. All NEW work - pumps, piping, valves or rebuilding of such equipment must be approved by the Plant Supervisor.

4. All paperwork used for any maintenance of equipment must be completed and submitted to the Plant Supervisor for purchase or alterations.

5. The Plant Maintenance Foreman will also be responsible for keeping the plant safe, clean and neat, including all outside properties. Responsible also for any new work contracted to him/her by the Company to be completed.

6. Evaluation of any subordinate employees are to be submitted to the Plant Supervisor for further processing and final approval with regard to salary increases, warnings, terminations, etc.

JOB DESCRIPTION

Operator Trainee (3.1)

Education - The Clean Harbors Plant Operator/Trainee shall have successfully completed high school course work.

Duties - The Clean Harbors Trainee is responsible to the Operations Foreman. His duties shall include:

1. Performing of functions assigned to him which may be related to assuring smooth plant operation, or the maintenance and repair of the plant equipment or any specific portion thereof.

2. Striving to gain experience in all phases of plant operations so as to be prepared for promotion as the opportunity arises.

During the course of carrying out Operator/Trainee responsibilities involving the treatment process, the Trainee may come into direct contact with wastes that the EPA classifies as hazardous. However, safety precautions are put into effect and protective equipment utilized in situations where the risk of exposure to a hazardous material is high.

Maintenance I(continued)

7. He/she will be expected to work overtime when necessary and to be "on call" in order to keep the plant in good operating condition.

During the course of carrying out supervisory maintenanceresponsibilities within the plant, the Maintenance Foreman may come into direct contact with wastes that the EPA classifies as hazardous. However, safety precautions are put into effect and protective equipment utilized in situations where the risk of exposure to a hazardous material is high.

JOB DESCRIPTION

Maintenance-II(3.2)

Education - A Clean Harbors Maintenance Person must have a high school education with knowledge of usual industrial maintenance problems.

Duties - The Maintenance Person reports to the Maintenance Foreman. Duties to include:

1. He/she is responsible for keeping all pumps, motors and equipment in good working condition, which includes lubricating and oiling of same. Keep all valves and pipes in working condition. He/she is also responsible for installation of all new pipe work, valves, electric motors, pumps and electrical apparatus for equipment.

2. All NEW work, pumps, piping, valves or rebuilding of such equipment must be approved by the Plant Supervisor. Also, all NEW work is usually completed by the Maintenance Foreman, with the Maintenance Person in assistance.

3. He/she will be expected to work overtime when necessary and to be "on call" in order to keep the plant in good operating condition.

During the course of carrying out equipment maintenance responsibilities within the plant, the Maintenance Person may come into direct contact with wastes that the EPA classifies as hazardous. However, safety precautions are put into effect and protective equipment utilized in situations where the risk of exposure to a hazardous material is high.

JOB DESCRIPTION

Chief Chemist - Plant (3.1)

Education - The Plant Chief Chemist shall have a degree in chemistry with lab supervisory experience, experience in water analysis and/or waste water treatment is preferable.

Duties - The Plant Chief Chemist is responsible for the day to day operation of the plant control laboratory to include:

1. Supervision of qualified technicians and/or technicians in training.
2. Training of new personnel in the correct laboratory techniques and procedures for the adequate characteristics of samples.
3. Verification that the correct testing procedures are being used in the laboratory.
4. Development of new or improvement of existing methods of analysis.
5. Proper maintenance of laboratory equipment and instrumentation.
6. Maintenance of an adequate supply of equipment and chemicals for smooth operation of the lab.
7. Assurance that the proper safe procedures are being followed by personnel in the laboratory.
8. Accurate compilation of all pertinent testing data.

The Plant Chief Chemist at the plant shall recommend to the Plant Manager the acceptance or rejection of specific waste streams. For se accepted, he shall provide the data necessary for the Plant ...ager to establish processing costs.

He shall provide the technical assistance to the plant for treatment methods and procedures, including trouble shooting when required.

Chief Chemist - Plant (continued)

During the course of carrying out the analytical responsibilities involving waste samples from prospective customers, tank trucks, or effluent discharge, the Plant Chief Chemist may have direct contact with materials that the EPA classifies as hazardous. Safety procedures and equipment are however utilized in the laboratory to minimize the risk of exposure to these materials.

JOB DESCRIPTION

Chemist (3.1)

Education - A Clean Harbors Principal Technician shall have at least a high school education with course study work to include academic chemistry and mathematics through algebra.

Duties - A Principal Technician is responsible directly to the Plant Chemist, Chemist or Chemical Group Leader, depending upon the organizational structure of the location where he/she works.

1. The Principal Technician shall, with minimal supervision, be able to carry out all necessary procedures when presented with a research project. These shall include, but not be limited to, a literature search, work proposal, equipment and material acquisition, equipment set up, and material analysis.

2. He/she will be able to instruct the Laboratory Technician and Senior Technicians in the use of more sophisticated analytical instrumentation.

3. He/she shall attempt to improve his/her chemical knowledge through further education, personal study, etc.

4. He/she will, through personal study, become familiar with the proposal of further appropriate research endeavor.

During the course of carrying out analytical responsibilitiesinvolving waste samples from prospective customers, tank trucks, or effluent discharge, the Principal Technician may have direct contact with materials that the EPA classifies as hazardous. Safety procedures and equipment are however utilized in the laboratory to minimize the risk of exposure to these materials.

JOB DESCRIPTION

Chemist (3.1)

Education - A Clean Harbors Senior Technician shall have at least a high school education with course study work to include academic chemistry and mathematics through algebra.

Duties - A Senior Technician is responsible to the Plant Chemist, Chemist, or Chemical Group Leader, depending upon the organizational structure of the location where he/she works. A Senior Technician shall be able to perform any of the procedures being used in the control laboratory, i.e., wet chemical analysis, instrumental analysis, physical characterizations, and new sample coordinations. He/she may be required to specialize in one of these areas for a period of time. His/her responsibilities in an area of specialization shall include

1. Preparation of the necessary reagents used in performing analytical methods.
2. Accurately performing all calculations required by the analytical methods.
3. Assisting the Plant Chemist in the training of new personnel in methods of analysis.
4. Following the proper laboratory and plant safety practices.
5. Informing the Plant Chemist when the need for replacement of chemicals or equipment arises.
6. Assuring that the flow of samples through the laboratory is both smooth and speedy.
7. Informing the Plant Chemist when analytical results of a particular sample type appear to be inconsistent with its predecessors.
8. Keeping his/her work area clean and presentable.

Chemist (Continued)

9. He/she will receive further training in instrumental techniques, i.e., G.C., aquametry, conductivity, etc., setting up of laboratory equipment to perform procedures such as distillation, stripping, refluxing, etc.: and when presented with a research project, shall become knowledgeable in carrying out appropriate literature search, in the presentation of a work proposal on the particular project, and in the acquisition of pertinent trade information, material samples, etc., related to the project.

This knowledge will be necessary for promotion to the next position of Principal Technician.

During the course of carrying out analytical responsibilities involving waste samples from prospective customers, tank trucks, or effluent discharge, the Senior Technician may have direct contact with materials the EPA classifies as hazardous. Safety precautions and equipment are however utilized in the laboratory to minimize the risk of exposure to these materials.

JOB DESCRIPTION

Laboratory Technician (3.1)

Education - A Clean Harbors Laboratory Technician shall have at least a high school education with course study work to include academic chemistry and mathematics through algebra.

Duties - A Laboratory Technician is responsible to the Plant Chemist. He/she shall be trained to perform the analytical methods required to characterize waste and effluent samples. Every attempt will be made during training for the Laboratory Technician to acquire the skills needed to perform any of the procedures being used in the control laboratory, i.e., wet chemical analysis, instrumental analysis, physical characterizations, and new sample coordination.

During the course of carrying out sampling of the material hauling trucks, the sampler will maintain a high risk of exposure to EPA classified hazardous materials. In the laboratory, the Lab Technician may also come into close contact with hazardous material. In either case, safety procedures and equipment are utilized.

JOB DESCRIPTION

Truck Clerk/Sample Taker (3.1)

Responsibilities - Preparing bills for each truck delivering waste as described herein:

1. NO PRICE will be entered.
2. On waste streams indicating "Bill to Hauler", The last copy of the bill is given to the driver, making sure all copies are legible.
3. On waste streams indicating "Bill to Generator", all copies are retained by plant.
4. A copy of the truck bill of lading is to be attached to the pink copy of the bill.
5. State manifests are not to be signed by the Sample Taker unless completed in full by the hauler and generator first. A copy of the completed manifest is then given to the driver.
6. Obtaining a sample from each truck (properly labeled with the number from the top of the bill). THE DRIVERS MAY NOT TAKE SAMPLES FROM THE TRUCK FOR THE SAMPLE TAKER.
7. Prepare a truck ticket for each sample.
8. Record each sample in the proper books.
9. Determine which samples must be completely tested and mark them according to plant procedure.
10. Record results of carious tests in proper books.

Truck Clerk/Sample Taker (Continued)

11. File completed truck tickets.

12. Pit assignment is obtained by the Sample Taker from the Shift Operator in the Plant.

13. Every Friday afternoon, work area will be cleaned.

The Sample Taker is responsible to the Plant Chemist and/or the Plant Manager.

During the course of carrying out truck sampling, the Truck Clerk/Sample Taker will come into close contact with material the EPA classifies as hazardous. Safety precautions and protective equipment utilized during sampling, along with sample taking apparatus, lowers the risk of exposure to the Sample Taker to these materials.

JOB DESCRIPTION

Sales Representative (1.0)

Education - A Clean Harbors Sales Representative shall have at least a high school education, preferably with some sales experience.

Duties - The position of a Clean Harbors Sales Representative is accountable for the development of liquid waste pre-treatment sales and attaining the optimum penetration of sales in the marketing area to maximize margin and profits through all logical classes of trade.

Develop and help establish liquid waste sales objective by volume and c/gal., both short and long range, for the regional plant for which he is responsible; present these sales objectives to the Plant Manager to incorporate into the regional plant budget.

Promote the profitable sales of the regional plant service through all classes of trade in the regional plant sales area: purchasing agents, plant managers, independent and contract haulers, others.

Monitor and review plant sales receipts versus bjectives on a weekly and monthly basis. Review erformance with Plant Manager, recommend corrective action and/or sales emphasis where warranted to resolve problems concerning sales deficiencies.

Suggest and help develop new areas of waste sales ervice programs, waste treatments, promotion, tudies, representation to further the profitable receipts and treatment of wastes in the regional plant.

Develop and monitor information on competitive waste treatment facilities and waste haulers, including prices and practices. Recommend competitive action, if warranted, with Plant Manager. Coordinate approved plan of action to resolve competitive problem.

Sales Representative (Continued)

Develop and schedule seminars, trade shows, meetings, government and public awareness through trade meetings where necessary to advance the cause of ecology and thus Clean Harbors interest in this endeavor.

Help insure minimum cost exposure and conformance to company policy in the application of credit policies and the handling of waste treatment sales to its customers.

Perform other related duties as required by the Plant Manager.

The Sales Representative is responsible to the Plant Manager.

The responsibilities of the plant sales personnel does notinvolve any contact with material classified by the EPA as hazardous.

Appendix H-2

EMP.....	NAME	PHYS._LOCATION.....
3584	ACKENHAUSEN,MICHELLE M	CINCINNATI PLANT
9649	BOLZ,DAVID S.	CINCINNATI PLANT
4597	BOOKER,CALVIN E	CINCINNATI PLANT
4354	BRAMMER,DAVID E	CINCINNATI PLANT
4514	CARPENTER,STEVEN R	CINCINNATI PLANT
2508	COGEN,CHARLES D.	CINCINNATI PLANT
2135	COX,DAVID A.	CINCINNATI PLANT
3450	CURRY,JEFFREY S.	CINCINNATI PLANT
2122	DAVISON,JEFFREY B.	CINCINNATI PLANT
2145	DREXLER,GARY J.	CINCINNATI PLANT
7136	EXNER,RICHARD	CINCINNATI PLANT
2116	FRELAND,MARIANNE	CINCINNATI PLANT
3278	GIBSON,WINSTON	CINCINNATI PLANT
4505	GREGORY,ROBERT	CINCINNATI PLANT
2546	HORACE,DANIEL W.	CINCINNATI PLANT
2118	KELLY,DENNIS W.	CINCINNATI PLANT
4515	LEE,RAYMOND J	CINCINNATI PLANT
3441	MCVAY,TERRY E.	CINCINNATI PLANT
2668	MILES,BRYAN	CINCINNATI PLANT
4604	MOORE,MARQUITA L	CINCINNATI PLANT
2561	MORGAN,DOUGLAS E.	CINCINNATI PLANT
2622	MOYERS,MICHAEL M.	CINCINNATI PLANT
4663	MULLINS,LAJOYCE C	CINCINNATI PLANT
4664	OOTEN,STANLEY	CINCINNATI PLANT
3064	PERNELL,JACKIE R.	CINCINNATI PLANT
4671	PIERCE,DAVID R	CINCINNATI PLANT
2121	SIBERT,JEFFREY M.	CINCINNATI PLANT
4513	TYNDALL,IRMA M	CINCINNATI PLANT
2765	WARREN,W. DAVID	CINCINNATI PLANT
4458	WATKINS,FULTON	CINCINNATI PLANT
2427	WILLIAMS,FLOYD	CINCINNATI PLANT
4459	ZIMMERMAN,RANDY	CINCINNATI PLANT

32 Records Processed

Appendix H-3

Cleanharbors

TRAINING DOCUMENT

Name: _____ Date: _____
(please print)

Soc. Sec. _____ Job Title: _____ Div.: _____

TRAINING SESSION/SEMINAR TITLE:

DESCRIPTION OF PROGRAM:

IN-HOUSE TRAINING PROGRAM: [ ] OUTSIDE AGENCY PROGRAM: [ ]

SPONSORING AGENCY: _____

LENGTH OF SESSION (in hours): ___ PRINCIPAL INSTRUCTOR: _____

YOUR PARTICIPATION: INSTRUCTOR [ ] PARTICIPANT [ ]

I certify that I have been trained in the above subject matter and have had the opportunity to ask questions and that those questions have been answered to my satisfaction.

_____ _____
Employee Signature *Instructor Signature*

TRAINING SESSION CODE: ____

Send COPY to: Compliance/Training Department
CLEAN HARBORS, INC.
325 Wood Road
Braintree, MA 02184

Appendix H-4

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.
4879 SPRING GROVE AVENUE • CINCINNATI, OH 45232
(513) 681-5738 • FAX (513) 681-7523
Visit our Website at www.cleanharbors.com

March 19, 2001

Cincinnati Police Department
310 Ezzard Charles Drive
Cincinnati, OH 45214-2805

CERTIFIED MAIL: #7000 1670 0001 3327 9822

Re: Spring Grove Resource Recovery, Inc. PCB Storage Facility

Dear Sir or Madam:

Spring Grove Resource Recovery, Inc. (SGRR) is requesting that all local support agencies that would potentially respond to an emergency situation at the SGRR PCB Commercial Storage Facility review the attached Contingency Plan.

We would appreciate any comments be directed to myself at 513-681-5738 extension 6382.

Sincerely,

Michael Crisenbery, CHMM
Facility Compliance Manager

Cc: File

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.
4879 SPRING GROVE AVENUE • CINCINNATI, OH 45232
(513) 681-5738 • FAX (513) 681-7523
Visit our Website at www.cleanharbors.com

March 19, 2001

University Hospital
Department of Occupational Health
234 Goodman Street
Cincinnati, OH 45267-1000

CERTIFIED MAIL: #7000 1670 0001 3329 0100

Re: Spring Grove Resource Recovery, Inc. PCB Storage Facility

Dear Sir or Madam:

Spring Grove Resource Recovery, Inc. (SGRR) is requesting that all local support agencies that would potentially respond to an emergency situation at the SGRR PCB Commercial Storage Facility review the attached Contingency Plan.

We would appreciate any comments be directed to myself at 513-681-5738 extension 6382.

Sincerely,

Michael Crisenbery, CHMM
Facility Compliance Manager

Cc: File

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.
4879 SPRING GROVE AVENUE • CINCINNATI, OH 45232
(513) 681-5738 • FAX (513) 681-7523
Visit our Website at www.cleanharbors.com

March 19, 2001

Chief, District #3
Cincinnati Fire Department
301 Ludlow Ave.
Cincinnati, OH 45232

CERTIFIED MAIL: #7099 3400 0016 1796 2132

Re: Spring Grove Resource Recovery, Inc. PCB Storage Facility

Dear Sir or Madam:

Spring Grove Resource Recovery, Inc. (SGRR) is requesting that all local support agencies that would potentially respond to an emergency situation at the SGRR PCB Commercial Storage Facility review the attached Contingency Plan.

We would appreciate any comments be directed to myself at 513-681-5738 extension 6382.

Sincerely,

Michael Crisenbery, CHMM
Facility Compliance Manager

Cc: File

Appendix 13

Appendix 13
Sampling Plan

December 6, 2000

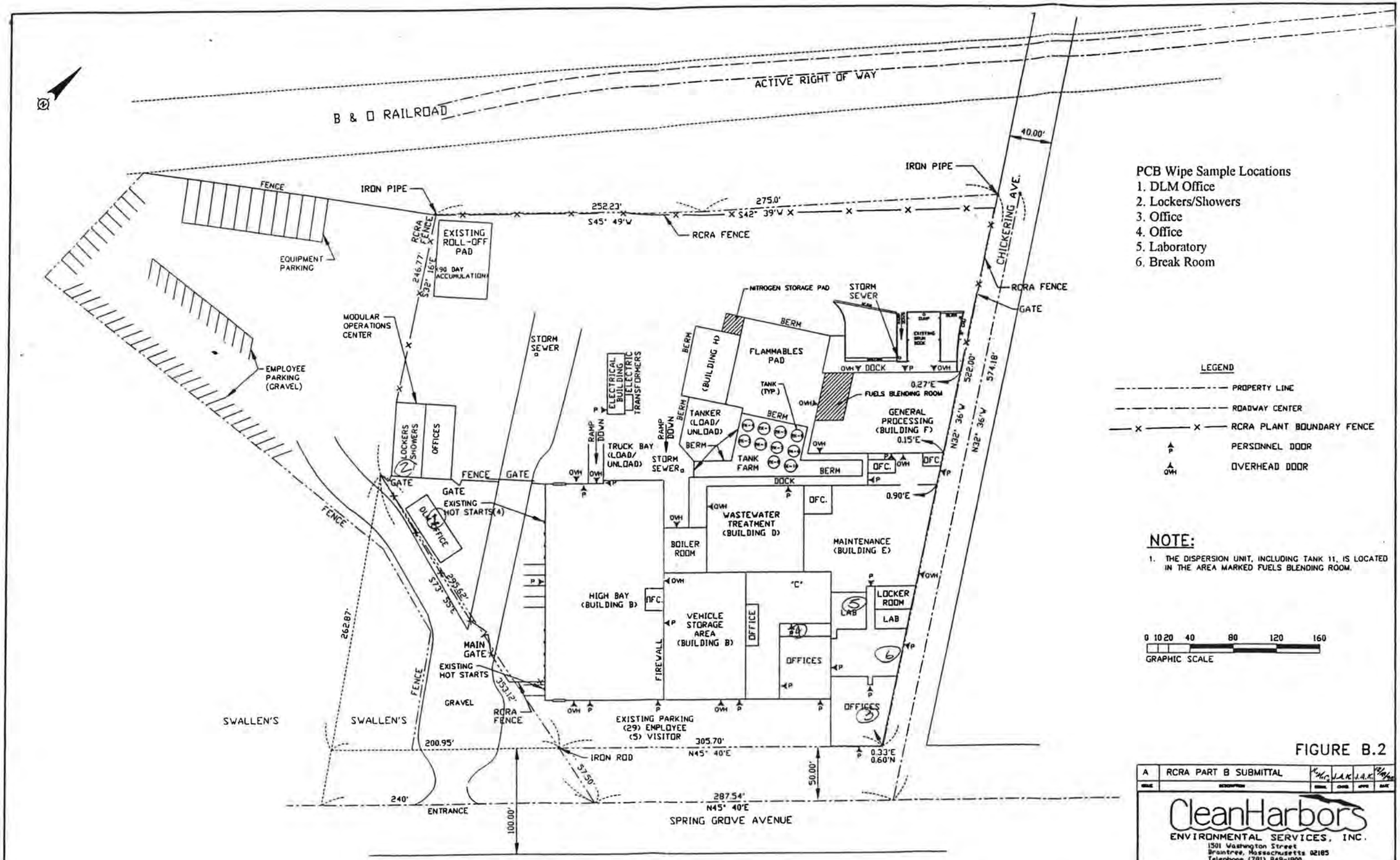
This routine sampling plan is designed to determine if there is contamination of areas outside the PCB storage areas. Sampling will be implemented every three (3) months.

Areas to sample (with number of wipe samples per area) are:

1. DLM office (1)
2. Lockers/Showers @ southwest area (1)
3. Northeast offices (1)
4. Laboratory (1)
5. Breakroom (1)

(Refer to Facility Plan Drawing # 5384-C-19 for locations)

Wipe samples of tile in each area will be done per 40 CFR Part 761.123. The same location will be sampled every 3 months. Areas must be <10 ug/100 cm2 to be considered clean.



PCB Wipe Sample Locations
1. DLM Office
2. Lockers/Showers
3. Office
4. Office
5. Laboratory
6. Break Room

LEGEND
- PROPERTY LINE
- ROADWAY CENTER
- RCRA PLANT BOUNDARY FENCE
- P — PERSONNEL DOOR
- OVH — OVERHEAD DOOR

NOTE:

1. THE DISPERSION UNIT, INCLUDING TANK 11, IS LOCATED IN THE AREA MARKED FUELS BLENDING ROOM.

0 10 20 40 80 120 160
GRAPHIC SCALE

REDUCED COPY
DO NOT SCALE PRINT

FIGURE B.2

A	RCRA PART B SUBMITTAL	K/H/C	J.A.K	J.A.K	2/14/96
MARK	DESCRIPTION	INITIAL	CHKD	APPD	DATE

CleanHarbors
ENVIRONMENTAL SERVICES, INC.
1501 Washington Street
Braintree, Massachusetts 02185
Telephone (781) 849-1800

SPRING GROVE RESOURCE RECOVERY
4879 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232

FACILITY PLAN MAP

PROJECT NO. GW-5384 | DRAWING NO. 5384-C-19
SCALE 1"=40'

Appendix 14

Appendix 14

December 6, 2000

SPRING GROVE RESOURCE RECOVERY
DAILY PCB INSPECTION

(✓) indicates "yes"
(X) indicates "no"
(OK) indicates "OK"
(N/A) indicates "not operational"
note: Inspections performed each operating day

Inspector:

Date:

Time:

INSPECTION CRITERIA	HIGH BAY	COMMENTS
1. Are all PCB Articles and PCB Containers properly marked with product code, storage date, PCB label, NFPA label (non-RCRA) ?		
2. Are all PCB Articles and PCB Containers stored in approved bermed areas?		
3. Are the roof and walls in good condition to prevent rainwater from reaching PCB's (I.e. not leaking) ?		
4. Are the floors and berms in good condition where PCB's are stored (I.e. no cracks) ?		
5. Are all moveable pieces of equipment that are used for handling PCB's in the storage area?		
6. Have all pieces of equipment that have been removed from the PCB storage area been decontaminated per 40 CFR 761.79?		
7. Are all PCB Articles and PCB Containers free from leaks?		
8. Do all containers holding liquid PCB's meet 40 CFR 761.65 criteria?		
9. Do all containers holding non-liquid PCB's meet 40 CFR 761.65 criteria?		
10. Is there enough aisle space to allow movement of personnel, fire protection, spill control, and decontamination equipment?		
11. Are there any flammable PCB wastes stored in High Bay?		
12. Are all containers of PCB waste closed except for the ones being processed?		
13. Do all PCB articles and PCB containers have unique Spring Grove numbers assigned to them?		
14. Do any PCB articles or PCB containers have storage dates greater than 200 days old?		

Appendix 15

Appendix 15

December 6, 2000

ENVIRONMENTAL SERVICES, INC.
1501 WASHINGTON STREET • P.O. BOX 859048 • BRAINTREE, MA 02185-9048
(781) 849-1800
Visit our Website at www.cleanharbors.com

Certified Mail – Return Receipt Requested (Z 209 736 826)

July 25, 2000

Mr. Anthony Martig
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: Spring Grove Resource Recovery, Inc.
Change in Financial Assurance Mechanism Guaranteeing Closure

Dear Mr. Martig:

Frontier Insurance Company (Frontier) is no longer listed as an acceptable surety on federal bonds in Circular 570 of the U.S. Department of Treasury. Consequently, Frontier can no longer underwrite a surety bond to guarantee closure of a PCB commercial storage facility regulated pursuant to 40 CFR 761.

Spring Grove Resource Recovery (SGRR) has formerly guaranteed closure of its PCB management activities with a surety bond issued by Frontier. This is to notify the U. S. Environmental Protection Agency that SGRR has changed the financial assurance mechanism guaranteeing closure to Closure Insurance. The Certificate of Insurance guaranteeing closure is enclosed herewith. The effective date of the insurance policy is July 28, 2000.

Please don't hesitate to contact me at 781-849-1800 extension 1278 if you have any questions.

Sincerely,

Peter W. Egan
Director of Regulatory Affairs

Enclosure

cc: Bill Bardos, Clean Harbors
Michael Crisenbery, Clean Harbors

CERTIFICATE OF INSURANCE
FOR CLOSURE OR POST-CLOSURE CARE

Name and Address of Insurer (herein called the "Insurer"):	Steadfast Insurance Company 1400 American Lane Schaumburg, Illinois 60196
Name and Address of Insured (herein called the "Insured"):	Clean Harbors, Inc. and Subsidiaries 1501 Washington Street Braintree, Massachusetts 02184
Facilities Covered:	EPA Identification No. OHD000816629 Spring Grove Resource Recovery, Inc. 4879 Spring Grove Avenue Cincinnati, Ohio 45232 Closure Costs: $354,422
Face Amount:	$354,422
Policy Number:	PLC 3681588-00
Effective Date:	July 28, 2000

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for closure for the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of 40 CFR 264.143(e), 264.145(e), 265.143(d), and 265.145(d) as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the EPA Regional Administrator(s) of the U.S. Environmental Protection Agency, the Insurer agrees to furnish to the EPA Regional Administrator(s) a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in 40 CFR 264.151 (e) as such regulations were constituted on the date shown immediately below.

Jayne Cunningham, Senior Underwriter

Authorized Representative of: Steadfast Insurance Company
Administrative Officer
1400 American Lane
Schaumburg, IL 60196-1056

Signature of witness or notary:

Victor Marukian

Date: July 21, 2000