

**ATTACHMENT X-1**  
**PCB COMMERCIAL STORAGE APPROVAL**  
**TRAINING MANUAL**

See RCRA Permit Attachment X-8: PCB Commercial Storage Application for Approval, Chapter 4  
and Coordinated Approvals: RCRA Permit Attachments X-1, X-2, X-4

**TABLE OF CONTENTS**

1.0 Storage Capacity Limitations / Security ..... 1  
2.0 Safety Plan ..... 2  
3.0 Spill Cleanup Procedures ..... 2  
4.0 Spill Prevention Procedures..... 6  
5.0 Inspections ..... 9

## 1.0 STORAGE CAPACITY LIMITATIONS / SECURITY

### A. STORAGE OF PCBs

Clean Harbors Grassy Mountain, LLC. (CHGM) shall always meet the following work practice and operation standards during operation:

- i. Maximum storage capacity at any time:
  - a.) PCB Tank Farm – 63,982 gallons of PCB Liquids. Tanks 1 and 2 (21,000 gallons each) and Tanks 4 and 5 (10,500 gallons each) and the transfer pipe from the Warehouse to the Tank Farm. Tank 5 is typically used to store PCB-contaminated water.
  - b.) Drain and Flush Building Warehouse One (DFBWO) – PCB Waste Not in Tanks (Combined Areas A &B). 10,670 gallons (194 – 55-gallon drum equivalents) waste PCB items (e.g., transformers, circuit breakers, voltage regulators, switches or bushings, small PCB capacitors / light ballasts, PCB Articles, PCB Article Containers, etc.), debris, PCB Containers, large PCB Capacitors, PCB Liquids, etc. Of the 10,670 gallons that are allowed, the maximum quantity of PCB Large Capacitors is 3,080 gallons (56 – 55-gallon drum equivalents or 14 pallets). Of the 10,670 gallons that are allowed, the maximum quantity of PCB Liquids is 7,040 gallons (128 – 55-gallon drum equivalents) minus the volume of PCB Large Capacitors in storage at the same time.
  - c.) DFBWO – PCB Liquid Waste in Tanks. 6,000 gallons (Tanks 3A and 3B: 3,000 gallons each).
- ii. CHGM shall comply with all PCB regulations under 40 C.F.R. Part 761, including:
  - a.) Containment: berm dimensions, containers, and maximum volume as described in the PCB Commercial Storage Application and clarified in the Approval (See 1. Above);
  - b.) Labeling other than PCB marks (i.e., OSHA and/or DOT labels);
  - c.) Access restrictions to storage areas; and
    - 24-Hour Surveillance System
    - A 6-foot-high security fence with gates encloses the entire Grassy Mountain facility. All gates are kept shut and locked except when being used and/or video monitored by security and/or operations personnel.

- d.) Manifesting/tracking or ‘chain of custody’ requirements within the storage site:
- Samples will be tracked using chain-of-custody forms or equivalent.
  - Containers will be given unique numbers for tracking purposes.
  - Transfers to and from the tank farm will be tracked.
  - CHGM will keep records showing that PCB transformers have been flushed for at least 18 hours.

## **2.0 SAFETY PLAN**

1. The safety plan details precautions required to minimize the risk to personnel performing the on-site inspection and sampling in addition to the facility’s or contractor’s standard safety plan. Personal Protective Equipment (PPE): Personnel shall wear, at a minimum, a hard hat, safety glasses, and steel-toed boots while working in or inspecting the Tank Farm or DFBWO. Appropriate additional PPE (such as Tyvek suits, face shields, leather gloves, chemical resistant gloves, chemical resistant boots, etc.) will be worn while sampling, working with liquids, transferring wastes, etc. If dust will be generated by an activity, workers shall wear either a half-face respirator with high efficiency filter and goggles or a full-face respirator with high efficiency filter.
2. Confined Space Entry: No confined space entries will be performed except by those trained in accordance with OSHA standards.

## **3.0 SPILL CLEANUP PROCEDURES**

### **A. CHGM Spill Cleanup Procedure / Standards**

#### **1. PCB and PCB/RCRA Spills**

##### **a.) Solid Surfaces (i.e., steel, glass, coated concrete, concrete, etc.)**

- 1.) 50 mg/kg or greater PCB in spilled material: Cleaned to less than 10  $\mu\text{g} / 100\text{cm}^2$  by standard wipe analysis. If not achievable, contact the CHGM General Manager. A minimum of three wipe samples is required. The sample grid, i.e., number of wipes and where they are to be taken, is to be put together by a person trained to do so or check with the CHGM General Manager to obtain a sample grid. All actions, except for taking the wipe samples, must be completed within 48 hours of the discovery of the spill. No delay should occur between getting wipe samples and cleaning areas still contaminated with PCB’s.
- 2.) Less than 50 mg/kg PCB in spilled material: Double wash rinse according to 40 C.F.R. § 761.125(b)(1) and Subpart S and to visible cleanliness. All actions must be completed within 48 hours of the discovery of the spill.

##### **b.) Soil, i.e., dirt, gravel, crushed rock, asphalt, etc.**

- 1.) If the concentration of the PCBs in the material spilled is 50 mg/kg or more, or more than 1 pound of PCBs was spilled, the contaminated soil must be decontaminated to 1 mg/kg or less PCB by weight or to at least 10 mg/kg PCB in the soil in spill area is excavated to a minimum depth of 10 inches. Excavated soil will be replaced with clean soil (i.e., containing less than 1 mg/kg PCBs).
- 2.) If the concentration of the PCBs in the material spilled is <50 mg/kg and less than 1 pound of PCBs was spilled, all soil within the visible traces of spill and a buffer of 1 lateral foot or an area 20% larger than the original area of contamination, whichever is greater, must be excavated to a depth of at least 10 inches and back-filled with clean soil (i.e., containing less than 1 mg/kg PCBs).

**Note: Cleaned up materials are to be treated as site generated hazardous and /or PCB waste unless they can be commingled with the waste that spilled.**

## 2. Standards for Cleanup

- a.) High contact indoor or outdoor solid surfaces should be cleaned to 10 µg/100 cm<sup>2</sup> (as measured by standard wipe test).
- b.) Low contact, outdoor, impervious solid surfaces should be cleaned to 10 µg/100 cm<sup>2</sup> (as measured by standard wipe test).
- c.) Low contact, outdoor, non-impervious solid surfaces should be cleaned to 10 µg/100 cm<sup>2</sup>.
- d.) For spill cleanups, PCB contaminated soil should be excavated to a minimum depth of 10 inches and then further removed until it reaches a concentration of ≤10 mg/kg. The excavated soil should be replaced with clean soil (less than 1 mg/kg PCBs).
- e.) As bulk PCB remediation waste, PCB contaminated soil and other non-impervious surfaces should be removed to 1 mg/kg PCBs.

## 3. Subpart S – Double Wash/Rinse Method for Decontaminating Non-Porous Surfaces (Procedure)

### **Section 761.360 - Background**

The double wash/rinse procedure is used to remove PCBs from surfaces quickly and effectively. It is important to select and use the proper cleanup equipment, to conduct the procedure correctly so as not to redistribute PCBs, and to comply with disposal requirements for all cleanup materials.

### **Section 761.363 - Applicability**

The double wash/rinse procedure includes two washing steps and two rinsing steps. The two washing and rinsing steps are slightly different depending on whether a contaminated surface was relatively clean before the spill (see §761.372), or whether the surface was coated or covered with dust, dirt, grime, grease, or another absorbent material (see §761.375).

### **Section 761.366 - Cleanup equipment**

(a) Use scrubbers and absorbent pads that are not dissolved by the solvents or cleaners used, and that do not shred, crumble, or leave visible fragments on the surface. Scrubbers and absorbent pads used to wash contaminated surfaces must not be reused. Scrubbers and absorbent pads for rinsing must not contain  $\geq 2$  ppm PCBs. Scrubbers and absorbent pads used in the second rinse of contaminated surfaces may be reused to wash contaminated surfaces.

(b) Capture and contain all solvents and cleaners for reuse, decontamination, or disposal. Clean organic solvents contain  $< 2$  ppm PCBs. Clean water contains  $< 3$  ppb PCBs.

### **Section 761.369 - Pre-cleaning the surface**

If visible PCB-containing liquid is present on the surface to be cleaned, thoroughly wipe or mop the entire surface with absorbent paper or cloth until no liquid is visible on the surface.

### **Section 761.372 - Specific requirements for relatively clean surfaces**

For surfaces that do not appear dusty or grimy before a spill, such as glass, automobile surfaces, newly-poured concrete, and desktops, use the double wash/rinse procedures in this section.

(a) *First wash.* Cover the entire surface with organic solvent in which PCBs are soluble to at least 5 percent by weight. Contain and collect any runoff solvent for disposal. Scrub rough surfaces with a scrub brush or disposable scrubbing pad and solvent such that each 900 cm<sup>2</sup> (1 square foot) of the surface is always very wet for 1 minute. Wipe smooth surfaces with a solvent-soaked, disposable absorbent pad such that each 900 cm<sup>2</sup> (1 square foot) is wiped for 1 minute. Any surface  $< 1$  square foot shall also be wiped for 1 minute. Wipe, mop, and/or sorb the solvent onto absorbent material until no visible traces of the solvent remain.

(b) *First rinse.* Wet the surface with clean rinse solvent such that the entire surface is very wet for 1 minute. Drain and contain the solvent from the surface. Wipe the residual solvent off the drained surface using a clean, disposable absorbent pad until no liquid is visible on the surface.

(c) *Second wash.* Cover the entire surface with organic solvent in which PCBs are soluble to at least 5 percent by weight. Contain and collect any runoff solvent for disposal. Scrub rough surfaces with a scrub brush or disposable scrubbing pad and solvent such that each 900 cm<sup>2</sup> (1 square foot) of the surface is always very wet for 1 minute. Wipe smooth surfaces with a solvent-soaked, disposable absorbent pad such that each 900 cm<sup>2</sup> (1 square foot) is wiped for 1 minute. Any surface  $< 1$  square foot shall also be wiped for 1 minute. Wipe, mop, and/or sorb the solvent onto absorbent material until no visible traces of the solvent remain. The rinse solvent from the first rinse (paragraph (b) of this section) may be used.

(d) *Second rinse.* Wet the surface with clean rinse solvent such that the entire surface is very wet for 1 minute. Drain and contain the solvent from the surface.

Wipe the residual solvent off the drained surface using a clean, disposable absorbent pad until no liquid is visible on the surface.

**Section 761.375 - Specific requirements for surfaces coated or covered with dust, dirt, grime, grease, or another absorbent material**

(a) *First wash.* Cover the entire surface with concentrated or industrial strength detergent or non-ionic surfactant solution. Contain and collect all cleaning solutions for proper disposal. Scrub rough surfaces with a scrub brush or scrubbing pad, adding cleaning solution such that the surface is always very wet, such that each 900 cm<sup>2</sup> (1 square foot) is washed for 1 minute. Wipe smooth surfaces with a cleaning solution-soaked disposable absorbent pad such that each 900 cm<sup>2</sup> (1 square foot) is wiped for 1 minute. Wash any surface <1 square foot for 1 minute. Mop up or absorb the residual cleaner solution and suds with a clean, disposable, absorbent pad until the surface appears dry. This cleaning should remove any residual dirt, dust, grime, or other absorbent materials left on the surface during the first wash.

(b) *First rinse.* Rinse off the wash solution with 1 gallon of clean water per square foot and capture the rinse water. Mop up the wet surface with a clean, disposable, absorbent pad until the surface appears dry.

(c) *Second wash.* Cover the entire surface with organic solvent in which PCBs are soluble to at least 5 percent by weight. Contain and collect any runoff solvent for disposal. Scrub rough surfaces with a scrub brush or disposable scrubbing pad and solvent such that each 900 cm<sup>2</sup> (1 square foot) of the surface is always very wet for 1 minute. Wipe smooth surfaces with a solvent-soaked, disposable absorbent pad such that each 900 cm<sup>2</sup> (1 square foot) is wiped for 1 minute. Any surface <1 square foot shall also be wiped for 1 minute. Wipe, mop, and/or sorb the solvent onto absorbent material until no visible traces of the solvent remain.

(d) *Second rinse.* Wet the surface with clean rinse solvent such that the entire surface is very wet for 1 minute. Drain and contain the solvent from the surface. Wipe the residual solvent off the drained surface using a clean, disposable absorbent pad until no liquid is visible on the surface.

**Section 761.378 - Decontamination, reuse, and disposal of solvents, cleaners, and equipment**

a) *Decontamination.* Decontaminate solvents and non-porous surfaces on equipment in accordance with the standards and procedures in §761.79(b) and (c).

(b) *Reuse.* A solvent may be reused so long as its PCB concentration is <50 ppm. Decontaminated equipment may be reused in accordance with §761.30(u). Store solvents and equipment for reuse in accordance with §761.35.

(c) *Disposal.* Dispose of all solvents, cleaners, and absorbent materials in accordance with §761.79(g). Dispose of equipment in accordance with §761.61(a)(5)(v)(A) or decontaminate in accordance with §761.79(b) or (c). Store for disposal equipment, solvents, cleaners, and absorbent materials in accordance with §761.65.

## 4.0 SPILL PREVENTION PROCEDURES

### A. TANK FARM

#### 1. Description of Tanks

- a.) Contingency Plan – The tank farm area that contains all tanks described in this section has a written protocol, 4.1.5.7.2 of this plan, for the prevention and handling of spills or other emergencies.
- b.) Spill Kit – The tank farm area described in this section has a spill kit that contains supplies for spill containment and cleanup.

#### 2. Tank Management Practices

- a.) The following practices are employed as a means of spill prevention.
  - 1.) Typical inlets and outlets to tanks and quick connect couplings are preceded by a ball valve that enables operators to shut off the flow of liquids before connecting or disconnecting any hoses or other parts of the tank system for repairs, maintenance, or regular operations.
  - 2.) Most lines in the system are designed to be pumped dry by the pumps in operation before being opened or closed.
  - 3.) When appropriate, connections and breaks in lines are done with an appropriately sized spill pan or absorbent pad underneath the connection to reduce the possibility of spills or splatters. Heavy-duty flexible oil transfer hoses, or their equivalent, are used.
  - 4.) Coupling connections are typically tied off with wire or an equivalent fastener to reduce the possibility of their coming undone during a transfer operation.
  - 5.) To minimize the potential for leaks from tanks during loading or unloading, the inlet and outlet lines of the large tanks are equipped with a locking ball valve that is locked in the closed position with a padlock when the facility is not in operation.
  - 6.) To minimize even small releases from lines, couplings are typically covered with fitted covers (if male) or plugged (if female) when not in use.
  - 7.) All lines are checked for obvious leaks and for correct valve position by an operator prior to initiating any transfer operation.
- b.) The following equipment and procedures are typical of those used to prevent the overfilling of the bulk storage tanks during transfer operations.
  - 1.) All tanks are equipped with level sensing devices that enable operators to determine the level of the liquid in the tank to the nearest half-inch.
  - 2.) All tank levels are recorded in the daily tank farm log at the beginning and end of the working day. Whenever any transfer has occurred from



one tank to the other the affected tanks are rechecked to verify liquid levels. These figures are checked by operations personnel to ensure that no mistakes have occurred and that, within reason, all material is accounted for.

- 3.) Prior to any transfer operation taking place, the operations personnel will check the level sensing device on both tanks to make sure that it is the same as recorded on the operations log. The amount to be transferred is then calculated from a conversion chart that converts the level in the tank to gallons of material and vice-versa. The final levels for both tanks are calculated, the transfer lines are checked for valve position and leaks, and the transfer process is begun. At all times during the PCB transfer process there is an employee in the area of operations. An operations employee checks the level sensing devices at the appropriate intervals to ensure that the predetermined amount is transferred, and that overfill does not occur. At the end of the transfer process, an operations employee records the transfer in the Daily Tank Farm Log, recalculates the final levels in the tank, and checks the level sensing device to ensure that all calculations were correct. The new levels of the tanks are then recorded in the log.

## **B. SPCC PLAN**

### **1. Spill Prevention Measures**

- a.) This plan is designed to include all areas at the Grassy Mountain facility that handle and/or store oil derived products or wastes. The following list encompasses areas where this SPCC Plan is applicable onsite and offsite, including the Fuel Facility, Commercial PCB Storage Facility, Maintenance Facility, GMF Clive Rail Siding, and the Temporary Portable Fueling Facilities located on the Grassy Mountain facility. The list provides a description of the containment, diversionary structures, and/or equipment that is utilized to prevent discharged oil from the identified potential spill sources from reaching the navigable waters of the United States.

### **2. PCB Storage Tank Facility**

- a.) Fluid may be transferred from tanks through an underground pipe to the Drain and Flush Building and vice versa or directly to or from a tanker. During oil transfer, pans are placed beneath the connection points to collect any oil drippings.
- b.) Tank trucks are loaded or unloaded from one of three locations: the concrete pad east of the tank farm, the containment area for the three smaller tanks or the west bay in the Drain and Flush Building. PCB oil is normally pumped into or from the tank using the pump on the tank truck. A PCB oil pump located within the Drain and Flush Building may also be used to transfer PCB oils. There is a separate transfer pump for diesel fuel that is in the east containment area of the tank farm.

- c.) Tank filling and unloading is supervised during the entire operation. Prior to departure of the tank truck, all outlet connections are inspected for leaks and securely tightened. All dome caps are checked to verify they are closed and battened down.
  - d.) The PCB Facility has spill control kits in both the tank farm and drain/flush areas.
3. Drain and Flush Building Warehouse One
- a.) This area is used to store PCB contaminated oil, PCB debris, PCB transformers, PCB capacitors and PCB contaminated water and similar non-regulated materials. The storage area is divided into two separated bermed areas, each of which can contain 100% of the volume of the permitted storage volume of the warehouse and are labeled as Areas A and B (Permit Attachment III-1).
4. Spill Contingency Plan
- a.) The Grassy Mountain facility has comprehensive incident response criteria outlined in its RCRA Part B Contingency Plan. In the unlikely event any oil should reach navigable waters, a report will be submitted to the U.S. Coast Guard, the EPA and the Utah Department of Environmental Quality as per 40 C.F.R. § 112.4(a).
- Note: The Grassy Mountain RCRA Part B Permit Contingency Plan is always kept on-site and available for use by facility personnel.**
5. Site Security and Training.
- a.) The Grassy Mountain facility's site security meets the requirements mandated in 40 C.F.R. § 112.7(e)(9). These measures include, but are not limited to:
    - 1.) A six (6) foot high chain-link fence with barbed wire at the top around the active or potentially active portion of the site (most of Section 16, Township 1N, Range 12W).
    - 2.) The facility gates are locked when unattended.
    - 3.) Tank discharge valves are closed and locked and pump starter controls are locked in the off position when not in use or in standby status.
    - 4.) Outdoor lighting for security and safety reasons.
    - 5.) The loading /unloading connections of oil pipelines are securely capped or blind flanged when not in service or standby service for an extended time.
  - b.) Only authorized facility personnel have access to the oil storage areas. All new personnel who work with and around the diesel/gasoline storage tanks, Commercial PCB Storage facility, maintenance facility and the GMF Clive rail siding are required to read and understand the SPCC Plan.

## **5.0 INSPECTIONS**

### **A. EQUIPMENT**

The facility shall at a minimum be equipped with the following:

1. An internal communications or alarm system capable of providing immediate emergency notification (voice or signal) to facility personnel.
2. Devices, such as a telephone or two-way radio, which is immediately available at the scene of operations, capable of summoning emergency assistance from other site personnel and to direct others to contact local police departments, fire departments, and State or local emergency response teams.
3. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment at the DFBWO.
4. Water at adequate volume and pressure to supply fire hose streams or foam equipment to DFBWO.

### **B. TESTING AND MAINTAINING EQUIPMENT**

1. CHGM shall at a minimum inspect, test, and maintain the equipment specified above as recommended by the manufacturer or in accordance with other regulatory agency requirements for safety equipment at the facility to assure its proper operation in case of an emergency. In the event any of the equipment specified above was manufactured by CHGM, the facility shall establish and follow a testing and maintenance plan for those manufactured items.