Mercury Bulb Crusher Procedure

The machine must be operating properly to ensure the mercury within the bulb is contained in the system. This allows for the protection of potential mercury exposure for the operator and the facility. No one other than the properly protected operator and/or protected helper should be in crushing room while crusher unit is in operation. Crusher unit should not be used for an eight hour continuous period. If crusher unit is not functioning in a safe and proper manner, do not use and report the problem to your supervisor immediately.

Before Use:

Make sure crusher unit is securely connected to drum.

Verify integrity of filter(s) prior to turning machine on. Check filter inspection log and follow manufactures recommendation for filter changes. Old used filters should be placed into drum of crushed bulbs for processing. Utilize all personal protective gear such as: disposable gloves, ear protection, filter mask, eye protection, and Tyvek long sleeve coveralls prior to unit being turned on.

Use of machine:

Once machine is turned on and vacuum has begun, remove plugs on feeder tube and insert feeder tube in top of unit and verify it is secured.

Carefully insert light tubes at moderate steady pace. Make sure you have enough head space above the unit to safely insert tubes to avoid breaking tubes on overhead obstructions.

Do not allow broken pieces of glass to accumulate on top of unit. Carefully pick up pieces and place into feeder tube.

Allow crusher unit to run at least 30 seconds before you turn off the crusher unit. This will allow for any material that may be in the feeder tube to be vacuumed into the storage drum.

Change of drums:

When changing out the drum, do not place crusher unit on the floor/ground. Have new drum ready for crusher unit to be placed on top immediately after removal. Make sure rubber drum seal is in place and properly seated to rim of drum and crusher unit to ensure complete sealing of crusher unit to new drum. (These steps are extremely important to protect the operator and facility from potential exposure to mercury.)

Complete this step before securing crusher unit to new drum. Properly place drum lid onto full drum of crushed bulbs quickly to reduce the potential evaporation of mercury into the air. Make sure drum seal is in place and working before attaching lid ring and tightening lid to drum of crushed bulbs. Do not allow the drum of crushed bulbs to sit open.