

5.4.2 Container Level 2 Controls



Photograph of a rolloff which contains volatile organic waste. Note that there is no cover on this unit.

Container Level 2 controls may be used for waste stored in containers greater than 0.46 m³ which manage material in light liquid service. Level 2 controls can not be used for waste undergoing stabilization. Container Level 2 controls include three different options from which the owner or operator may choose:

- Use a container that meets the applicable regulations of U.S. Department of Transportation (DOT) on packaging hazardous materials for transportation.
- Use a container which is operating with no detectable emissions. No detectable emissions must be certified in accordance with Method 21 to operate at less than 500 ppm by volume. In the case when a hazardous waste is already in the container at the time the waste is accepted at the facility, a visual inspection must be made initially upon receipt of the container and annually thereafter. When the no detectable emissions test is performed, the container must be filled with organic hazardous waste representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in the container. Each potential leak interface on the container, cover and associated closure devices must be checked. During the test the cover and closure devices must be in the closed position.
- Use a vapor-tight container. A vapor-tight container must be certified using [Method 27](#), initially and annually thereafter. A pressure of 4,500 Pascals is applied to the container and then removed, and the pressure change is monitored over time. If the pressure change is less than 750 Pascals within five minutes, the container is designated as a vapor-tight container.

Any transfer of hazardous waste in or out of a container requiring Container Level 2 controls must be conducted in a manner to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices. Some methods recommended by EPA include: submerged-fill pipe or other submerged-fill method to



A quickconnect still in the hatch however no loading is being conducted therefore the container is open. Containers need to be closed at all times except during actual waste transfer operations. This is a commonly observed violation.

load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening. Splash-loading methods are prohibited for containers meeting Container Level 2 criteria.

The cover and closure devices must be secured and in the closed position whenever hazardous waste is stored in the container. The opening of a closure device or cover is permitted to add waste to the container. When the addition of waste is performed in a continuous manner, the owner or operator must promptly secure the closure devices in the closed position and install the covers, once the filling operation is complete. During batch operations, the owner or operator must promptly secure the closure device in the closed position and install the covers, when the container is filled to the intended level; the completion of the batch loading with no additional material added to the container within 15 minutes; the person performing the loading operation leaves the immediate vicinity of the container or shutdown of the process generating the material being added to the container.

The closure device or cover may be opened to remove waste. When discrete quantities of material are removed from the container the owner or operator must promptly secure the closure devices in the closed position and install covers upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container.

The opening of a closure device or a cover is also allowed when access inside the container is needed to perform routine activities other than the transfer of a hazardous waste. Some examples of routine activities are collection of samples, measurement of the level of liquid in the container, and recording readings of equipment inside the container. A spring-loaded pressure-vacuum relief valve, conservation vent or similar type of pressure relief device which vents to the atmosphere is allowed to open during normal operations in order to maintain the internal pressure of the container in accordance with the container design specifications. The relief device must be designed to operate with no-detectable emissions, less than 500 ppm above background, when in the

secured closed position. The setting at which the device opens must be established so that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on the container manufacturer recommendations, applicable regulations, fire protection and prevention codes and practices and other requirements for the safe handling of flammable, ignitable, explosive, reactive or hazardous materials. Opening of a safety device is permitted at any time conditions require doing so to avoid an unsafe condition.

The owner or operator must inspect all containers using Container Level 2 controls upon filling. When the hazardous waste is already in the container at the time the owner or operator accepts possession of the container, the owner or operator has 24 hours to perform a visual inspection. The visual inspection will be conducted to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the closure devices and cover are secured in the closed position. The owner or operator must repair any defects that were detected within five days of detection. A first attempt at repair must begin within 24 hours of detection.

When a container, used to manage hazardous, remains at the facility for a period of a year or more, the owner or operator must visually inspect the container and its cover and closure devices initially upon receipt of the container and thereafter at least once every 12 months. The owner or operator must check for any visible cracks, holes, gaps or other open spaces into the interior of the container when the closure device and cover are in the secured closed position. Again, when a defect is detected, a first attempt at repair must begin within 24 hours of detection, and must be completed within five days of detection.