

Just-In-Time Report

Configuration of Some Waste Drums Prevents Proper Engagement of Parrot-Beak Drum Handling Devices

January 25, 2007

2007-RL-HNF-0003

Tracking No: 390

Site/Facility: Hanford/All

Event: A 55 gallon Transuranic waste drum that had been retrieved from the Hanford Low Level Burial Ground was being lifted using a Lift-O-Matic Parrot-Beak® drum handling device. The drum handling device failed to engage properly, allowing the drum to fall approximately 16 inches. The drum did not breach and no personnel were injured.

Important Points:

The waste drum was a 55 gallon container that had been placed in the Low Level Burial Ground in the 1970's.

The top chine of the container protrudes $\frac{3}{4}$ to 1 inch beyond the outer diameter of the top ring (see picture).



Figure 1: Normal Drum Chine

Figure 2: $\frac{3}{4}$ -1 inch Gap Cause by Chine

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The diameter of the top chine interferes with the parrot beak drum handling device.



Figure 3: Full Engagement



Figure 4: Poor Engagement due to Interference

Contributors: The top chine is also located approximately 1 inch higher than the height of more commonly used drums. This contributes to the interference.

Other Important Considerations - Prevent Events

Managers/Supervisors	Workers
<p>Use a straight edge long enough to span two chines to determine chine Outer Diameter relative to top ring Outer Diameter.</p> <p>Discontinue use of this type of drum handling device for drums with larger chines.</p> <p>Identify other drum handling tools which mitigate the interference from the larger chine.</p>	<p>Verify full engagement of drum handling devices prior to lifting drums</p> <p>Use of extension tools for drum survey prevented a worker injury.</p>

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