



Property Damage – HiPo: Waste delivery vehicle tailgate was hit by waste crane

Number	2024-08	Date	06.03.2024
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Summary:

On Wednesday, 06.03.2024, at approximately 06:50 am, a Compactor type waste delivery vehicle belonging to a Waste Operating Contractor was tipping waste in tipping bay# 9, waste bunker #1. Whilst the waste tipping operation was ongoing, the waste crane #2 (which was in automatic operation mode) approached bay #9, struck the waste delivery vehicle's tailgate, and pulled the truck half-way into the waste bunker #1. The waste delivery vehicle driver and his assistant safely exited the waste delivery vehicle whilst it was still in position on the tipping floor. There was no personal injury reported.

Outcomes:

Property Damage - The Waste delivery vehicle suffered some damages and the extent of the damages sustained will be confirmed by the Waste Operating Contractor.

Incident Classification: Level 3 HiPo Property Damage



Position of waste delivery vehicle during the incident and before rescue, Waste bunker #1, Tipping Bay #9

Root Causes and Contributory Factors

- **Procedure Followed Incorrectly / Intentionally not followed / Short-cut chosen:** the unauthorised action of tapping the “Reflector” unit of the “Beam-to-Beam light curtain sensor to the “Emitter” unit resulted in the sending of a signal to the crane system “*No obstructions for the light curtain*”, which was a signal that the tipping bay is unoccupied and is available for the waste crane to enter the area, even though the area in question (bay#9) was occupied by the waste delivery vehicle at the time.
- **Communications (No communication or not timely):** failure to report to the SAP that the “reflector” unit of the “Beam-to-Beam light curtain was removed and failure to record this action in any of the permit to work document.
- **Human Engineering (Human-machine interface / Arrangements/placement):** Failure to reinstall the “Reflector” unit after the task was completed
- **Training (instruction Needs Improvement)** the Commissioning Technician was unaware that by tapping the “Receiver” / “Reflector” unit” of the “Beam-to-Beam light curtain to the “Emitter” / “Sender unit” of the light curtain could result in the sending of a signal to the waste crane that the tipping bay is unoccupied even when a waste delivery vehicle is occupying the tipping bay.

Lesson Learned

- Provide a design control (protection) around the “Beam-to-Beam light curtain” sensor units which will protect the sensors from any potential damage avoid unauthorized removals
- Communicate to all SAP to ensure that any work instructions / precautions / protections being given as part of the approval for a permit to work must be noted/written down within the concerned permit to work document and the information also communicated to the concerned Competent Person.
- Re-emphasis to all workers that they are empowered to intervene by pushing the Emergency Stop Button in the event of any emergency situation.
- Educate all workers to conduct their work activities according to the specific instructions given to them by their supervisor. If there is any change, they must inform their supervisor for authorization to make the change.
- Provide additional training to the HZI BOP commissioning technicians to educate them about the functionality of the “Beam-to-Beam light curtain” sensors including the consequences of any short-cut.



Every Lesson Learned is an opportunity to avoid recurrences.
What have you done to avoid a similar incident on your project?

