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1.0 PCB COMMERCIAL STORAGE INTRODUCTION

The Clean Harbors Los Angeles, LLC facility is located at 5756 Alba Street in Los Angeles, California. CHLA is a permitted treatment, storage, and disposal facility (TSDF) for hazardous and non-hazardous wastes. The facility receives wastes for storage, consolidation, and shipment to off-site treatment and disposal facilities.

CHLA has occupied its present site since 1979. In 1980, pursuant to new EPA regulations, the facility notified the EPA that it was operating as a transporter of hazardous wastes. At the same time, the facility began planning a waste processing facility. Hazardous waste management applications were filed with the California Department of Health Services (DOHS) in 1984. The DOHS issued the facility a Hazardous Waste Facility Permit on June 3, 1985. The DOHS issued a revised permit on May 29, 1990. This permit was modified twice since that application. The most recent modification was effective February 28, 1995. The facility submitted a RCRA Part B permit re-application to the Department of Toxic Substances Control (DTSC) in November 1994 to renew the existing permit for a period of ten years. Several RCRA permit renewal applications have been submitted to the Department of Toxic Substances Control (DTSC) over the years as updates were necessary. The most recent RCRA permit renewal application was submitted in April 2010 and approved effective January 27, 2011.

The facility was initially authorized to operate as a commercial storage facility for PCBs on September 10, 1991. The initial authorization allowed for the storage of 6,900 pounds of PCB waste. An amendment dated December 19, 1991 revised the maximum storage capacity to 825 gallons and increased the time that PCB items may be stored outside the designated storage area from three business days to six days. A second amendment, dated May 5, 1994, provided interim authorization to use the additional PCB storage area within the Container Storage Warehouse. The use of this area increased the storage capacity to 8,745 gallons.

Under regulations issued by EPA and codified at 40 CFR Part 761.65(d), each Commercial Storer of PCB waste is required to submit an application to the U.S. EPA. This application is submitted pursuant to this requirement for commercial PCB Storage. Accordingly, the facility wishes to store the PCB items, within a designated storage area, prior to shipment off-site for treatment and/or disposal. No TSCA federally regulated PCB treatment or disposal will be performed on-site. The following are examples of items to be managed:

PCB Transformers
PCB Capacitors
PCB Liquids in drums
PCB Liquids in bulk
PCB Soils
Other PCB Solids
Other PCB Items and Articles

This application is for storage only. No draining of TSCA federally regulated PCBs will be conducted on-site unless the primary container is compromised. In that event PCB liquids will

be repackaged using DOT approved containers to ensure environmental integrity and safe off-site transport.

1.1 Facility Information

Facility Name: Clean Harbors PPM, LLC

Facility Address: 5756 Alba Street
Los Angeles, CA 90058
EPA ID # CAD050806850

2.0 Facility Owner/Operator Qualifications

2.1 Identification of the Owner, Operator, and Officials of the Facility with Direct Management Responsibilities

Property and Business Operation and Ownership

Building and Land Owner:	Clean Harbors, Inc. 42 Longwater Drive Norwell, MA 02061
Business Owner and Operator:	Clean Harbors PPM, LLC 5756 Alba Street Los Angeles, California 90058

This facility is one of several operating as part of this corporation. Clean Harbors PPM, LLC is a member organization of Clean Harbors Incorporated, a Massachusetts corporation, with its headquarters located at:

42 Longwater Drive
Norwell, MA 02061

2.2 Identification of the Person Responsible for Overall Operations of the Facility, and the Supervisory Employees Responsible for Operation of the facility

The key employees responsible for the day-to-day operation of the facility are as follows:

Mike Golden	Director of Site Services
Vacant	Facility General Manager
Abby Pourhassanian	Operations Manager
Jesus Vela	Operations Manager

Note: Additional affiliations for Mike Golden are the Clean Harbors PPM, LLC locations. These facilities are permitted to manage PCB's and include the following five locations:

Ashtabula, OH
Coffeyville, KS
Philadelphia, PA
Tucker, GA
Twinsburg, OH

2.3 Principal Officers

The principal officers of Clean Harbors, Inc. are:

CEO: Alan S. McKim
COO: N/A
CFO: James M. Rutledge
General Counsel: David. T. Musselman

The principal officers of the Environmental Services Division are:

President:	Eric W. Gerstenberg
Senior Vice President:	Barry K. Fogle
Vice President:	Scott D. Reed

2.4 Companies Owned or Operated

Clean Harbors Los Angeles, LLC is a wholly owned subsidiary of Clean Harbors, Inc. which does own and operate a number of other companies. With the exception of Mike Golden, the member's officers do not own or operate any other companies. Affiliations of other key operating employees are shown in Section 2.2 and Section 2.7. The parent's officers own and operate all the related subsidiaries and have or have had some ownership interest in numerous other corporate entities. There are no serious environmental violations extant of which the certifying officer(s) are aware in these other corporate entities. The compliance history in Section 5.6 covers the Clean harbors Los Angeles, LLC location as well as the Clean Harbors PPM, LLC locations (as noted above, associated with Mr. Golden).

2.5 Technical Qualifications & Experience of Key Employees

Individuals who are directly responsible for the operation of the facility have extensive training in hazardous waste management and/or engineering. The principal individuals who make decisions related to the facility's operations are: the Facility General Manager, the Facility Operations Manager, and the Director of Site Services. A summary of their qualifications is included. Complete resumes may be found in Appendix A.

Mike Golden has worked for Clean Harbors since 1990 and served as Director of Site Services for PPM PCB Services since 2005. His responsibilities include overseeing all aspects of PPM PCB environmental services performed out of five service locations throughout the United States. Prior to his tenure as Director he has served as General Manager for the Deptford, NJ Service Center and Field Services Manager. He has over twenty years of experience in environmental remediation, emergency response services and waste management including most aspects of the site remediation and emergency response services pertaining to petroleum, chemical and PCB cleanup activities.

Plant General Manager - Vacant

Abby Pourhassanian has been Operations Manager since 2006. From 1993 to 2006, Mr. Pourhassanian was an Operations Supervisor. Mr. Pourhassanian was a Chemical Technician from 1990-1993. Prior to this, Mr. Pourhassanian held the position of Driver, Dispatcher, and Instructor since 1981.

Jesus Vela has been an Operations Supervisor since 2002. From 1997 to 2002, Mr. Vela was a Treatment Supervisor. Prior to this, Mr. Vela held the position of Chemical Technician since 1987.

2.6 Compliance History

The following compliance history details past State and Federal environmental violations for the Facilities described below.

Clean Harbors Los Angeles LLC

The Clean Harbors Los Angeles, LLC regulatory compliance history for the past five years is summarized in the table below.

Date	Agency	Program	Activity	Findings	Result
3/27/12	DTSC	RCRA	NOV	Incorrect signature date on manifest	Resolved
12/14/2011	DTSC	RCRA	Inspection	1) Failure to record qty at each location for the waste received. 2) Failure to inspect tank overfill controls Minor Violations 3) Staged containers at WMU-1 outside the designated storage unattended. 4) Inaccurate accumulation start date was marked on waste containers.	Resolved
3/17/2011	EPA	TSCA	NOV	Failure to have out of service date on 11 manifests.	Resolved
10/27/2010	DTSC	RCRA	Inspection	DTSC conducted a 3 day annual inspection. Alleged violations: • Level of a tank did not match pump records. • Overfill control on a tank was not operating properly. • Malfunction was not noted on inspection log. • A container was not marked as Hazardous Waste. • The top of a container was left open. A spill	Resolved

Date	Agency	Program	Activity	Findings	Result
				kit had been moved. • A component of the 2009 RCRA Annual Report could not be located – corrected during the inspection.	
10/18/2010	DTSC	CalRecycle	Inspection	Follow-up inspection.	No issues.
09/30/2010	City of Los Angeles	Fire Department	Inspection	No issues.	No issues.
09/22/2010	City of Los Angeles	Wastewater	Inspection	No issues.	No issues.
08/11/2010	DTSC	CalRecycle	Inspection	Tire Program ID permit not displayed.	Resolved. No violations.
07/19/2010	City of Los Angeles	Bldg & Safety	Inspection	No issues.	No issues.
06/23/2010	City of Los Angeles	Wastewater	Inspection	No issues.	No issues.
05/14/2010	City of Los Angeles	Wastewater	NOV	No 48-hr presampling notification. Mercury exceedence from 2/28/10 discharge.	Rescinded. No violations. City found our notification and had read wrong column on analytical report.
02/03/2010	City of Los Angeles	Wastewater	NOV	Sulfide exceedence from 10/26/09 stormwater discharge	Closed. No violation.
01/14/2010	CA Air Resources Board	South Coast Air Quality Mgmt District	Inspection	No issues.	No issues.
11/17/2009	City of Los Angeles	Fire Department	NOV	Emergency exit light and alarm panel in need of repair.	Closed. No violations.
07/16/2009	EPA	TSCA	Inspection	No issues.	No issues.
05/15/2009	CA Air Resources	South Coast Air Quality	Inspection	No issues.	No issues.

Date	Agency	Program	Activity	Findings	Result
	Board	Mgmt District			
03/24/2009	DTSC	RCRA	Inspection	Annual inspection. Alleged violations: • Quantity in isotainer did not match pump record • No written procedure for annual tank integrity inspection • Malfunction not recorded in the inspection log.	Resolved. No violations.

Clean Harbors PPM, LLC

The Clean Harbors PPM, LLC regulatory compliance history for the past five years is summarized below.

This corporate entity associated with Mike Golden has five locations as follows:

- The operation at Ashtabula, OH has had one notice of non-compliance within the last five years that was corrected and no further action was taken.
- The operations in Coffeyville, KS has had one notice of non-compliance within the last five years that was corrected and no further action was taken.
- The Philadelphia, PA facility has had one notices of violation within the last five years that was corrected and no further action was taken.
- The Tucker, GA has had one notice of violation within the last five years which resulted in a penalty. All violations were corrected.
- Twinsburg, OH has had had one notice of non-compliance within the last five years that was corrected and no further action was taken.

Clean Harbors, Inc.

The complete environmental history on the corporate entity may be submitted as requested.

2.7 Affiliation Listing

Other companies currently owned or operated in the past five years by the principals or key employees directly or indirectly involved with waste handling activities:

Ashtabula, OH
Coffeyville, KS
Philadelphia, PA
Tucker, GA
Twinsburg, OH

3.0 Facility Design

3.1 PCB Waste Inventory

The portion of the facility dedicated to PCB storage consists of an existing PCB storage area, as well as existing RCRA storage areas. The storage areas permitted exclusively for RCRA activities are not addressed specifically in this PCB Storage Facility Permit renewal application, although the areas are depicted on the site drawings provided as a reference in Appendix B. The PCB storage area is for container storage only. There are no tanks included in this Application.

The PCB storage area is in the contiguous Bay 1 (consisting of areas DW-1, DW-2, DW-3, DW-4, DW-5 and DW-6) of the Container Storage Warehouse. This bay is separated from other bays in the container Storage Warehouse by intermediate curbs and is currently authorized by the State of California and the EPA for the storage of 144 55-gallon equivalent containers of PCB liquids. The facility may at given times (during event business) approach the design capacity but will typically average about half that amount. A tracking system is in place to monitor stored volume and to prevent an exceedence of design/permitted capacity.

The facility will be inspected to ensure at least weekly to ensure containers are not leaking. Examples of inspection forms used to ensure the site is operated in a manner so as not to pose a risk to the environment or human health can be found in Appendix C. Inspection forms will consistently contain the minimum amount of information required by the regulations, however, the format and content of the forms may change without notice.

To establish the maximum authorized storage capacity for the PCB storage areas, floor plans were developed and are shown in Figure 3-1included with this renewal application. The PCB storage layout is based on palletized 55-gallon equivalent containers and the arrangements are illustrative. PCB storage areas may contain varied sized containers including transformers, capacitors and other odd-sized containers. PCB storage capacity will not exceed maximum authorized volume (including liquid contents of transformers, drums, capacitors and other PCB articles) and adequate aisle space will be maintained. The floor plans establish an arrangement and maximum total count of 55-gallon equivalent containers that will be stored in each of the container storage areas (see Figure 3-1). Based on the arrangements illustrated, and upon the assumption that all of the containers are full of liquid, a total authorized PCB storage volume is established for each container area. Table 3-1 lists the maximum authorized storage for the two PCB storage areas and available containment volume for each area.

Table 3-1: Design Capacities and Containment Provisions for PCB Storage Areas

Location	Maximum Allowed PCB Storage	Containment Volume Required	Containment Volume Available

	(Gallons)	(Gallons)	(Gallons)[1]
Container Storage Warehouse Bay 1	7,920	3,300	5,423[2]

For the Los Angeles facility, the estimated maximum PCB waste inventories will be 7,920 gallons. The forms this waste will take are as follows:

PCB Transformers
PCB Capacitors
PCB Liquids in drums
PCB Liquids in bulk
PCB Soils
Other PCB Solids
Other PCB Items and Articles

Transformers come in all sizes and shapes, so all liquid capacity is calculated in gallons. Capacitors follow the same calculation. Drums and containers used for PCB storage will be in accordance with the requirements set forth in 40 DFR 761.65(c)(6) and (c)7(i).

Pursuant to 40 CFR 761.65(c)(7)(ii), the facility has prepared and implemented a Spill Prevention, Control, and Countermeasures Plan (SPCC). The plan was prepared in accordance with 40 CFR 112. A copy of the plan is included in Appendix D of this application.

[1] -No rainfall allowance is included for the storage area. It has been constructed in an enclosed area not subject to rainfall.

[2] -Within the Container Storage Warehouse, 13,200 gallons of non-PCB waste are also stored in connecting bays to Bay 1 in addition to the 7,920 gallons of PCB waste. The total containment required is calculated by adding 25% of the maximum volume of PCB waste stored in this area (1,980 gallons) to 25% of a conservative maximum volume of non-PCB waste stored in this area (3,300 gallons, in the event if catastrophic failure). This results in a total containment requirement of 5,281 gallons.

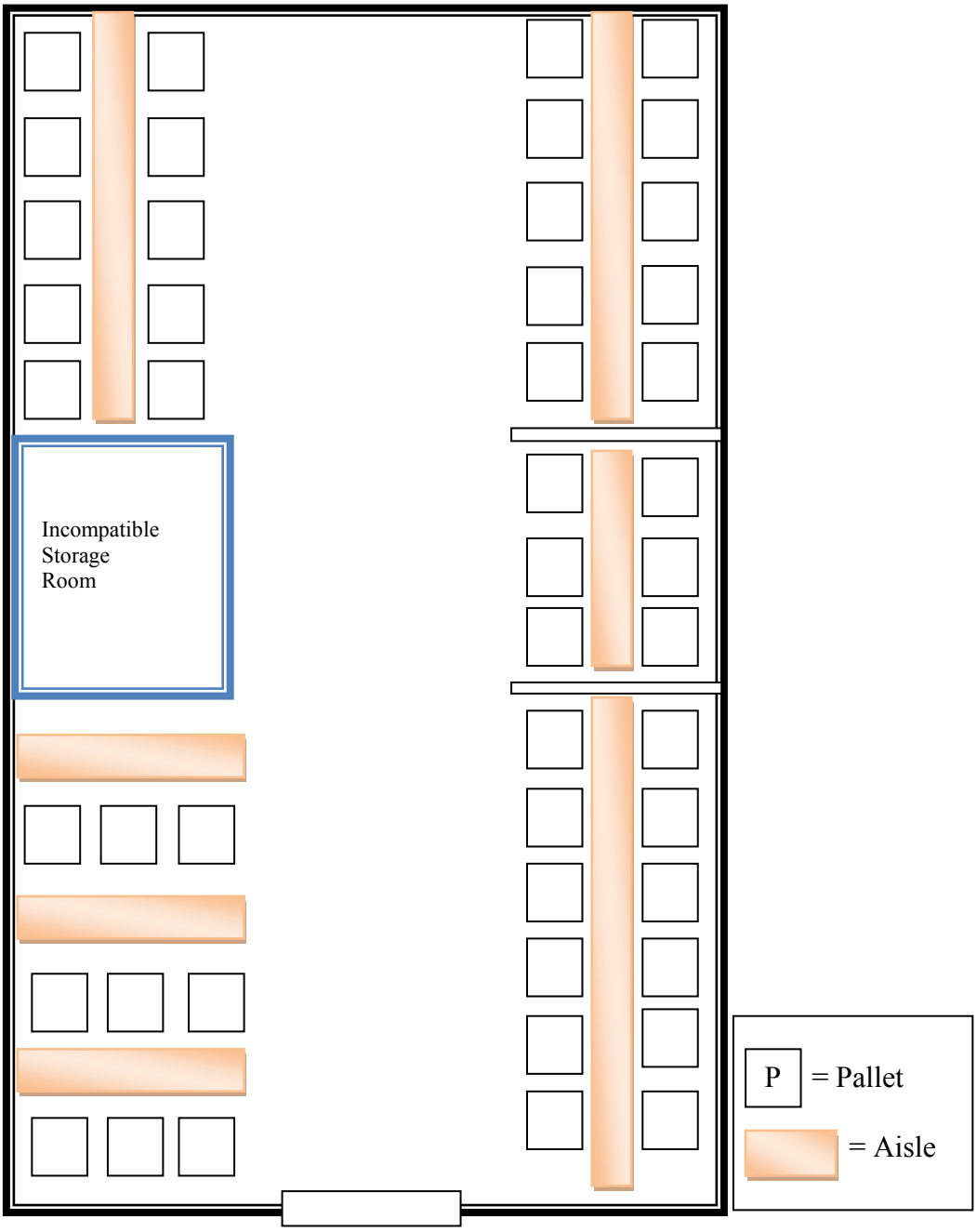


Figure 3-1

Sample Pallet Configuration
Bay 1

3.2 Facility Design Qualifications & Certification

The facility complies with the design and construction standards in 40 CFR 761.65.

The following certification is made for compliance of the existing PCB facilities with facility design standards currently in effect:

> *Under the 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 document is true, accurate, and complete. As to the identified section(s) of this document 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.*
>
> Signature: _____
>
> Printed Name: James C. Childress
>
> Date: September 10, 2012

3.3 Facility Design and Construction Standards

The Container Storage Warehouse consists of three separate storage bays. Bay 1 is a rectangular storage area 54 feet long x 34 feet wide. The structure consists of a smooth concrete, with no expansion joints, surrounded by a 6 inch containment berm. The bay is subdivided into six separate storage areas consisting of open areas separated by 6-inch high concrete berms and a totally enclosed room. PCBs may be stored anywhere within the storage areas of Bay 1. Specific dimensions and capacities are listed below.

The storage area containment volumes are adequate to contain at least 25 percent of total volume of liquid in PCB containers in the containment areas. The facility's total available containment volume is documented in Appendix E.

A Spill Prevention Control and Countermeasure Plan has been prepared and implemented and is included as Appendix D. This plan includes all of the TSCA containers and non-TSCA liquid in tanks and containers that are also present at the facility.

3.3.1 Roof and Walls

The roof and walls are constructed of concrete filled masonry block and steel. The roof is sloped and served by gutters and downspouts to convey rainfall to drainage on the exterior to the building. Doors and other openings in the building have been designed and installed to resist wind-blown rainfall.

3.3.2 Floor and Curbing

A concrete floor with an impervious surface coating has been provided for all PCB storage areas inside the building. The curbing is at least six inches high. The containment volume available is 5,423 gallons for the area, which stores PCB containers and/or other articles. This exceeds the combined requirements for a containment volume of 25 percent of the maximum authorized storage volume of PCBs or two hundred percent of the internal volume of the largest PCB article or PCB container, whichever is greater, and a containment volume of 25 percent (using worst case scenario) of the maximum authorized storage volume of RCRA waste or one hundred percent of the internal volume of the largest RCRA container, whichever is greater. Floors are sealed and coated with epoxy coating such as STEEL-SEAM® FT910 Epoxy (Part A), White, STEEL-SEAM® FT910 Epoxy (Part B), Black Hardener (see Attachment C).

3.3.3 Floor Penetrations

There are no drain valves, floor drains, sewer lines, expansion joints, or other openings that would permit liquids to drain from the curbed areas. The floor and curbing are constructed of continuous smooth and impervious materials (concrete, sealed with epoxy-type coatings) to prevent or minimize penetration of PCBs. Copies of the Material Safety Data Sheets for the coatings are in the Appendix F.

3.3.4 Floor Construction

The floors and curbs are constructed of smooth and impervious Portland cement concrete which prevents or minimizes penetration of PCBs. A surface coating of an epoxy sealer has been applied to all exposed concrete surfaces (including containment sumps and trenches) to further seal the surface and retard any potential penetration of the surface by PCBs. Floors are sealed and coated with epoxy coating such as STEEL-SEAM® FT910 Epoxy (Part A), White, STEEL-SEAM® FT910 Epoxy (Part B), Black Hardener (see Attachment C). The floor is inspected regularly and maintained to ensure the surface coating is intact. It was last coated in January of 2012.

3.3.5 100-Year Flood Water Elevation

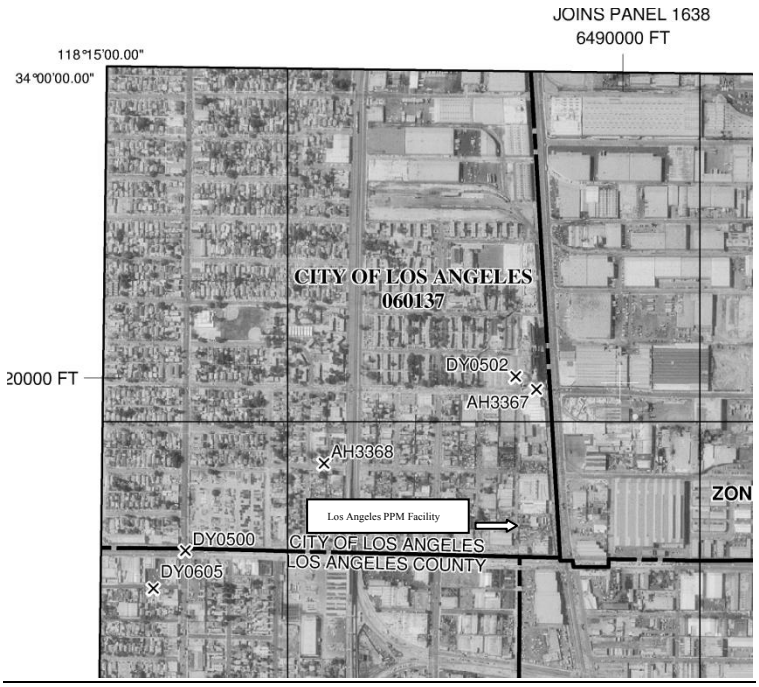
The entire site, including the Container Sludge Warehouse, is above the 100-year flood water elevation (see Figure 3-2).

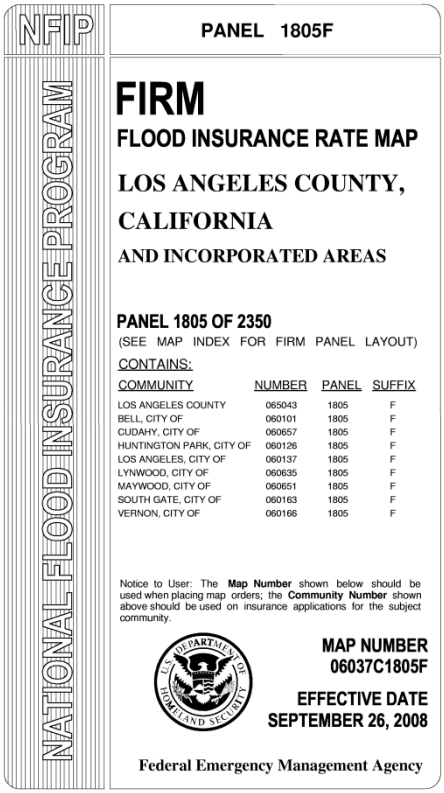
3.3.6 Storage Capacities

The maximum PCB storage capacity and the maximum PCB storage inventory are the same volume of 7,920 gallons. This corresponds to the equivalent of 144 55-gallon equivalent containers. Items other than 55 gallons in size may be accepted for storage, but maximum internal liquid volume in storage at any one time will not exceed the stated value.

3.3.7 Temporary Storage/Staging

The facility may conduct staging (i.e. temporary storage) storage at the facility. This area would be located in the Northeast section of the facility (refer to Appendix B, drawing P003-CC-102) and will follow the requirements specified by 40 CFR 761.65(c)(1). Additionally, loading/unloading operations typically take place at the unloading bay adjacent to the container storage warehouse. In the event transformers are too large for this area, they are loaded/unloaded at the Parking, Loading/Unloading, Receiving and Staging Area located just inside and North of the main gate. As previously noted the entire site is contained.





NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1805F

FIRM

FLOOD INSURANCE RATE MAP

LOS ANGELES COUNTY, CALIFORNIA

AND INCORPORATED AREAS

PANEL 1805 OF 2350

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

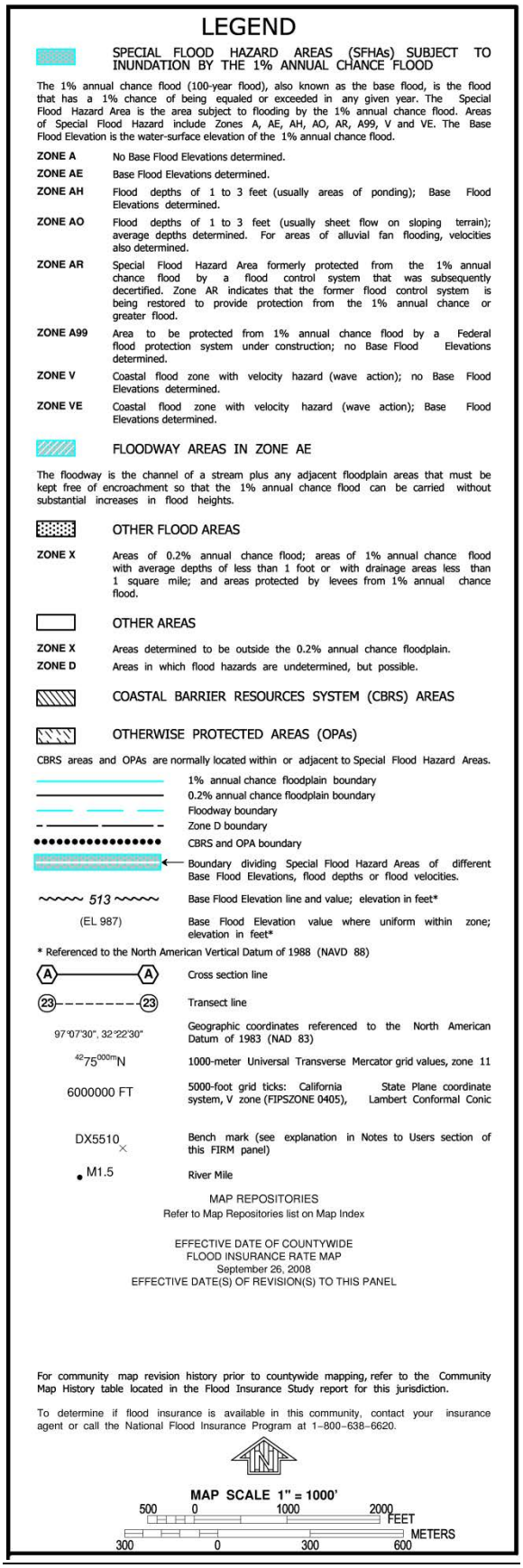
COMMUNITY	NUMBER	PANEL	SUFFIX
LOS ANGELES COUNTY	065043	1805	F
BELL, CITY OF	060101	1805	F
CUDAHY, CITY OF	060657	1805	F
HUNTINGTON PARK, CITY OF	060126	1805	F
LOS ANGELES, CITY OF	060137	1805	F
LYNWOOD, CITY OF	060635	1805	F
MAYWOOD, CITY OF	060651	1805	F
SOUTH GATE, CITY OF	060163	1805	F
VERNON, CITY OF	060166	1805	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06037C1805F

EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.

513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

A — A	Cross section line
23 - - - - - - - 23	Transect line
97°07'30", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
42 75 000m N	1000-meter Universal Transverse Mercator grid values, zone 11
6000000 FT	5000-foot grid ticks: California State Plane coordinate system, V zone (FIPSZONE 0405), Lambert Conformal Conic
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
• M1.5	River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
September 26, 2008
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

N

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

300 0 300 600 METERS

Figure 3-2 Flood Insurance Rate (FIR) Map

3.4 Jurisdiction

This facility is located on approximately 2.3 acres and approximately 4 miles south of downtown Los Angeles on the northwest corner of the intersection of Slauson Avenue and Alameda Street. This facility is currently regulated by and/or files reports with the following public agencies, committees, commissions and/or departments:

AGENCY	PHONE NUMBER
National Response Center	(800) 424-8802
U.S. EPA Region 7	(415) 947-8000
California Department of Toxic Substances Control	(818) 717-6500
State Office of Emergency Services (OES)	(800) 852-7550
U.S. Healthworks Medical Group	(323) 585-7162
Los Angeles Fire Department	911 or (213) 485-6185
Los Angeles Police Department	911 or (323) 846-6547

Other public agencies also have jurisdiction, at the federal and state level, include OSHA and the Department of Labor.

3.5 Written Description and Topography

3.5.1 PCB Storage Facility

The portion of the facility dedicated to PCB storage consists of an existing PCB storage area, as well as existing RCRA storage areas. The PCB storage area is for container storage only. The Storage area is shown in the drawings located in Appendix B

3.5.2 Hazardous Waste Management Unit

The Clean Harbors Los Angeles, LLC facility is a permitted treatment, storage, and disposal facility (TSDF) for hazardous and non-hazardous wastes. The facility receives wastes for storage, consolidation, and shipment to off-site treatment and disposal facilities.

3.5.3 Lab Area

The facility has an on-site laboratory that supports its operations. Standard Operating Procedures for sample receiving and storage are outlined in Appendix G.

3.5.4 Flood Plain

The Los Angeles facility is not located in the 100-year flood plain (see Figure 3-2).

3.5.5 Adjacent Surface Waters or Wetlands

There are no adjacent surface waters or wetlands.

3.5.6 Surrounding Land Uses

The Los Angeles Facility is immediately surrounded by businesses that are involved in auto dismantling; paint manufacturing; and furniture manufacturing. The streets are paved for heavy traffic and sidewalks run directly from the street to the building.

3.5.7 Traffic Flow

There are two entrances for truck traffic. The main entrance located on Alba Street is manned and operated 24 hours per day by facility staff or contractor services. The entrance on Alameda Street is a locked, secured gate to be opened in the event of an emergency and/or use requirement. There are two employee emergency exits in addition to the truck entrances. Those are located on Alba Street and also on Alameda Street. These gates would be unlocked in the event of an emergency for evacuation of plant personnel. All roadways within the facility associated with routine waste movement activities are paved with concrete or asphalt.

3.5.8 Underground Storage Tanks

There are no underground storage tanks at this facility.

3.5.9 Security Systems and Procedures

The perimeter of the Los Angeles Facility is a combination block wall and/or corrugated galvanized fence. The wall and/or fence is six (6) to eight (8) feet high, topped with barbed wire, and completely surrounds the facility. The fence and wall are maintained in good repair. There are warning signs posted in English and Spanish at the entrance of the facility. There is one main gate designated as entrance/exit ways used by employees or visitors requiring access to the facility. The gate is set up with remote controls so that they can be opened or closed from the Security Office or the Main Office. All other gates are secured by lock and chain and are only used in cases of emergency or maintenance. Remote cameras are used to monitor the most active areas from the Main Office. Daily inspections of the perimeter are performed to ensure that fences and gates are intact and secure.

All personnel at the facility have been identified and issued company picture IDs. Company issued badges distinguishes Clean Harbors' employees from an intruder or other unauthorized person. All persons, other than Clean Harbors' employees, entering and exiting the facility are required to log in and wear an appropriately designated badge while on-site.

The facility has an internal paging system that is utilized both indoors and outdoors. Alarms are in place at specific locations and are there to monitor equipment. Employees have been trained on how to use the methods of communication available at the facility.

The facility utilizes high-pressure sodium vapor, high-pressure mercury vapor, or similar lighting systems throughout the plant to provide adequate illumination during hours of darkness. The lighting system provides sufficient illumination to all necessary plant areas by strategically locating individual lights to prevent acts of vandalism.

3.5.10 Signs

There are warning signs posted in English and Spanish at the entrance of the facility. All signs meet the requirements prescribed in 40 CFR 264.14(c). These signs read: "Danger-Unauthorized Personnel Keep Out". Additional warning signs are also posted at each entrance that meet the requirements of 40 CFR 761.45(a). These signs read: "Caution contains PCBs (Polychlorinated Biphenyls). A toxic environmental contaminant requiring special handling and disposal in accordance with U S Environmental Protection Agency Regulations 40 CFR 761-For disposal Information Contact the nearest U S EPA Office. In case of accident or spill, call toll free the US Coast Guard National Response Center 800-424-8802. Also Contact: _____ at Telephone No. _____."

3.5.11 Closed PCB Units

The facility has one area currently permitted to store PCB's which has not been utilized in excess of fifteen years. This unit will begin TSCA closure concurrent with this renewal application.

3.6 Environmental Conditions

3.6.1 Surface Water Proximity

There are no surface water bodies located within one mile of the site. Rainfall run-off and run-on are not a problem since the PCB storage facilities are located indoors within bermed areas.

3.6.2 Drinking Water Proximity

Drinking water, water for sanitary needs, and water for fire control are supplied by the local municipality.

3.6.3 Sewers

There is no process water released to the POTW.

3.6.4 Ground Water Location Issues

Records on file with the California Geological Survey indicate that there are ground water wells located within 1 mile of the site. The locations of record are shown on the Well Location Map in Figure 4-1.

4.0 PCB Closure Plan

4.1 Facility Description

4.1.1 General Description

Clean Harbors Los Angeles, LLC is a RCRA permitted treatment and storage facility that receives wastes for storage, consolidation, and shipment to off-site treatment and disposal facilities. One area is designated for storage of PCBs pending off-site treatment and disposal. No TSCA federally regulated PCB treatment or disposal is conducted on-site. No draining of TSCA federally regulated PCBs will be conducted on-site unless the primary container is compromised. In that event PCB liquids will be repackaged using DOT approved containers to ensure environmental integrity and safe off-site transport.

4.1.2 Facility Location

The facility located in an industrial area of Los Angeles, California, in U.S. EPA Region IX. The address of the facility is 5756 Alba Street, Los Angeles, California 90058.

4.1.3 Site Specific Information

The facility is located in the heavily industrialized area and occupies approximately 2.3 acres. The perimeter is completed fenced by an 8-foot corrugated steel fence topped by approximately 18-inches of concertina wire. The entire site is electronically monitored by protection equipment 24 hours per day. The property is relatively flat and paved as shown on Drawing P003-CC-102 (Attachment B). The site is bounded on the south by a city street and railroad tracks, on the west by a city street, on the north by an industrial property, and on the east by a city street and railroad tracks.

The site is currently operating as a permitted RCRA and State of California hazardous and industrial waste storage facility. Tanks for storage as well as analytical laboratory facilities are present on the property. These facilities are totally separate from the PCB storage areas that are the subject of this PCB Closure Plan.

The Container Storage Warehouse, Bay 1, is the sole permitted location for storage of TSCA regulated PCBs. The locations are separate from the other containment bays within the Container Storage Warehouse.

The site is located greater than one mile from any surface water body and is above the 100-year flood plain. Drawing P003-CC-102 (Attachment B) provides additional details about the property.

Traffic enters from Alba Street through a secured gate. Internal traffic is limited to parking areas and loading and unloading areas.

4.1.4 Environmental Conditions of the Site

There are no surface water bodies located within one mile of the site. Rainfall run-off and run-on are not a problem since the PCB storage facilities are located indoors within bermed areas.

Records on file with the California Geological Survey indicate that there are ground water wells located within 1 mile of the site. The locations of record are shown on the Well Location Map in Figure 4-1.

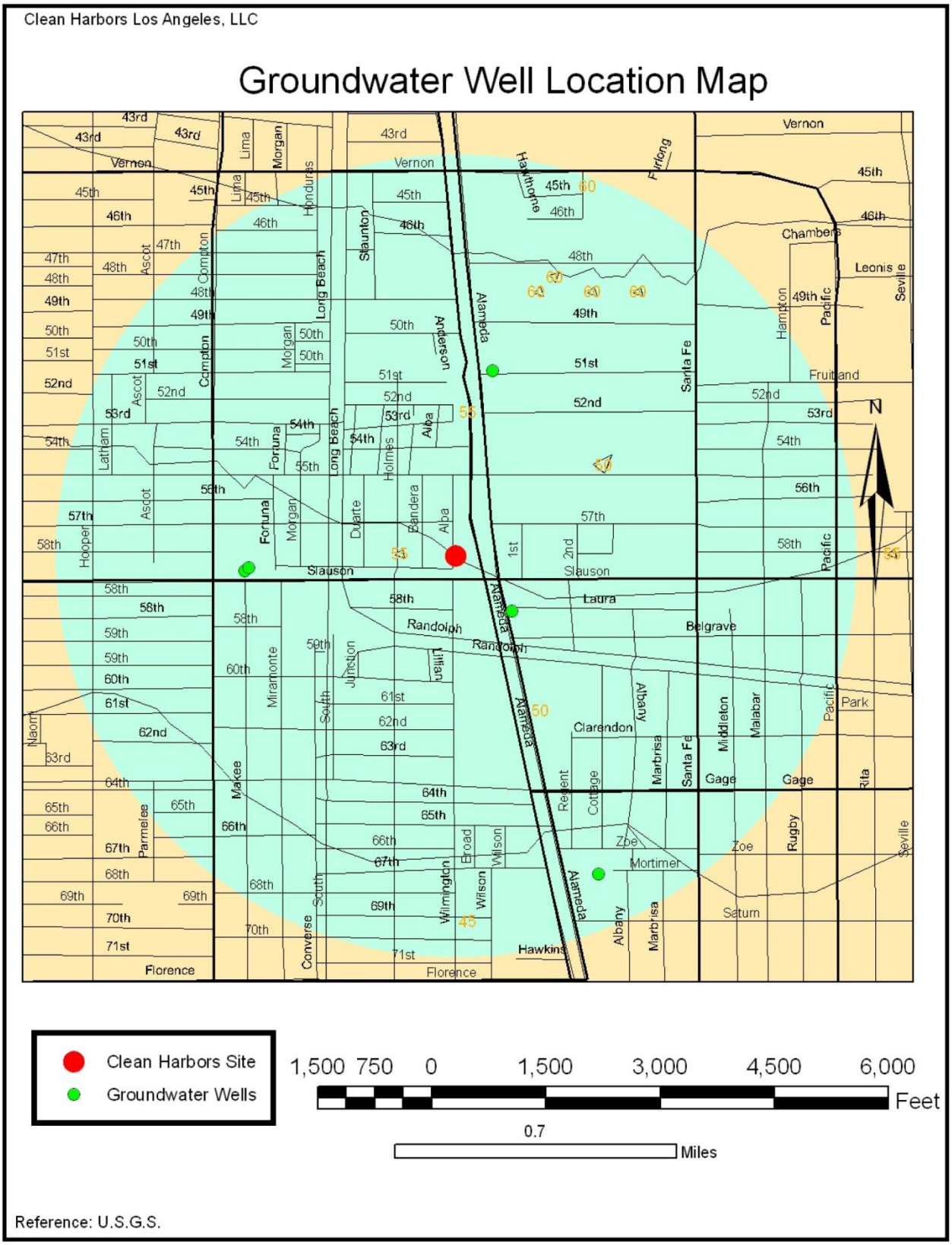


Figure 4-1: Well Location Map

4.1.5 PCB Waste Storage Facility Design

The Container Storage Warehouse consists of three separate storage bays. The first bay, Bay 1 (consisting of areas DW-1, DW-2, DW-3, DW-4, DW-5 and DW-6) is a rectangular storage area 54 feet long x 34 feet wide. The structure consists of a concrete slab surrounded by a containment berm. The bay has six discrete storage areas consisting of open areas separated by 6-inch high concrete berms and a totally enclosed room (Incompatible Storage Room (DW-2)). PCBs may be stored in any area of Bay 1. For purposes of containment calculations, all of the storage areas are considered. Specific dimensions and capacities are listed below. Detailed calculations, including displacement, can be found in Appendix E. Please note that the Incompatible Storage Room (DW-2) is utilized for storage of incompatible wastes or miscellaneous PCB contaminated equipment. This structure was included in containment calculations and closure sampling.

Table 4-2: Bay 1 (consisting of areas DW-1, DW-2, DW-3, DW-4, DW-5 and DW-6) – Dimensions and Capacities

Container Storage Warehouse Bay 1	Dimensions And Capacities
Overall Interior Dimensions Floor Area	54 Feet x 34 Feet 1,836 Square Feet
Containment Berm Height	6 Inches
Contained Storage Area Trench and Sump Area	1,639 Square Feet 53 Square Feet
Gross Containment Volume Trench and Sump Volume	6,134 Gallons 97 Gallons
Design Storage Capacity – PCB Design Storage Capacity – RCRA Maximum Liquid Volume – PCB Maximum Liquid Volume - RCRA	144 x 55-Gal Containers 240 x 55-Gal Containers 7,920 Gallons 13,200 Gallons
Required Containment Volume PCB Requirements at 25% RCRA Requirements at 25%[3] Total Requirements	 1,980 Gallons 3,300 Gallons 5,280 Gallons
Net Containment Volume[4]	5,423 Gallons

[3] - RCRA secondary containments are required at 10%. However 25% secondary containment was used in the event of catastrophic failure (e.g. earthquake or fire) assuming entire containment contents were to become comingled

[4] -Net available area and volume after correction for containers and berm displacements. Trench and sump area is included.

4.2 Disposal of PCB Waste Inventory

As specified in 40 CFR 761.65, the PCB Closure Plan is based on the disposal of the maximum PCB storage capacity of the facility. This section will describe the maximum storage capacity of various types of PCB items and the disposal methods for the different types of PCB items.

4.2.1 Maximum Inventory

The maximum inventory in storage is indicated below.

Table 4-3: Maximum Inventory

Waste Type	Estimated Maximum Quantity
Liquids in Drums	7,920 Gallons
Pallets	36

4.2.2 Disposal of Inventory

Disposal of all PCB items will follow the guidelines set forth in 40 CFR 761.60. The maximum volume of waste as described in Section 4.2.1 will be disposed. Methods of disposal and processing procedures required for closure are discussed below. The designated PCB waste disposal facility is Clean Harbors Aragonite, LLC located in Aragonite, Utah. The secondary facility is Veolia Environmental Services, Inc. located in Port Arthur, Texas.

PCB liquids in drums will be transported off-site to an approved incineration facility and pallets used for transportation purposes will become the responsibility of the disposal company and is so reflected in the closure cost estimate.

Any miscellaneous equipment (e.g. pumps, hoses etc.) contaminated with PCB will be disposed at closure. Larger equipment (such as a contaminated forklift) will be decontaminated.

4.2.3 Detailed Building Description

The Building roof and walls are constructed of concrete filled masonry block and steel. The roof is sloped and served by gutters and downspouts to convey rainfall to drainage on the exterior to the building. Doors and other openings in the building have been designed and installed to resist wind-blown rainfall. Floors are sealed and coated with epoxy coating such as STEEL-SEAM® FT910 Epoxy (Part A), White, STEEL-SEAM® FT910 Epoxy (Part B), Black Hardener (see Attachment C).

4.3 PCB Closure Plan Sampling, Decontamination, and Spill Cleanup Policy

A detailed description of the activities that will be carried out to identify and remove a decontaminate PCB contaminated containment system components is provided in this subsection. Specific items to be addressed are:

- Area Classifications
- Numerical Cleanup Levels
- Statistical Sampling Program
- Decontamination Procedures
- Post Cleanup Verification Procedures

4.3.1 Area Classifications

The facility will pursue cleanup standards designated for High Occupancy Areas for the closure of TSCA management units and other potentially affected areas of the facility. A High occupancy area means any area where PCB remediation waste has been disposed of on-site and where occupancy for any individual not wearing dermal and respiratory protection for a calendar year is: 840 hours or more (an average of 16.8 hours or more per week) for non-porous surfaces and 335 hours or more (an average of 6.7 hours or more per week) for bulk PCB remediation waste. Examples could include a residence, school, day care center, sleeping quarters, a single or multiple occupancy 40 hours per week work station, a school class room, a cafeteria in an industrial facility, a control room, and a work station at an assembly line.

Building Areas Porous Surfaces

Indoor solid surfaces which are porous will be sampled by means of chip and core and cleaned to a level of 1 ppm or less for high occupancy areas without further restrictions. This is based on the regulatory standard set forth in 40 CFR 761.61(a)(4), *Cleanup Levels for PCB Remediation Waste.*

Building Areas Non-Porous Surfaces

Indoor solid surfaces which are non-porous or, porous surfaces covered with a non-porous surface will be cleaned to a concentration of 10 $\mu g/100cm^2$ or less as measured by standard wipe tests. This is based on the regulatory standard in 40 CFR 761.125(c)(4), *Requirements for decontaminating spills in nonrestricted access areas.*

The Container Storage Warehouse Bay 1 (consisting of areas DW-1, DW-2, DW-3, DW-4, DW-5 and DW-6) can be classified as "Other Restricted Access Locations (Non-Substation)" according to 40 CFR 761.123. The classification is justified because all areas that could potentially be contaminated are enclosed

within secure buildings, on a site surrounded by a security fence, and located greater than 0.1 kilometers from any nearby residential or commercial areas.

Other areas of potential impact at the facility include PPE donning/doffing areas, bathrooms adjacent to PCB areas, loading/unloading areas, temporary storage area, and areas where spill have been noted in the past and will be included closure sampling .

4.3.1.1 Facility Structure Components

As mentioned previously, the PCB storage area consists of a totally enclosed concrete containment area inside a concrete block building. Although the concrete surfaces have been treated with an epoxy coating and can be classified as "low contact indoor, impervious solid surfaces," according to 40 CFR 761.123 they will be sampled and evaluated, at closure, with the porous surface standards. Interior walls and doors below 6 feet can be classified as "high contact solid surfaces" according to 40 CFR 761.123. Interior walls above 6 feet will not be sampled, because there are no splash hazards at this facility, and PCBs do not readily volatilize, thus there is no reason to expect that PCBs will be present above 6 feet.

4.3.1.2 Containment System

The containment system at this facility consists of epoxy coated concrete berms and slabs. The concrete berms and slabs can be classified as "low contact indoor impervious solid surfaces" according to 40 CFR 761.123 but will be sampled and evaluated, at closure, with the porous surface standard.

4.3.2 Numerical Standards

In the previous subsection, the various building components at the CHLA facility that performed PCB service were classified according to the criteria in 40 CFR 761.125(c)(3). Table 4-1 describes the various building component classifications and the corresponding cleanup level specified in 40 CFR 761.125(c)(3).

Table 4-4: Component Classifications and Specified Cleanup Levels

Cleanup Category Per 40 CFR 761.61(a)(4) and 761.125 (c)(4)	Building Components in this Category	Cleanup Criteria
Porous Surfaces	Any surface that allows PCBs to penetrate or pass into itself	1 ppm
Non-Porous Surfaces	smooth un-corroded metal; smooth glass	10µg/100 cm^2

4.3.3 Statistical Sampling Program

A statistical sampling program will be initiated as part of the closure of this facility in order to ensure that the facility will be properly decontaminated upon closure. Specific topics to be addressed in the statistical sampling program are:

- Safety Plan
- Initial Facility Inspection
- Field Sampling Plan.

4.3.3.1 Safety Plan

According to 40 CFR 1910.120(b), a site specific safety plan shall be prepared for all work to be performed at a site that has the potential for employee exposure to a hazardous or toxic substance. Since employee exposure to such substances is possible during PCB closure activities at this facility, a safety plan conforming to the requirements set forth in 40 CFR 1910.120 (b), shall be prepared for the PCB closure activities at CHLA at the time of closure. This safety plan will be prepared by the contractors at the time of closure and will be contractor specific.

A safety plan conforming to the requirements set forth in 40 CFR 1910.120(b) has been prepared for PCB activities occurring at this site currently and is available in Appendix H.

4.3.3.2 Initial Facility Inspection

The purpose of the Initial Facility Inspection is to gather data that will assist in deciding where to collect samples from, and to provide an overall assessment of the site. This will include locating areas of potential PCB contamination, identifying any potential hazards or items causing a safety concern, and assessing the overall structural integrity of the facility. The following areas will be addressed when performing the Initial Facility Inspection:

- Review of Plant and Regulatory Agency Records
- Interviews with Site Personnel
- Visual Site Inspection.

Review of Plant and Regulatory Agency Records

The purpose for reviewing plant and regulatory agency records will be to gather any data that may exist concerning previous PCB spills, accident, or clean up actions. Plant records will be reviewed first, followed by regulatory agency records.

Interviews with Site Personnel

Available employees of the current owner, and any employees of previous owners that can be readily located, will be interviewed as part of the Initial Facility Inspection. The purpose of the interviews will be to determine if any PCB spills occurred at the facility that were not reported, or that may have occurred in a location that was outside the normal operating areas.

Visual Site Inspection

The Visual Site Inspection will involve a survey of the PCB storage area, including the immediately adjacent roads and surrounding land. The area where PCBs were stored will be entered and will be observed for any obvious spills, coating degradation, cracks in containment, any building materials that might require special sampling, and any apparent structural defects or potential hazards.

4.3.3.3 Field Sampling Plan

This Field Sampling Plan presents a description of the activities planned for the pre-cleanup sampling at CHLA. The sampling plan includes the following items.

- Field Investigation Objectives
- Sampling Locations and Rationale
- Decontamination Procedures
- Sample Handling and Documentation
- QA/QC Procedures

Field Investigation Objectives

The overall objective of the Field Investigation is to determine if there is PCB contamination at the PCB storage facility in order to develop a cleanup plan so the PCB storage area can be effectively remediated and closed.

Sampling Locations and Rationale

As was mentioned in Section 4.3.1 Area classifications, all PCB storage will be conducted indoors, in an area surrounded with containment berms. For this reason, unless the Initial Facility Inspection reveals any potential PCB spill areas outside of the area identified in Section 4.3.1, no soil or groundwater samples will be collected during the Field Investigation. Sampling will be performed, however, in the bay described in Section 4.3.1. In each location, two sampling methodologies will be used: judgmental and systematic sampling.

Judgmental sampling will involve collecting samples in places where the Initial Facility Inspection found evidence of a release, or where use

patterns indicate the possibility of PCB contamination. Judgmental sampling will incorporate chip, core and wipe sampling (depending on the particular area) as a means of evaluation. A minimum of one judgmental sample will be collected from the concrete of each containment area and will be collected from a low point or sump.

Systematic sampling (chip, core or wipe) will be performed on each wall and floor area in accordance with the standards set forth in 40 CFR 761, subpart N. This will involve establishing a grid system for each affected wall and floor area, and collecting samples at the grid nodes. Typical sampling grids for walls are shown on Figure 4-2 and floor sampling grids for the Container Storage Warehouse are shown on Figure 4-3. Sampling grids will be laid out in the field and sample locations will be marked with masking tape or other suitable marking device.

Cracks in the flooring or distressed areas within secondary containment will be evaluated to determine the likelihood for residual contamination. Cracks in the flooring will be evaluated by coring to determine the potential for the crack to have penetrated the entire depth of the floor. In those cases where a crack does penetrate the floor, the subbase will be tested for PCBs. Otherwise, the depth of the distress plus one inch will be tested for PCBs. If no penetration beyond the surface is apparent then core samples will be taken in these areas at a depth of up to 7 cm and a diameter of 2 to 3 cm.

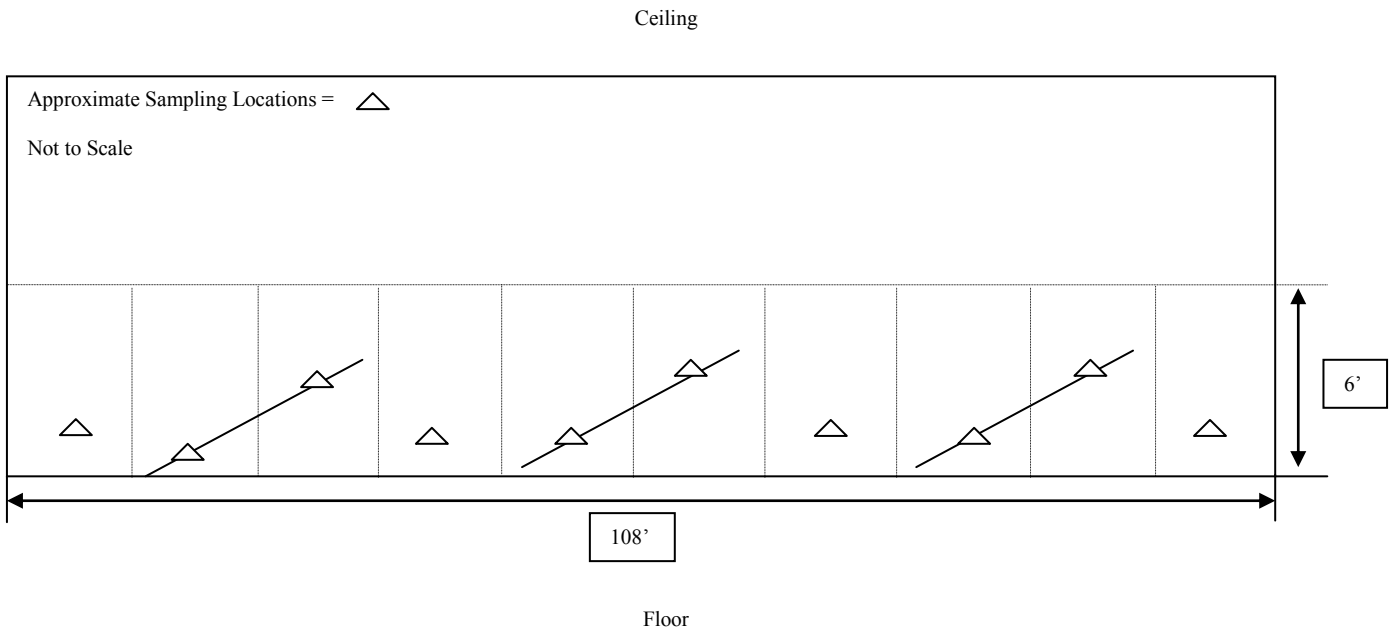
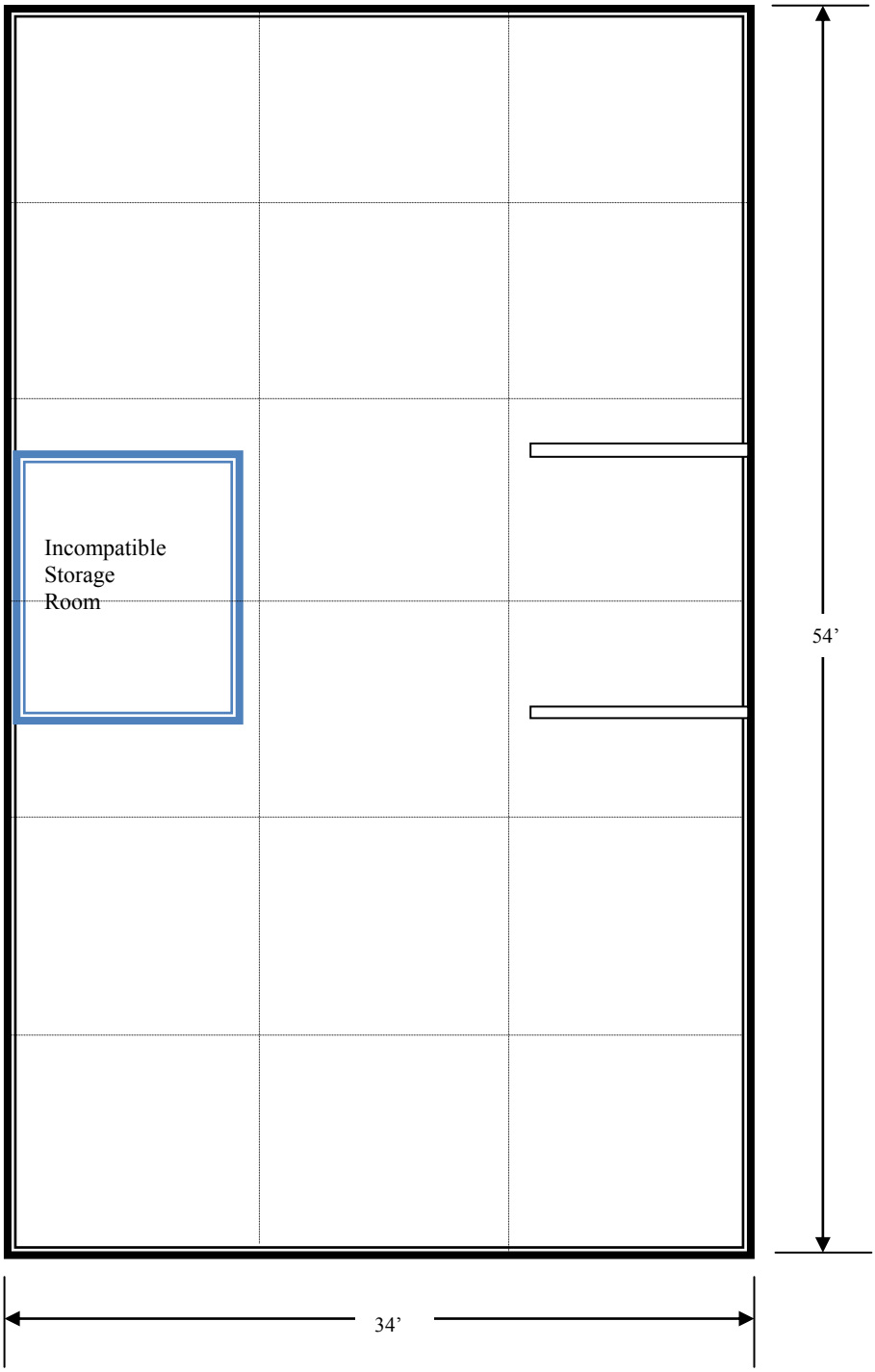


Figure 4-2: Typical Sampling Grid for Wall



Note: Sample marked as deviates from the grid pattern but is included to accurately represent the area

Figure 4-3: Grid Sampling Locations – Container Storage Warehouse

Sampling Activities and Analytical Requirements
Samples collected from concrete surfaces will be chip or core samples. Samples from other areas (bathroom doorjambs and floors) will be wipe samples. Samples to evaluate other areas of potential impact at the facility include PPE donning/doffing areas, bathrooms adjacent to PCB areas, loading/unloading areas and areas where spill have been noted in the past.

Wipe Samples will be taken in accordance with the requirements outlined in 40 CFR 261, subpart P.

Core samples (if no penetration beyond the surface is apparent) will be taken at a depth of up to 7 cm and a diameter of 2 to 3 cm.

All samples collected will be analyzed using EPA SW-846 Method 8082 or the current equivalent method.

Prior to collecting the pre-cleanup samples, individual sampling grid maps will be prepared for each wall and floor. The maps for the walls will be drawn on an 8 ½ x 11 sheet of paper and will depict all necessary dimensions and sampling locations needed to lay out the sampling grid. These maps will also be used as part of the sample documentation. The map for the floor shall use those shown in Figure 4-3.

Decontamination Procedures
All sampling equipment that is not disposable shall be decontaminated after each sample by washing twice with hexane and allowing to air dry. Sampling equipment may also be appropriately packaged and disposed. Personnel decontamination is addressed in the Site Safety Plan.

Sample Handling and Documentation
Proper handling and documentation of samples is important to assure that the data will be legally defensible and reproducible. Field logs will be used to record information concerning sample identification, evacuation, field analysis, and other aspects of the sampling effort for each sample. Specifically, the field log when completed will provide the following information:

- Sample location
- Sampling date and time
- Name of samplers
- Time of sampling
- A description of the material sampled and the presence of any unusual odors or visible contamination
- Types of samples collected
- Field analysis data
- Weather conditions
- Any other field observations, such as problem with equipment, or

any other aspect of sampling conditions that might have an effect on the outcome of sampling results.

These procedures are expected to be followed at all times. Deviations from the plan should be noted on the field log.

A jar label as shown in Figure 4-4 will be completed and placed on each sample jar. The lid will then be taped shut and custody seal as shown in Figure 4-4 will be placed around the lid. Each jar will be individually wrapped in bubble wrap plastic and placed in a cooler. The cooler shall be lined with Styrofoam packing material to protect the samples. Enough room will be left in the coolers to allow ice packs to be placed in the cooler to preserve the samples at or near 4 degrees C. Once a cooler is full, a Chain-of-Custody form as shown in Figure 4-5 will be completed in triplicate. The Chain-of-Custody will assure samples are always under the supervision of a qualified individual or organization. One copy of the Chain-of-Custody will be retained and the other two copies will be sealed in the cooler with the samples. The cooler will then be taped shut using strapping tape and sealed on three sides with custody seals.

Official Sample Seal

SAMPLE NO.

DATE

SIGNATURE

PRINT NAME AND TITLE

SEAL BROKEN BY

DATE

Sample #: _____ Date: _____

Collected By: _____ Time: _____

Analysis: _____

Preservative: ___ None ___ HNO3 ___ H2SO4 ___ NaOH

Other: _____

Figure 4-4: Jar Label and Sample Seal

CHAIN OF CUSTODY RECORD

PROJ. NO. | PROJECT NAME

SAMPLERS: (Signature)

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CON-TAINERS				REMARKS

Relinquished by: (Signature) | Date/Time | Received by: (Signature) | Relinquished by: (Signature) | Date/Time | Received by: (Signature)

Relinquished by: (Signature) | Date/Time | Received by: (Signature) | Relinquished by: (Signature) | Date/Time | Received by: (Signature)

Relinquished by: (Signature) | Date/Time | Received for Laboratory by: (Signature) | Date/Time | Remarks

Distribution: White and Yellow Accompanies Shipment; Pink copy to Field Files

Figure 4-5: Chain of Custody Form

4.3.3.4 QA/QC Procedures

Laboratory Selection

Although the facility has an on-site laboratory, for the purpose of this closure plan, it is assumed that an off-site lab will be utilized for sample analysis. In that regard, a Quality Assurance Plan (QAP), prepared in accordance with accepted industry practices and as a commitment to the quality of its environmental testing and the law is included in Appendix I.

Detection Limits

In order to determine whether a sample is contaminated above the levels specified in 40 CFR 761.125 (c)(3) it will be necessary for the laboratory to detect PCBs at levels below the specified cleanup levels. As described in Table 4-4, the cleanup level for exposed surfaces of this facility is 10µg/100 cm². Therefore, it will be necessary for the laboratory to detect PCBs at concentrations in the range of 1 µg/100 cm².

PCBs-8280 (wipe)

Compound	RL	Units	MDL	Units	LCL	UCL	RPD
Aroclor 1016	1	ug/wipe	0.25	ug/wipe	45	107	50
Aroclor 1221	1	ug/wipe	0.33	ug/wipe			
Aroclor 1232	1	ug/wipe	0.25	ug/wipe			
Aroclor 1242	1	ug/wipe	0.25	ug/wipe			
Aroclor 1248	1	ug/wipe	0.25	ug/wipe			
Aroclor 1254	1	ug/wipe	0.25	ug/wipe			
Aroclor 1260	1	ug/wipe	0.25	ug/wipe	50	127	43
Surrogates							
Decachlorobiphenyl					65	137	NA
Tetrachloro-m-xylene					54	126	NA

PCBs-8280 (solids)

Compound	RL	Units	MDL	Units	LCL	UCL	RPD
Aroclor 1016	33	ug/kg	3.4	ug/kg	81	114	20
Aroclor 1221	33	ug/kg	5.2	ug/kg			
Aroclor 1232	33	ug/kg	6.4	ug/kg			
Aroclor 1242	33	ug/kg	7.4	ug/kg			
Aroclor 1248	33	ug/kg	5.7	ug/kg			
Aroclor 1254	33	ug/kg	2.7	ug/kg			
Aroclor 1260	33	ug/kg	2.9	ug/kg	85	123	30
Surrogtes							
Decachlorobiphenyl					77	123	
Tetrachloro-m-xylene					64	139	

4.3.4 Decontamination

After all the data has been validated, and the areas of PCB contamination above cleanup levels have been identified, cleanup of these areas can be initiated. As part of this PCB closure plan, different cleanup methods are listed and appropriate methods will be selected for the various items to be decontaminated. Areas that will potentially need to be decontaminated may include facility structure components and containment systems.
Items to be discussed in this section include:

- Evaluation of Cleanup Methods.
- Description of Selected Cleanup Methods
- Decontamination of Cleanup Equipment
- Health and Safety Considerations
- Disposal of Cleanup Derived Waste

4.3.4.1 Evaluation of Cleanup Methods

Currently, there are several methods in use for cleanup of PCBs. These include the solvent clean method and various proprietary aqueous solvent or foam methods. Due to the small size of the potential area for decontamination, this PCB closure plan will focus only on the solvent clean method.

Solvent Clean Method

This method can be used to decontaminate both exposed surfaces and PCB containers as specified in 40 CFR 761.79. Acceptable solvents include, but are not limited to, isopropyl alcohol, kerosene, hexane and #2 diesel fuel. For exposed surfaces, sufficient volume of solvent is applied to cover the entire contaminated surface, the excess solvent is absorbed with rags, and the contaminated area is wiped with a clean rag. If the surface is porous, scrubbing may be required using a wire brush. The process is then repeated and all solvent is absorbed with rags and granular absorbent.

The Solvent Clean Method is the most common cleanup method for PCBs. This method has been proven to be effective on most types of materials. It does not work as well on porous surfaces because the solvent tends to increase the mobility of the PCBs and allow them to penetrate further into the porous surface.

Equipment and support facilities needed for the solvent clean method are minimal. The only equipment needed is: rags, solvents, wire brushes, buckets, pumps, and other small items. Ladders and scaffolding may be required depending on the height of the area or item being decontaminated.

The solvent clean method is a simple procedure to implement and should not require any special time requirements. Since this method involves the use of flammable solvents, special precautions would need to be taken to prevent ignition of the solvents.

The relative cost of the Solvent Clean Method is expected to be low. As mentioned previously, this method does not involve any sophisticated equipment, so the main costs will be for labor, solvent, rags, and other miscellaneous equipment.

Health and Safety Considerations

Persons performing closure operations will be trained in proper chemical handling and safety procedures. They will be under the direct supervision of persons who are familiar with the process and understand the hazard potential of the stored material. Management personnel in conjunction with an independent engineer will oversee closure, will be familiar with this closure plan, and will ensure that all closure personnel are properly trained to safely perform the cleaning operation. The supervisor will have health and safety training provided through Clean Harbors' corporate health and safety program.

During the cleaning process, personnel will be equipped with the appropriate protective equipment. They will also utilize head protection and chemical resistant gloves and boots. The clothing will be designed so that both sleeves and pant legs can be taped at the wrists and ankles respectively, to protect against upward or inward splash of water during cleaning.

Additional health and safety considerations during the cleanup of the facility are further addressed in Appendix H.

Disposal of Cleanup Derived Waste

Waste material generated during the PCB closure activities will fall into the two categories of contaminated and non-contaminated. Contaminated material will include liquid waste from the solvent clean process, miscellaneous sampling equipment, personnel protective equipment, and other items. These items will be segregated into liquids and solids and stored in 55-gallon drums. Both liquids and solids will be transported, in accordance with applicable regulatory requirements, to an approved disposal facility.

Non-contaminated material generated during closure activities will be disposed of at the local sanitary landfill.

4.3.5 Post Cleanup Verification Procedures

In order to verify that cleanup has been effective in reducing PCB contamination below acceptable levels and to satisfy the requirements of 40 CFR 761.125 (c)(5)(viii), post cleanup sampling will be performed as described below. Sample collection, analytical, and management will be in accordance with the standards previously outlined in section 4.3.3.3.

4.3.5.1 Sampling Methods, Locations, and Rationale

The methods used for post cleanup sampling will be the same as those used for the pre-cleanup sampling. This will consist of chip, core, and wipe samples as described in section 4.3.3.3

The locations to be sampled during post cleanup sampling will be based on areas of contamination identified during the initial site inspection and the pre-cleanup sampling. Before any post cleanup sampling begins, the records from the previous sampling will be reviewed to identify areas where elevated levels of PCBs were found. At the locations, samples will be taken as close as possible to the location previously having elevated levels of PCBs.

4.3.5.2 Analytical Procedures

Samples collected during post cleanup sampling will be analyzed using the same analytical methods described in the pre-cleanup analytical procedures. After the results are returned and validated as described previously, any sampling locations with PCB concentrations above the established cleanup levels will be decontaminated again using the same procedures as previously specified.

4.3.5.3 Waste Collection

All waste generated during the post cleanup sampling will be collected, containerized, and disposed in accordance with all Federal (e.g. 40 CFR 761.65(e)(7)), State, and Local regulations.

4.4 Other Closure Activities

Because of the way the facility is laid out, other closure activities such as groundwater monitoring, run-on/run-off treatment and control, and additional security devices will not be necessary after cleanup is completed.

4.5 Closure Schedule

Closure activities for the CHLA facility will be subject to the schedule described in Table 4-6. The estimated date of closure will be March 1, 2065. Prior to closure Clean Harbors Los Angeles, LLC will petition EPA, in accordance with 40 CFR 761.65(e)(6)(i), that the closure plan is u- to date or submit a permit modification with an update closure plan.

Table 4-6: Closure Activity Schedule

Date	Closure Activity Schedule	Duration	
		Days	Hours
Dec. 31, 2064	Owner to notify EPA of intent to close facility.	0	0
Jan. 31, 2065	Facility to receive final shipment of PCB waste.	0	0
Mar. 1, 2065	Closure of facility begins.	0	0
	Removal of inventory (Section 4.2.2).	1	8
	Initial facility inspection (Section 4.3.3.2).	2	4
	Facility sampling (Section 4.3.3.3).	1	4
	Receive analytical results and perform validation and statistical analyses (Section 4.3.3.3).	30	4
	Decontaminate facility (Section 4.3.4).	5	14
	Submit closure certification to U.S. EPA.	30	8

A timeline showing the required activities before and after closure is presented in Figure 4-6. The times indicated are illustrative and actual duration of each task is expected to be much less.

Task Name	Start Date	Duration	End Date
Closure Preparation	**12/31/64**	**22.00d**	**1/31/65**
Notify EPA of Intent to Close Facility	12/31/64	0d	12/31/64
Receive Final Shipment of PCB Waste	1/31/65	0d	1/31/65
Facility Closure	**3/2/65**	**39.00d**	**4/23/65**
Removal of Inventory	3/2/65	1.00d	3/2/65
Initial Facility Inspection	3/3/65	2.00d	3/4/65
Facility Sampling	3/5/65	1.00d	3/5/65
Receive Analytical Results & Perform Statisti	4/16/65	0d	4/16/65
Decontaminate Facility	4/17/65	5.00d	4/23/65
Closure Certification	**5/1/65**	**30.00d**	**6/11/65**
Prepare Closure Certification	5/1/65	30.00d	6/11/65
Submit Closure Certification to EPA	6/11/65	0d	6/11/65

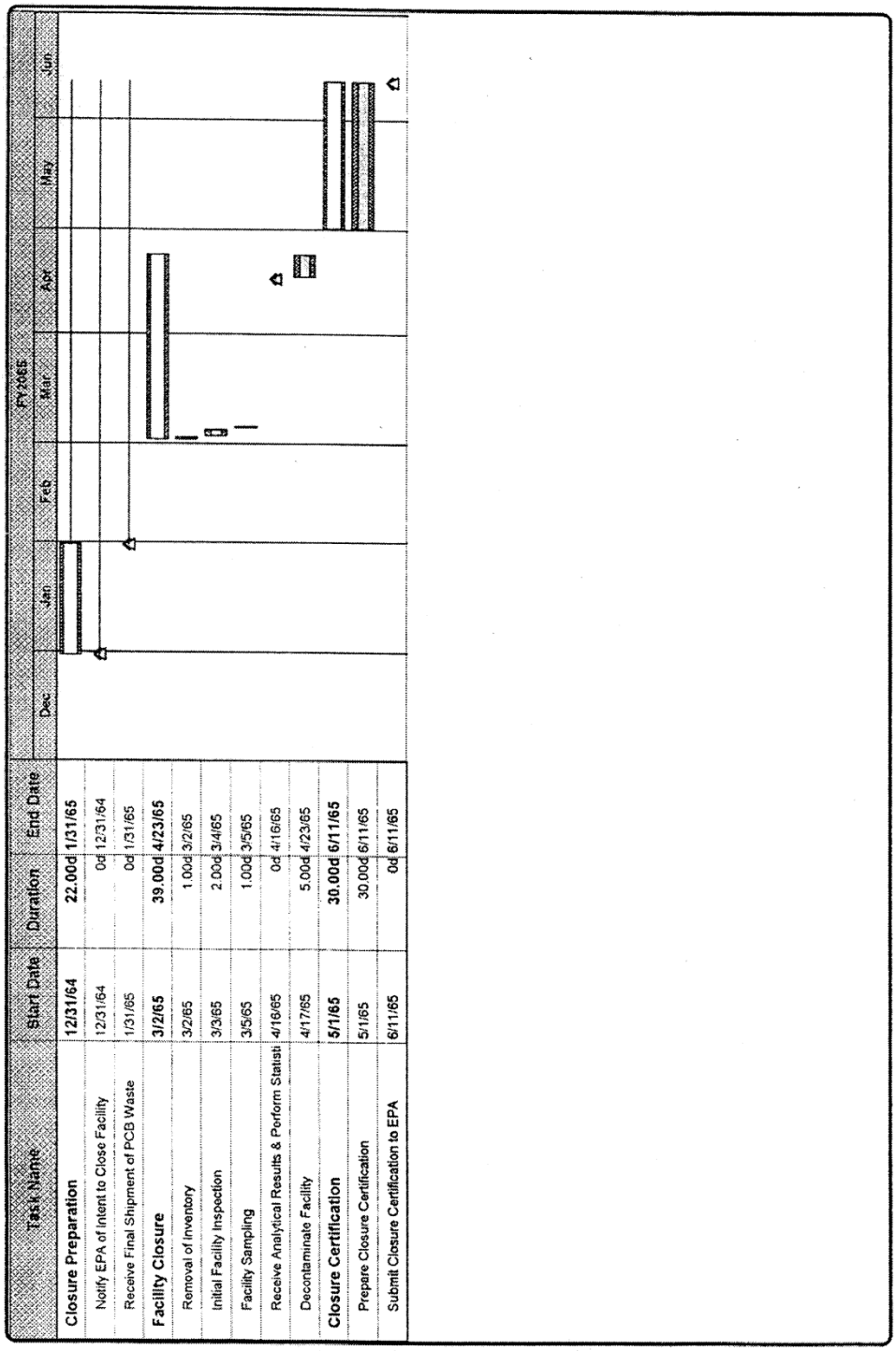


Figure 4-6 TSCA Closure Schedule

4.6 Modifications to the PCB Closure Plan

This PCB Closure Plan will be amended and resubmitted to the U.S. Environmental Protection Agency for approval when certain specified events or conditions occur. These items are listed below.

4.6.1 Operating and /or Design Changes

When a change in operating plans or in facility design affect the PCB Closure Plan, an amended plan will be prepared and submitted to the U.S. EPA for approval. Examples of specific items, which are considered under this subsection, include:

- Increases in facility size or capacity.
- Increases in the estimate of maximum inventory.
- Changes in the regulatory requirements that affect closure activities.
- Changes in the surrounding land use.

4.6.2 Unexpected Events During Final Closure

If during final closure, unexpected events occur which could affect the existing PCB Closure Plan; an amended PCB Closure Plan will be prepared and submitted to the U.S. EPA for approval. Unexpected events would include a release during closure activities, unavailability of planned disposal facilities or other occurrences, which were not anticipated.

4.6.3 Change in Expected Year of Closure

The year 2065 was selected as the closure year for this Plan. If closure is expected to occur at a different time, an amended PCB Closure Plan will be prepared and submitted to the U.S. EPA for approval.

4.6.4 Change in Financial Status

If a change in the facility's financial status occurs which may result in the inability to adequately pay for closure, an amended PCB Closure Plan will be submitted to the U.S. EPA for approval.

4.7 Closure Plan Checklist

A closure plan checklist is attached on the following pages. The checklist is taken from the TSCA Guidance Manual for Commercial PCB Storage Facility Application dated October 18, 1989. Specific subsections of this PCB Closure Plan are identified on the checklist to aid in compliance review.

Exhibit 4-1: Closure Plan Checklist for Commercial PCB Storage Facilities

	Provided	Not Applicable	Comments
1.0 Facility Description:			
1.1 General Description:	4.1.1		
1.2 Jurisdiction in which facility is located:	4.1.2		
1.3 Written description as well as topographic map detailing information on:			
• PCB Storage facilities	4.1.3		
• PCB treatment and disposal facilities		X	
• Hazardous waste management units (if RCRA permitted also)	4.1.3		
• All buildings and structures	4.1.3		
• Any 100-year floodplain	4.1.3		
• Adjacent surface waters or wetlands	4.1.3		
• Surrounding land uses	4.1.3		
• Other key topographic features	4.1.3		
• Traffic patterns	4.1.3		
• Location and status of underground storage tanks		X	
• Location and nature of security systems	4.1.3		
• Closed PCB Units (or hazardous waste management units if RCRA permitted)		X	

1.4 Description of environmental conditions on-site:

- Proximity to surface waters including

ponds, lagoons, wetlands and storage reservoirs	4.1.4		
• Proximity to public or private drinking water sources	4.1.4		
• Sewer location and design which could result in contamination of sewage treatment systems from PCB spills		**X**	
• Location of nearby grazing lands, farms, and vegetable gardens		**X**	
• Presence of a shallow well, ground water near the surface, or which poses a high potential for ground-water contamination	4.1.4		

1.5 Detailed description with engineering drawings of facility design:

	Design Capacity	**Monitoring**	**Containment Systems**
• Roof and walls	4.1.5		
• Flooring	4.1.5		
• Curbing and its containment volume	4.1.5		
• Drain valves, floor drain, etc. • Storage pallets outside of storage buildings (including locations and numbers)	4.1.5		
• Bulk tanks	**N/A**	**N/A**	**N/A**

	Provided	Not Applicable	Comments
2.0 Disposal of PCB Waste Inventory:			
2.1 Maximum inventory:			
• Provide design capacity	4.2.1		
• Estimate of maximum types and Quantities of:			
PCB Articles	4.2.1		
PCB Article Containers	4.2.1		
PCB Liquids in Bulk Tanks	4.2.1		
PCB Containers	4.2.1		
PCB Capacitors	4.2.1		
PCB Transformers	4.2.1		
PCB Contaminated Electrical Equipment	4.2.1		
Other PCBs	4.2.1		
Total PCB Inventory	4.2.1		
2.2 Disposal of inventory:			
• Details to ensure compliance as a PCB waste generator	4.2.2		
• Estimate of maximum inventory to be sent off-site	4.2.2		
• Description of any treatment prior to transport, if applicable		X	
• Methods and arrangements used for PCB waste removal and transportation off-site to approved storage and disposal facilities	4.2.2		
• Description of treatment and disposal methods at the final treatment or disposal facilities	4.2.2		
• Bulk tank removal, transport, tracking, and off-site disposal of tank capacity		X	

- Proposed schedule to complete disposal within 90 days from closure commencement 4.5

3.0 Closure Plan Sampling, Decontamination, and Compliance with the Spill Cleanup Policy:

3.1 Identification and classification of items to be decontaminated:

	Use	Structures & Equipment Construction Materials	Spill Cleanup Policy Classification of Materials, Structures, and Equipment	Numerical Cleanup Levels Applicable from the Spill Cleanup Policy
• Facility structure components (roof, wall, etc.)	4.3.1			
• Surrounding soil, pavement and vegetation	N/A			
• Containment systems and piping	4.3.1			
• Equipment	N/A			
• Pallets	N/A			
• Bulk tanks	N/A			
• OTHER	N/A			

3.2 Pre-cleanup survey and sampling:

a) Visual inspection to ascertain sampling boundaries includes detailed discussion of inspection for PCB contaminated residues or particulate matter on:

	Provided	Not Applicable	Comments .
• Tanks		X	
• Valves and piping		X	
• Equipment		X	
• Containment areas	4.3.3		
• Soil		X	
• OTHER		X	

b) Sampling survey should include:

• Discussion of methods for soil and aqueous materials		X	
• Discussion and maps of proposed grid sampling	4.3.3		
• Sampling plan for solid surfaces	4.3.3		

• Sampling for the penetration and contamination of PCBs into solid surfaces		**X**	
• Discussion of validity of statistical sampling plan	4.3.3		
• QA/QC	4.3.3		

4.0 Decontamination:

4.1 Cleanup methods for each contaminated component should be described in detail:

	Description of Decontamination Method	Description of Worker Protection Measures
• Facility walls	4.3.4	
• Facility floors	4.3.4	
• Facility roof	4.3.4	
• Soil	N/A	
• Containment systems and valves	4.3.4	
• Equipment	N/A	
• Pallets	N/A	
• Bulk tanks	N/A	
• OTHER	N/A	

4.2 A description of the criteria used to choose each decontamination method for the components listed below:

	Effective-ness	Equip-ment	Support Facilities Needed	Time Require-ments	Safety Require-ments	Amounts of Wastes Generated
• Facility walls	4.3.4					
• Facility floors	4.3.4					
• Facility roof	4.3.4					
• Soil	N/A					
• Containment systems and valves	4.3.4					
• Equipment	N/A					
• Pallets	N/A					
• Bulk tanks	N/A					
• OTHER	N/A					

4.3 Decontamination should also detail post-cleanup verification sampling – especially visually contaminated areas:

	Provided	Not Applicable	Comments .
	4.3.4		

4.4 Decontamination, containerization, and disposal of both PCB and non-PCB wastes produced in facility decontamination, including solvents, rags and equipment:

• Estimates of wastes produced from:		X	
➢ Decontamination of equipment	4.3.5		
➢ Decontamination of structures		X	
➢ Decontamination of grounds	4.3.5		
➢ Post cleanup verification	4.3.5		
• Estimates of transportation of above wastes	4.3.5		
• Estimates of disposal facilities that would take these wastes	4.2.2		

5.0 <u>Other Activities Covered in the Closure Plan:</u>

5.1 Ground-water monitoring plan:	4.4
5.2 Treatment, removal, and disposal of run-on and run-off to decontamination procedures:	4.4
5.3 Security measures to prevent unintentional or unpermitted access to the site:	4.4

6.0 <u>Schedule for Closure Detailing the Above Activities:</u> 4.5

5.0 CLOSURE COST ESTIMATE

5.1 Initial Closure Cost Estimate

The closure of the Clean Harbors Los Angeles, LLC PCB storage facility is described in Section 4- PCB Closure Plan. The date of closure has arbitrarily been set for March 1, 2065. This date has been selected solely to develop a closure plan, and may be revised in the future based on business decisions.

The estimated cost for the PCB storage area closure based on 2012 dollars is listed in Table 5-2. Table 5-1 illustrates the costs by separate areas. The basis of the various costs is summarized below.

5.1.1 Certification

The closure cost has been certified by the person responsible for the closure cost preparation and uses the prescribed working. This certification is located in Section 6.

5.1.2 Closure Activities Included

The closure cost estimate is intended to cover all the activities described in the PCB Closure Plan. Specific activities are listed in Table 5-1 along with the estimated cost to complete each activity.

5.1.3 Cost Basis

The costs presented have been calculated by utilizing current cost quotations for outside vendors, contractors, and service agencies. Labor rates include provisions for contractor overhead and profit, and are based on the use of third party cleanup contractors. Costs include the certification of closure by an independent, professional engineer. Disposal rates are those currently charged by the disposal sites listed in the PCB Closure Plan. The costs include a factored transportation rate based upon a full load trip rate of $5.00 per loaded mile. Costs also include a 10% contingency.

5.1.4 Inventory on Hand

The closure cost estimate is based on the inventory specified in the PCB Closure Plan. This inventory consists of the maximum possible inventory of 7,920 gallons of PCB waste.

5.1.5 Off-site Disposal

All disposal of existing inventory and closure derived waste is intended to be at an approved off-site disposal facility. No on-site treatment or disposal is proposed.

5.1.6 Third Party Participation

PCB storage area closure costs, including disposal of inventory and closure derived wastes, are based on the use of third parties and do not include use of

parent companies or subsidiaries of the owner/operator of the Clean Harbors Los Angeles, LLC facility.

5.1.7 Salvage Value

No credit has been taken for possible salvage value of any component of the facility or inventory.

5.2 Review of Cost Estimate Adjustments

Adjustments to the closure cost estimate are required in two situations:

- After certain modifications to the PCB Closure Plan
- Annually to account for inflation

5.2.1 Adjustments for Closure Plan Modifications

A revised closure cost estimate is required to be prepared within 30 days of approval by the Regional Administrator of a closure plan modification. The revised cost estimate will be requested by the U.S. EPA when notification of approval of a closure plan modification is made.

The following changes in facility conditions or activities could increase closure cost estimates:

- An increase in facility size or capacity
- An increase in the estimate of maximum inventory
- Changes in regulatory requirements affecting the cost of closure
- Contingencies over the facility life that may affect future closure costs
- Changes in surrounding land use that may affect closure activities

Changes in facility conditions may also be the basis for a reduction in the closure cost estimate. A request for a reduction may be made as long as the closure activities continue to meet regulatory requirements.

5.2.2 Annual Inflation Adjustments

Closure cost estimates must be adjusted annually to account for inflation. This adjustment must be made prior to the anniversary date of the financial assurance instrument.

Annual inflation adjustments to the closure cost estimate may be made by either recalculating the closure cost using the current year's costs, or by multiplying the previous estimate by an inflation factor that measures the general trend in prices in the economy.

Use of the inflation factor will require regulatory review of only the inflation factor calculation. Re-estimating the closure costs will require a level of review similar to an initial closure cost estimate.

The source for inflation factor data is based upon standard practices accepted by the U.S. Department of Commerce.

The inflation factor used in the revision of the closure cost estimate is obtained by dividing the most recent annual deflator by the previous year's deflator factor. The previous closure cost estimate is then multiplied by this quotient to derive the new closure cost estimate.

Table 5-1: Closure Costs – Container Storage Warehouse – PCB Area

CONTAINER STORAGE WAREHOUSE PCB AREA	Quantity	Unit	Cost	Unit	Total Cost
INVENTORY DISPOSAL Drums: Liquid/Solid + Miscellaneous PCB Equipment/Solids	79,400	lbs	0.50	lbs	$39,700
Transportation	3,276	Mile	5.00	Mile	$16,380
INVENTORY DISPOSAL SUB-TOTAL					**$56,080**
DECONTAMINATION (Floor Area = 1,836 ft^2, Wall Area to 6 ft = 462 ft^2)					
Records Review & Interviews – Manager	4	Hours	55.00	Hour	$220
Inventory Removal					$0
Laborers	36	Hours	45.00	Hour	$1,620
Foreman	36	Hours	65.00	Hour	$2,340
Initial Sampling					$0
Laborers	12	Hours	45.00	Hour	$540
Manager	12	Hours	65.00	Hour	$780
Equipment Rental (Scarifier)	1	Week	900.00	Week	$900
Grid (core) Samples (Note 1)	47	Each	57.00	Each	$2,679
Wipe Samples (Note 1)	5	Each	57.00	Each	$285
Discretionary Samples (Note 1)	5	Each	57.00	Each	$285
Surface Decontamination (Floor Area= 1,836 ft^2					

Laborers	20	Hours	45.00	Hours	$900
Foreman	20	Hours	65.00	Hours	$1,300
Safety Manager	10	Hours	65.00	Hours	$650
Solid Waste	4	Drum	400.00	Drum	$1,600
Confirmation Sampling					
Grid (core) Samples (Note 1)	38	Each	57.00	Each	$2,166
Discretionary Samples (Note 1)	3	Each	57.00	Each	$171
Laborers	5	Hours	45.00	Hours	$225
Foreman	5	Hours	65.00	Hours	$325
Certification – 3rd Party Engineer	4	Hours	95.00	Hours	$380
Miscellaneous					
Expendable Supplies	1	Lot	700.00	Lot	$700
Equipment Decon Fluid (forktruck, sacrifier) (Note 2)	10	Gal	4.50	Gal	$45
Safety Equipment	20	Sets	50.00	Sets	$1,000
Project Management	32	Hours	55.00	Hours	$1,760
Per Diem Expenses	5	Days	125.00	Days	$625
Utilities	20	Days	10.00	Days	$200
Rental Equipment	4	Lot	250.00	Lot	$1,000
DECONTAMINATION SUB-TOTAL					**$22,696**

CONTAINER STORAGE WAREHOUSE–PCB AREA TOTAL	**$78,776**
CONTINGENCY	**$7,878**
GRAND TOTAL	**$86,654**

Note 1 – Sample cost includes sampling supplies.
Note 2 – Diesel fuel cleaning agent is absorbed into solids (rags, brushes, etc.) and is disposed of as a solid.

Table 5-2: Closure Costs – Totaled

TASK	NEW CONTAINER STORAGE PAD	CONTAINER STORAGE WAREHOUSE	TOTAL
Inventory Disposal	$5,400	$51,840	**$57,240**
Decontamination	$5,424	$17,538	**$22,962**
Contingency, 10%	$1,082	$6,938	**$8,020**
Total Closure Cost	$11,906	$76,316	**$88,222**

6.0 PCB CLOSURE COST ESTIMATE CERTIFICATION

The following certification is made by the person responsible for preparation of the PCB Closure Cost Estimate presented in Tables 5-1 through 5-2.

Under the 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 document is true, accurate, and complete. As to the identified section(s) of this document 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.

Signature: _____

Printed Name: James C. Childress

Date: September 10, 2012

7.0 DEMONSTRATION OF FINANCIAL ASSURANCE

761.65 (d)(3)(x) specifies that a PCB storage application must include a demonstration of financial assurance for facility closure. This demonstration is provided in this section and Appendix J.

The Closure Plan for the PCB storage portion of the facility is contained in Section 4 of the application. The Cost Estimate is contained in Section 5. The estimated cost for closing the PCB storage portion of the facility is $86,654.

It should be noted that separate closure costs and a financial assurance demonstration are in place for the closure of the RCRA portions of the facility.

APPENDIX A – RESUMES

APPENDIX B – FACILITY DRAWINGS

APPENDIX C – INSPECTION FORMS

APPENDIX D – SPCC PLAN

APPENDIX E – STORAGE CONTAINMENT CALCULATIONS

APPENDIX F – MATERIAL SAFETY DATA SHEETS

APPENDIX G - ON-SITE LAB SOP

APPENDIX H – FACILITY PCB SOP

APPENDIX I – EXTERINAL LABORATORY QA/QC

APPENDIX J – FINACIAL ASSURANCE