



Critical Incident Notification

Collision between D8T bulldozer & Light Vehicle

A potentially serious incident has occurred in connection with our operations at the Bardon Hill extension project in the United Kingdom. This is an opportunity to reflect on this incident and take any relevant necessary actions to help prevent another accident, if possible.

Date of incident: 2016-01-20

Country: United Kingdom

Site: Bardon Hill Extension - Project Sence (UK Aggregates)

Employee

Contractor

Third Party / Member of the Public

On-Site

Off-Site

Transport

What we know so far:

On Wednesday January 20, 2016, at 9.15am a Caterpillar D8T Dozer reversed into a parked Land Rover Discovery which was a site vehicle on the Northern Landform at the Bardon Hill Extension (Project Sence) in the United Kingdom.

During placement of fill materials on the Northern Landform a CAT D8T dozer owned and operated by Walters Plant Hire Ltd and driven by their operative reversed and into a light vehicle (a Land Rover Discovery) owned and operated by Walters Plant Hire which was being driven by a works Supervisor. The Supervisor had travelled to collect the CAT D8T operator from an agreed meeting point on the work site to return him to the Contractors Compound. The Supervisor proceeded past the agreed meeting point, without positive communication from the Operator, to the dozer as it was stationary in its work area. The Supervisor parked the light vehicle to the rear of the dozer and waited for the Operator to exit the dozer. The dozer then unexpectedly reversed from a stationary position into the stationary light vehicle. The Supervisor was sitting in the driver position of the light vehicle when the impact occurred. Nobody was injured in the incident, however the light vehicle sustained significant damage to its front as a result of the impact of the ripper fitted to the rear of the dozer.

This is an opportunity to review current traffic management arrangements and protocols especially when large plant and equipment are interacting with light vehicles.

Initial Investigation Findings:

- Both Operator and Supervisor were experienced and appropriately trained
- They had received site specific inductions that detailed vehicle rules and radio procedures
- The CAT D8T and Land Rover Discovery were in good condition and well maintained
- The Operator and Supervisor had agreed to meeting point for collection of the CAT D8T Operator
- The Supervisor moved past the agreed meeting point and entered the dozers working area
- The Supervisor failed to positively communicate his intentions to the Operator
- The Supervisor parked the Land Rover Discovery directly behind and very close to the dozer



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- The Land Rover Discovery was (clearly) visible in the reverse camera, the operator did not look at this prior to reversing
- The Operator energized the CAT D8T and immediately reversed
- The Supervisor sounded the horn of the light vehicle warning the CAT D8T operator what was happening.
- The dozer Operator immediately stopped and de-energized the CAT D8T
- When the CCTV system initiates a message comes up with information from the manufacturer, this makes the picture difficult to view

Immediate actions taken by country leadership:

- First consideration should be segregate light vehicles from heavy plant, where possible
- Where this is not possible, safety zones around all mobile equipment (parked or operating) must be maintained, with minimum separation distances formally established for both operating and stationary equipment
- Radio protocols to be reinforced with control of immediate areas around heavy equipment in the control of the equipment operator
- Approach procedures to be reviewed with the use of positive affirmation to approach heavy equipment from the vehicle operator
- Procedures revised to reinforce the use of all available visual aids (mirrors, cameras, direct vision)
- Review of “start up” direction for individual equipment types, ideally this should be first move forward

The above actions MUST be reviewed and actions taken as necessary at all sites that operate mobile plant equipment. Confirmation that the review has been undertaken and details of any subsequent action taken to prevent a reoccurrence MUST be communicated to your business Director in writing by 10th February 2016.



Recreation of incident scene

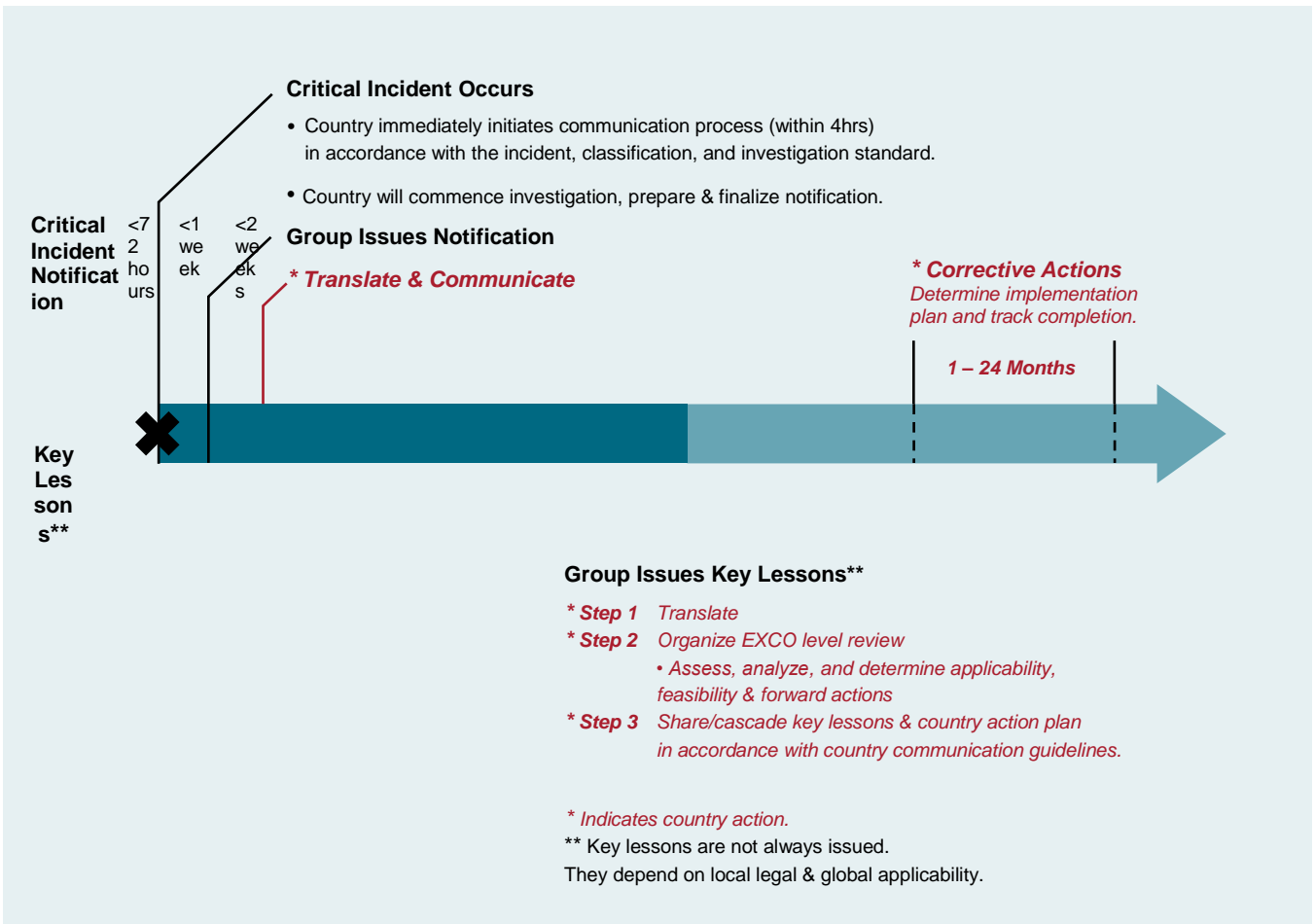


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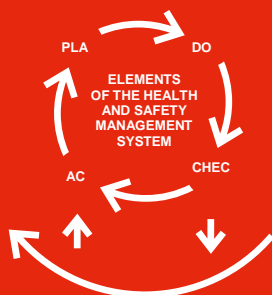
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Communication Principles

- Determine a country-wide process for distribution of this document, including appropriate corrective actions for all levels of the organization.
- Communication should include discussions in team meetings, toolbox talks, posting on notification boards, e-mail distribution, and developing and sharing relevant action plans



Important Actions

- Perform a gap analysis based on the information in this document.
- Establish the action plan, including objectives and processes necessary to ensure that a similar incident will not occur at your sites.
- Implement the action plan, execute the process, close the gaps.
- Collect data to track implementation until completion