

APPENDIX 2

SAFETY AND HEALTH INCIDENT REPORT					
Division: Mistassini WP Mills			Site recordable number: 1		
Date: March 25, 2018				Time: 3:30 PM	
Type of incident:	Fatality []	Major Incident high severity [X]	Lost time [X]	Modified / Restricted work []	Medical Ass. []
Function: Grapple Loader Operator			Department: Yard Location: Grapple Loader Parking		
<p><u>Incident description:</u> (description, location and causes – attach appendix if necessary)</p> <p>Operator opened the cab door 180° to get to the loader cut-out. He held on to the cab door, but it was not latched to the retaining device (cf. Picture #1). At that moment, door swiveled and operator <i>seems to have lost</i> his balance backwards. He ended his fall on his right knee, landing on the ground in the position shown in Picture #2.</p> <p>Relevant facts:</p> <ul style="list-style-type: none"> • Fall height was 74”. • When loader is stopped for a long time, cut-out must be switched off to save the battery. • Cut-out is located at the back of the machine (Picture #4) and can only be accessed by walking on the catwalk and holding the handrails. • Operator was making for the cut-out to switch it on when he fell. • OEM step plates are 6.5” wide and were modified. • Catwalk is 16.5” wide up to the end of the cab then 13.5” in the back of the machine (Picture #5). • Step was not slippery (no trace of ice or oil). • Weather was sunny with South/South-East winds at 7 km/hr. • Worker struck the loader leg in his fall then hit the ground with his right knee. • Loader involved in the incident is a Liebherr model LH-50 rented to a contractor. • Several handrails were added to the machine pursuant to proactive NMI reports. • There are no purchasing or rental standards for fall-protection criteria on mobile loaders. • Info on the fall-protection standard at 4’ from the ground was communicated to all employees, including heavy machinery operators. • Change management on falls from heights is in roll-out mode. • A safety rule exists on maintaining 3-point contact when accessing machines. 					
<p><u>Injury description:</u></p> <p>Multiple fractures to the right tibia; hospitalization and surgery (picture #3)</p>					
<p><u>Immediate Causes:</u></p> <p>A. Equipment Failure- Inadequate Design</p> <ol style="list-style-type: none"> a. Step plates too narrow around equipment b. No guardrails around catwalks c. Not enough handrails d. Opening the door 180° hides some support points <p>B. Inadequate Control Process</p> <ol style="list-style-type: none"> a. No purchasing/rental standards for fall protection on heavy machinery b. Failure to recognize fall hazards when walking with door opened 					

C. Inadequate Hazard Control

- a. Loss of adhesion from support points
- b. Failure to ensure support point was secure (door latched)

Corrective measures:

Immediate: Mistassini Mill

- 1. Stand down with all crews including mechanics of the subcontractor who owns the machines. (Done)
- 2. Prohibit walking on heavy machinery more than 4' from the ground. (Done)
- 3. Provide a mobile staircase to access the engine compartment/cut-out. (Done)
- 4. Ask all heavy machinery operators to report as Proactive NMIs any situations where they are required to climb up on machines. (Done)

Immediate (0-3 months): All P&P/Tissue/WP Sites if incident is applicable

- 1. *Make a list of all jobs that expose employees to a loss of balance/fall hazard when accessing or working on mobile equipment (e.g. long log loader, front end loader, lift truck, bulldozer, etc.). Ref. IR-2012-15_Clermont, IRC-2013-12_Thorold, IR-2014-52_Catawba*

2. IMMEDIATE: Until further notice, prohibit pre- inspections or other jobs (except for using the fixed ladder to access cab) that require climbing up on mobile equipment more than 4' from the ground (e.g. long log loader, front end loader, lift truck, bulldozer, etc.) UNLESS A FALL-PROTECTION DEVICE IS PRESENT AND USED AT ALL TIMES (e.g. permanent guardrail, or self-retracting lanyard or mobile ladders with guardrails OR Level 3.1 platform or 3.2 platform see for example pictures #8 & 9).

Permanent: Mistassini Mill

- 1. *Create a Task Force to rule on purchasing/rental standards for fall protection on mobile equipment for all RFP operations.*
- 2. Install fall-protection devices on all heavy machinery based on recommendations from the Task Force.
- 3. Move the cut-out system to be accessible from the ground.
- 4. Perform regular audits on compliance with the fall-protection devices.

Property Loss:	YES []	NO [X]
W.O. Issued:	YES []	NO [X]
Date recommendations to be completed by:		
Report prepared by: Alexandre Ouellet Tel.: 418-276-3530 ext.15114 <i>Being revised by: Corporate H&S Department</i>	Contact person: Tony Truchon Tel.:	

Internal distribution by Corporate H&S Department

Picture #1: Cab door opened in latched position



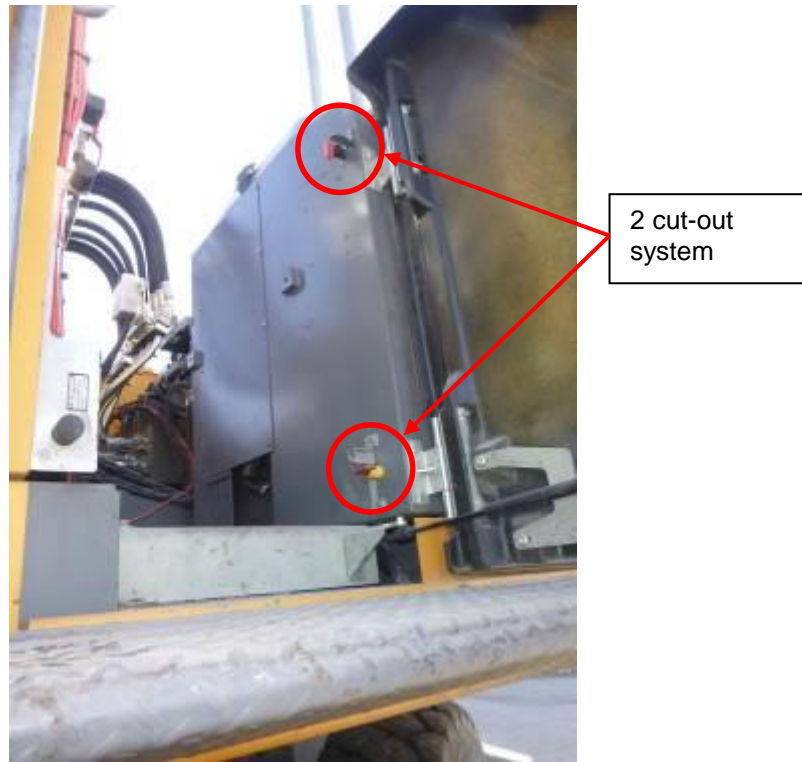
Picture #2: Re-enactment of the scene as witnessed by first responders



Picture #3: Condition of injured employee's leg: multiple fractures



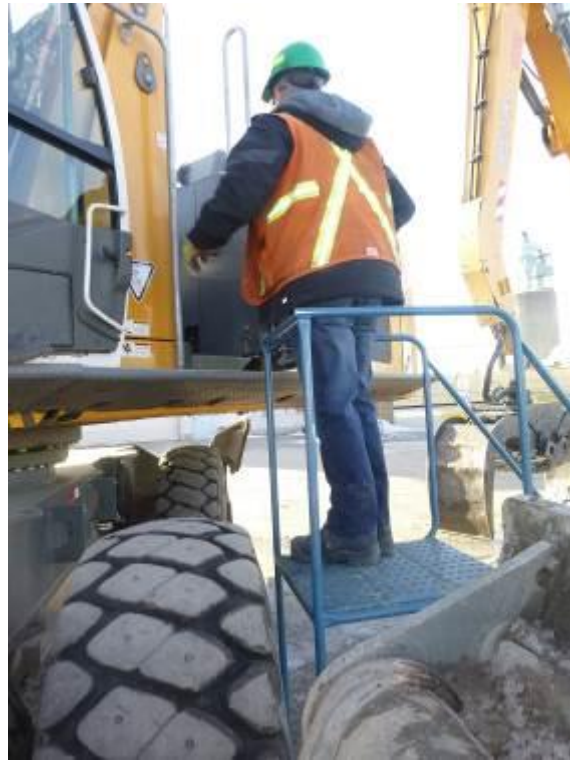
Picture #4: Loader cut-out



Picture #5: Catwalks of different widths



Picture #6: Immediate corrective measure



Picture #7: Example of fall-protection devices



N.B.: the guardrails is not complete, but the design is being shown as an example

Picture #8:

Hazard Control Levels for Working at Heights

LEVEL 3

3.1 WORK DONE ≤ 4' above ground level with stepladder with platform and 36" minimum extension handrails over the platform level- IT'S FORBIDDEN TO WORK ON THE RUNGS



EX : Louisville, model FXP1704XL-4', type IA



EX : Louisville, model FXP1703XL-3' type IA, modèle FXP1702XL-2' type IA



EX : WERNER, model PD7304CA-4' type IAA

Picture #9:

LEVEL 3

3.2 WORK > 4' above ground in a TYPE I (ANSI or CSA) platform WITHOUT HANDRAILS BUT EQUIPPED WITH COMPLETE GUARDRAILS AROUND THE PLATFORM- REQUIRES TO DISPLAY SAFETY WARNING LABEL ON THE PLATFORM REGARDING FULL APPLICATION OF SAFETY ACCESS RULES BY THE QUALIFIED USER

Safety Platform
Little Giant 6'-10'
#19506-815



Vidéo 2

MINIMUM FORMAT 8 ½" X 11"
FOR SAFETY WARNING LABEL FOR THE LITTLE
GIANT EXTENDABLE PLATFORM OR SIMILAR
EQUIPMENT

- WARNING! SAFETY ACCESS RULES FOR ADJUSTABLE PLATFORMS**
1. Maintain 3 points of contact ALL TIME to climb up or coming down, ALWAYS facing the portable ladder/stepladder
 2. Apply firm grip (non-slip gloves) by holding the platform rungs when climbing up or coming down
 3. **NO TOOL OR OBJECT IN HANDS** when climbing up or coming down.
 4. If tools are required, they **MUST** be carried on in a tool case or lifted within an appropriate container once they reach the required height for the task.
 5. **FAILURE TO COMPLY WITH THESE FALL HAZARD CONTROL RULES TO ACCESS THE PLATFORM WILL AUTOMATICALLY RESULT IN DISCIPLINARY ACTION**

IMPORTANT: THE QUALIFIED USER MUST HAVE SUCCESSFULLY COMPLETED THE SAFE USE TRAINING FOR THAT EQUIPMENT AS WELL AS THE CONTROL OF POTENTIAL LINES OF FIRE EXPOSURE TO HANDS WHEN ADJUSTING THIS TYPE OF EQUIPMENT BEFORE FIRST USE



Safety Platform Little Giant 8'-14' #185#5-240