ATTACHMENT X-2

PCB TANK MANAGEMENT PRACTICES

General Tank Transfer Procedures:

The following spill prevention practices are employed by Clean Harbors Grassy Mountain (CHGM) at Drain and Flush Building Warehouse One (DFBWO) and the PCB Tank Farm:

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 systems for repairs, maintenance, or regular operations.

Most lines in the system are designed to allow them to be pumped dry by the pumps in operation before being opened or closed.

When necessary, an appropriately sized spill pan or absorbent pad is placed underneath connections and breaks in lines to reduce the possibility of spills or spatters.

Heavy-duty flexible oil transfer hoses or their equivalent are used.

Coupling connections are typically tied off with wire or an equivalent fastener to reduce the possibility of their coming undone while undergoing a transfer operation.

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 closed.

To minimize releases from lines, couplings are typically covered with fitted covers (if male) or plugged (if female) when not in use.

All lines are checked for leaks and for correct valve position by a chemical technician or crew chief prior to any transfer operation.

The following equipment and procedures are typical of those used to prevent the overfilling of the eight large tanks (referred to as Tanks 1, 2, 3A,3B, 4, 5, 6, and 7) during transfer and process 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.
3. Whenever any transfer has occurred from one tank to the other, operations personnel recheck the affected tanks to verify liquid levels. They check the figures to ensure that there are no errors and that all material is accounted for.
4. Prior to conducting any transfer operations, the operations personnel check the level sensing device on both tanks to make sure that it matches the record on the operations log.
5. Operations personnel calculate the amount to be transferred using a chart that converts the level in the tank to gallons of material and vice-versa. They calculate the final levels for both tanks, check the transfer lines for valve position and leaks, and begin the transfer process.
6. 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 appropriate

intervals to ensure that the predetermined amount is transferred and that there is no overfill.

7. 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 daily operations log.

Drain and flush procedure:

The drain and flush procedure applies to the processing of any electrical equipment that contains oils that are not permitted for stabilization and/or landfilling at CHGM. Electrical equipment requiring removal of liquids is processed in DFBWO.

1. Prior to draining the equipment into one of the four vats or removing them via the stinger, the current volume of the Tank (3A or 3B) is checked against the storage log to ensure adequate space is available. Additionally, the site glass is read to verify the accuracy of the storage log.
2. Equipment to be drained is placed on the vat. The valves on the tank are kept closed until all the liquids have been drained from the equipment.
3. The pump from the vat to the tank is activated.
4. The tank valve on the storage tank is opened. The storage tank is also equipped with a fire valve (one way valve) between the tank and tank valve.
5. The vat valve is then opened so that the oil is transferred to the storage tank.
6. To evacuate the remaining residual in the vat and hoses, suction is created by opening and closing the pump valve.
7. Once the vat is completely emptied, the tank valve is closed, the pump is stopped, and the vat valve is closed.
8. This same procedure applies when using the stinger. The term “stinger valve” can be substituted for the term “vat valve.” Upon conclusion of the transfer, all hose end caps are replaced, and the tank storage logs are updated to reflect the quantities in the storage tanks.

Storage Tank to Tanker Truck Transfer Procedure

The tank to tanker procedure applies to the transfer of PCB oil from storage tanks 3A and 3B into a tanker truck for shipment to an offsite disposal facility.

1. Prior to the transfer the current volume of the storage tank is checked against the capacity of the tanker truck to ensure adequate space is available. The site glass on the storage tank is read to verify the accuracy of the storage log. Additionally, prior to the transfer the tanker truck is visually inspected to confirm that it is empty and ready to receive the transfer.
2. The transfer of the material to the tanker truck takes place in the west truck bay of DFBWO.
3. The truck’s wheels are chocked, and the grounding cable is connected to the vehicle.

4. The tanker's pump is engaged to create a vacuum in the tank to prepare for the transfer. Buckets with absorbent pads are placed under the tank truck valve connections to manage any potential drippage during the process. The transfer hose is connected from the storage tank valve to the tanker valve. The fire valve (one way valve) on the storage tank is opened first. Upon confirmation that the tanker truck has attained the proper vacuum to make the transfer, both the storage tank valve and the tanker valve are opened simultaneously. Upon completion of the transfer, the fire valve is closed first.
5. The storage tank valve is then closed, and the transfer hose is disconnected from the tank valve.
6. The transfer hose end is then held in an elevated position to facilitate its complete emptying.
7. The transfer hose end is then capped, and the tanker valve is closed.
8. The tanker truck's pump is disengaged.
9. The transfer hose is then disconnected from the tanker valve, and both are capped. Upon completion of the transfer process, the ground is disconnected from the tanker, the wheels are unchecked and tank record logs are updated to reflect the quantities in the storage tanks.