

Compost Plant Operator Caught in Rotating Conveyor Belt

SUMMARY

On the morning of September 10, 2020, a lead operator and his assistant at an outdoor compost manufacturing facility, also known as a screen plant, were operating the plant's biomass screening system that processed recycled organic yard and food waste into compost, topsoil, and mulch. The system's final stage used a radial stacker conveyor that carried and discharged finished compost into stockpiles.

Around 8:15 a.m., the assistant informed the lead that plastic debris were escaping from a metal waste container near the stacker. The lead told the assistant not to worry about it and to get a backpack leaf blower to clean up the debris. The lead then walked toward the tail end of the energized stacker. As the assistant got the blower, he heard the stacker shut down and yelled to the lead. Getting no response, the assistant walked to the machine and saw the lead under it with his head, left arm and shoulder caught between its unguarded steel return idler roller and rubberized conveyor belt. The lead's sweatshirt hood was entangled in the roller, and a spade metal scraper with a long wooden handle was also caught between the roller and belt and pressed against his throat. When the assistant could not pull the lead out, he ran to the operations trailer 75 feet away, shouting for help. The crew supervisor and facility manager came and released the lead by cutting his sweatshirt and the conveyor belt and breaking the scraper's handle. They did CPR until first responders arrived. The lead died at the hospital after nine days on life support.



Conveyor belt and unguarded steel return idler roller with metal spade scraper tool that was pressed against the lead operator's throat. Responding workers cut the belt and broke the tool's wooden handle to release the operator. Photo taken after incident.

RECOMMENDATIONS

Washington State Fatality Assessment and Control Evaluation (FACE) investigators concluded that to protect their workers from similar hazards employers should:

- Ensure that equipment safety guards are not removed, displaced, or carried off.
- Identify lockout/tagout (LOTO) procedure steps and how to properly use and test LOTO devices' effectiveness for specific equipment.
- Conduct and document periodic reviews at least annually to make sure workers know and can apply LOTO procedures, including how to provide notification before LOTO application and removal on affected equipment.
- Document that LOTO training had been done and kept up to date for all authorized and affected workers.

SHARP Publication # 52-51-2022_summary. The full version of this investigation report, along with the detailed recommendations and discussions section, can be found at: http://www.lni.wa.gov/safety-health/safety-research/files/2022/52_51_2022_CompostPlantOperatorCaughtInConveyor.pdf

The Washington State Fatality Assessment and Control (WA FACE) program is one of many workplace health and safety programs administered by the Washington State Department of Labor & Industries' Safety & Health & Research for Prevention (SHARP) program. It is a research program designed to identify and study fatal occupational injuries. Under a cooperative agreement with the National Institute for Occupational Safety and Health (NIOSH grant# 2U600H008487), WA FACE collects information on occupational fatalities in WA State and targets specific types of fatalities for evaluation.

More about WA FACE can be found at: www.lni.wa.gov/safety-health/safety-research/ongoing-projects/work-related-fatalities-face