

COS SAFETY SHARE

WHAT WILL WE DO TO PREVENT THIS FROM HAPPENING HERE?

PROTRUDING NOZZLE LEADS TO 550-GALLON LEAK TO CONTAINMENT

What happened?

While lifting a full 550-gallon tote tank of...525 asphaltene Inhibitor into the tote tank rack on top of the chemical injection skid...the tote drain nozzle contacted a cross member of the rack, resulting in a crack on the weld for the drain nozzle on the bottom of the tote tank. A minor leak was noted on the bottom of the tote tank.

After the tote tank was inspected, it was decided to let it drain into the chemical injection skid rack without further intervention. This decision was made to limit the risk of exposure to personnel, as it did not require close contact, trying to connect a hose, or monitoring the nearby pump. The area around the chemical injection skid was red-barricaded, and personnel monitoring the area were staged upwind. The facility was reviewed for any ongoing Hot Work. After the decision to let the containment system work as designed, it took approximately 2 hours for the tank to drain completely. Once the tote tank had completely drained, personnel with respiratory protection flushed and cleaned the area.

What went wrong?

The tote drain nozzle contacted a cross member of the rack, resulting in a crack on the weld for the drain nozzle on the bottom of the tote tank.

Why did it happen?

Upon inspecting the tote tank drain, it was noted that the nozzle stuck out beyond the tank's wall by one and a half inches. This is not the standard for tote tanks received by the facility, as all other tote tank nozzles are flush or slightly recessed compared to the tank walls to prevent the drain from striking other objects while lifting.

What areas were identified for improvement?

Update the tote suppliers' contracts to specify to only use 550-gallon tote with dimensions of 48" x 42" with recessed configuration on the facility. The drain components shall not protrude outside the side wall of the tote. Update the task-specific permit or lift plan, confirming that the facility deck crew will inspect chemical totes and confirm that the tote size or controls are in place (protruding drain valves) for totes to fit into the rack. A non-conformance is to be filed for any instance when the tote does not meet the standard size or configuration.

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