Port Wentworth Fatality Review

May 11th. 2010 Federal Way, Washington

Robbie Linton Fatality

April 22nd. 2010

Port Wentworth Cellulose Fibers Mill

Vehicle/Pedestrian Collision

Robbie Linton, 42 years of age

- 4 years as a fiber line E&I maintenance planner.
- Survived by son age 9 years, and Mother.



Mill History

- The Mill processes softwood chips to produce Kraft bleached fluff (rolls), bleached market pulp (bales), and specialty cellulose pulps.
- Initially owned by Smurfit-Stone and Willamette since February 2002 has been a Weyerhaeuser facility. The maintenance department was changed from contractor based to mill employees in 2006.
- Safety has significantly improved in recent years at Port Wentworth mill. 2008 - 2010.1 RIR = 0.84

April 22nd. 2010 Incident Timeline

- At approximately 7:00 PM on April 22, 2010, Robbie left the operations building walking on the main pedestrian walkway towards the employee parking lot. He was leaving work for the day.
- At 7:04 PM, Robbie observed an unloaded log truck heading south with a 17-foot log (4- to 6-inch diameter) protruding from the passenger (west) side of the log truck trailer
- The log truck driver stated that he saw Robbie walking towards him on an angle from the general area of the administrative building sidewalk waving to him to attract his attention and pointing to the back of the log truck.
- At the same time a CAT TL943 telehandler was moving north through the area. The telehandler operator stated that his attention was drawn to the left towards the log truck and the protruding log.

April 22nd. 2010 Incident Timeline

- A security EMT rover was driving north in a golf cart on the main mill roadway perpendicular to Bleach Alley. He looked north and observed the log truck adjacent to and on the left (west) side of the CAT TL943 Telehandler.
- He observed Robbie start to walk westward into the path of the telehandler. He saw Robbie attempt to move out of the way of the telehandler immediately prior to being struck by the telehandler waste bin. He drove immediately to the incident scene to provide assistance
- At 7:05 PM, he called the guard house attendant on the radio and instructed him to call 911

April 22nd. 2010 Incident Timeline

- Emergency medical services (EMS) arrived at the mill at 7:15 PM Robbie was loaded onto the ambulance and EMS departed the mill site at 7:26 PM and transported Robbie to Memorial Health University Medical Center in Savannah where he arrived at 7:40 PM.
- Robbie passed away at 9:58 P.M.

Area/equipment Photos and Incident Diagrams

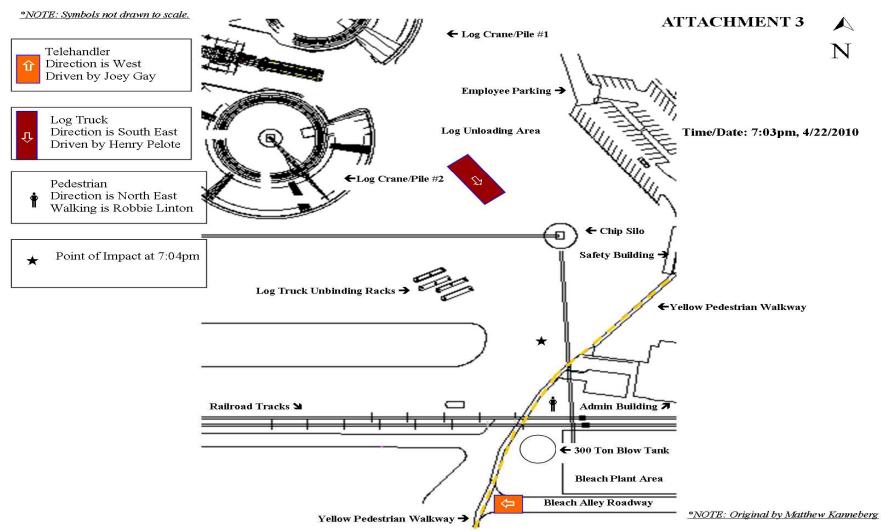
CAT TL943 Telehandler



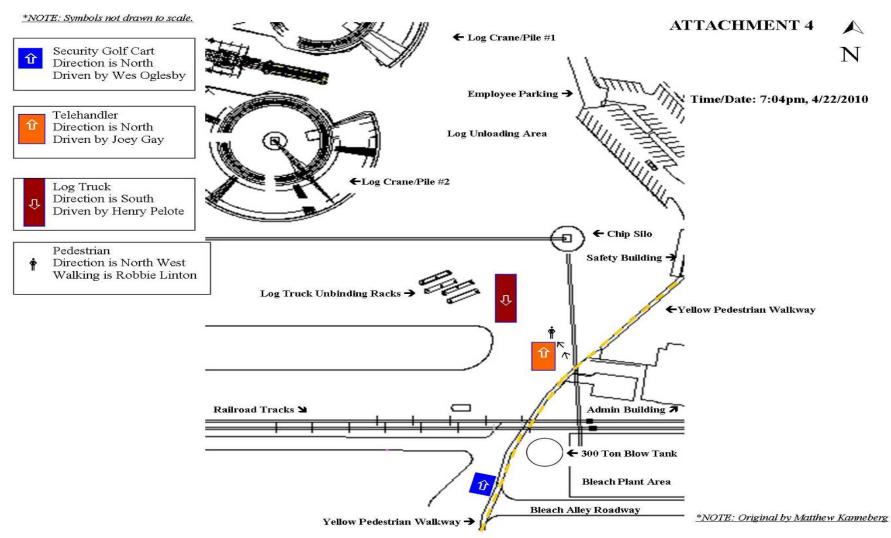
Restricted view from inside cab with boom lowered



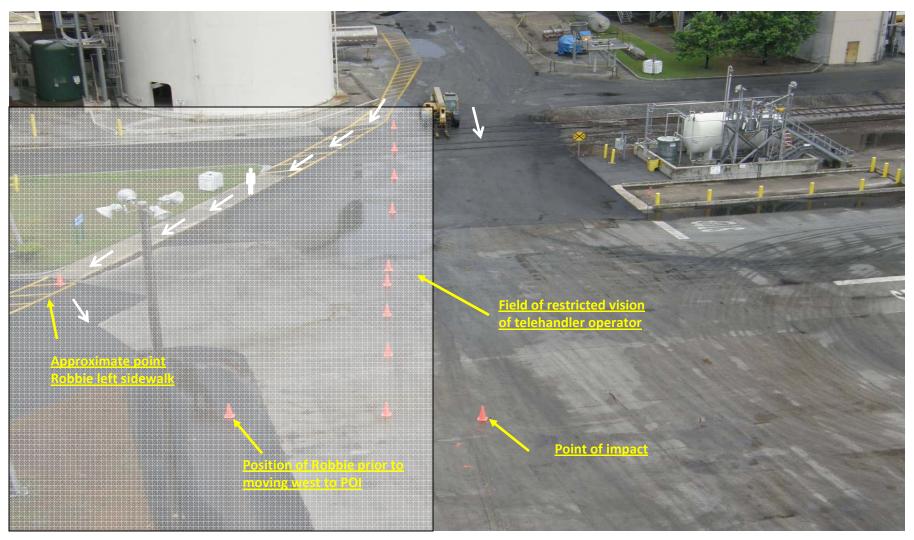
Schematic of incident Scene Timing



Schematic of incident Scene Timing



Reenactment of Incident scene



Robbie Linton:

- On the day of the incident, Robbie was in good spirits and looking forward to spending time with his son over the weekend.
- He had not worked the previous weekend but had worked for 10-12 hours on Monday through Thursday (the day of the incident).
- Thursday was a normal day in terms of work activities, and the majority of the day was spent preparing for the upcoming annual maintenance shutdown scheduled to begin on May 2nd.
- Robbie left the maintenance planning office at approximately 7:00
 PM and expressed to his co-workers that he was finished for the day and going home.
- Robbie did have a cell phone on his person, there was no evidence to indicate that he was using it at the time of the incident.

CAT TL943 Telehandler:

- Telehandlers have been used for this activity at the mill since 2000.
 This particular vehicle began operation at the mill in 2007 and up until January 2009, had been operated by contract employees.
- Used to transport screen and knotter reject material from the ground floor of the screen building to the hog fuel and chip piles. About 24 to 48 times (30 to 60 tons) per day driving through areas of the site with pedestrian and other vehicle traffic.
- Due to the tight configuration at the base of the knotters and rejects screen and position of the skips, other types of mobile equipment cannot access the area easily and are not seen to be as effective or safe.
- Manufacturer's instructions indicate to position the forks low to the ground to maintain safe working balance with the machine when transporting heavy loads. Mill operators are trained to follow this approach.

TL943 Telehandler (cont):

- All telehandler operators are trained and certified.
- Visibility on the right side of the lift is almost entirely obscured by the boom when it is in the lowered position. Visibility to the front is partially obscured by the forward end of the boom and the loaded bin.
- Re-enactments indicate the telehandler operator would not have seen Robbie crossing over into the vehicle's path unless specifically bending down and looking under the telehandler boom. Also that Robbie would have been in the area of restricted vision from the time he left the sidewalk until the point of impact
- Noise level of the telehandler in comparison to mill ambient noise was insufficient to have attracted Robbie's attention away from his focus on intervening with the log truck.
- The telehandler was moving very slowly (below the 10 mph posted speed limit) at the time of the incident.

INCIDENT ANALYSIS - Conditions:

- The Telehandler operator has a significant area of restricted vision on the right side when operating the vehicle in accordance with manufacturer's instructions and mill practices.
- The screen reject material protruded above the top of the waste bin restricting the driver's forward vision. In addition his attention was drawn to the left towards the log truck and the protruding log.
- The log protruding from the outbound log truck created a high potential unsafe condition for pedestrians and other equipment.

INCIDENT ANALYSIS - Behaviors:

- Robbie did not take adequate precautions to avoid entering the path of the on-coming vehicle.
- Neither the log truck driver nor the log unloading crane operator observed the log left on the log truck trailer after unloading.

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Incident Analysis - Basic Causes:

- Design of this model of telehandler has resulted in a field of restricted vision on the right side due to boom placement when carrying a load with the forks lowered.
- The risk of operating the telehandler in pedestrian and mobile equipment traffic areas, with its field of restricted vision was recognized by mill personnel but felt to be managed adequately by on-the-job training and hands-on instruction. There have been no incidents regarding visibility formally reported.
- There is a written safe operating procedure for the telehandler, however, it does not address the level of screen reject material allowed in the bin for safe transportation nor does it address the visibility restrictions.

Incident Analysis - Basic Causes (cont):

- There is no requirement for the log truck driver to do a 360-degree walk-around inspection of his truck/trailer after being unloaded.
 Some drivers do – others do not.
- Robbie was motivated to intervene with the truck driver to address the high potential unsafe condition with the log protruding. This motivation distracted his attention from being fully aware of his surroundings.

Recommendations - directly related to incident

Site follow up:

- Tag out and review the use of the Telehandler involved in this
 incident to determine the applications and areas for safe operation
 at the mill Complete, the equipment was immediately tagged out of service and
 will be removed from Site.
- Include in written operating procedures direction on the level of screen reject material allowed in the bin for safe transportation and controls to mitigate or eliminate the visibility restrictions when operating in areas of pedestrian and other vehicle traffic – Complete
- Establish change management controls to ensure new mobile equipment is evaluated and meets site safety needs - Complete
- Communicate to site employees the need to maintain awareness of surroundings at all times and in all areas and that motivation to intervene must not take precedence over personal safety - Complete
- Incorporate this messaging into annual training Complete

Recommendations (continued)

Site follow up (Continued):

- Implement with Fulghum Fibres a requirement for log truck drivers to do 360-degree walk-around inspection of their unloaded trucks prior to leaving the log unloading area to ensure that logs or partial logs are not left on the trailer. Port Wentworth and Fulghum Fibres personnel must inspect to ensure compliance against that requirement - Complete
- Review mill traffic patterns and designate additional safe pedestrian travel corridors - Complete
- Assess site safety culture and implement plans to address identified gaps - Complete

System wide follow up:

- Evaluate current practices at Cellulose Fibers sites and implement best practices sector wide - Complete
- Communicate incident findings Companywide Complete