



Critical Incident Notification

Slip of material on stockpile engulfed Bulldozer

A potentially serious incident has occurred in connection with our operations at Glensanda Quarry 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: 2016-03-16

Country: United Kingdom

Site: Glensanda Quarry – Primary Stockpile

- | | | |
|---|--|---|
| <input type="checkbox"/> Employee | <input checked="" type="checkbox"/> Contractor | <input type="checkbox"/> Third Party / Member of the Public |
| <input checked="" type="checkbox"/> On-Site | <input type="checkbox"/> Off-Site | <input type="checkbox"/> Transport |

What we know so far:

Material was required to be 'dozed' to the feeders below the 500,000 tonnes capacity primary stockpile to maintain feed to the Secondary processing plant. The condition of the stockpile was assessed and the risk assessment – method statement for the task was reviewed by the shift manager and operator. The RAMS was then reviewed by subsequent Shift Manager and Operators on night shift and dayshifts from Sunday 13th March through to Tuesday 15th March. The contractor's operator took over from the Aggregate Industries operator at 1000 on Monday 14th and again at 0800 on the day of the incident.

The task was reassessed on Tuesday 13th. Following the briefing the operator was taken to the work area to commence work. No issues were noted by either the operator or the Shift Manager and work commenced. The Shift Manager visited the area to check on progress at 1000 with no issues observed or raised. At 1140 the Shift Manager received a call on the radio from the operator advising that the D9T had become trapped by a slip of material on the stockpile. He immediately attended the site and the operator was able to leave the machine without having sustained any injury.

Following extensive risk assessment a method statement for recovery of the dozer was developed and the machine was recovered with minimal damage to lights and beacons.

Initial Investigation Findings:

- The breakdown of the Primary conveyor led to the requirement to push material into the stockpile feeders.
- Correct process was followed with respect to carrying out of Risk Assessment and Method Statement.
- Flawed decision making allowed the D9 dozer to be used in an area too close to a high face.
- Machine selection not appropriate for conditions on day of incident. Dozer should not have been working at the level on the stockpile it was.
- The Shift Manager had received L3 Geotechnical training.
- The contractor's operator was experienced on dozer operations, had carried out the task on a number of previous occasions but had no L2 Geotechnical training.



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- Although the risk assessment for the task was reviewed dynamically the process did not fully consider the prevailing condition of the stockpile at the time.
- The task had become 'routine' due to disruption to Primary production associated with the delivery and commissioning of the new primary crushing plant.
- Complacency had become a factor due to the previous point.

Immediate actions taken by country leadership:

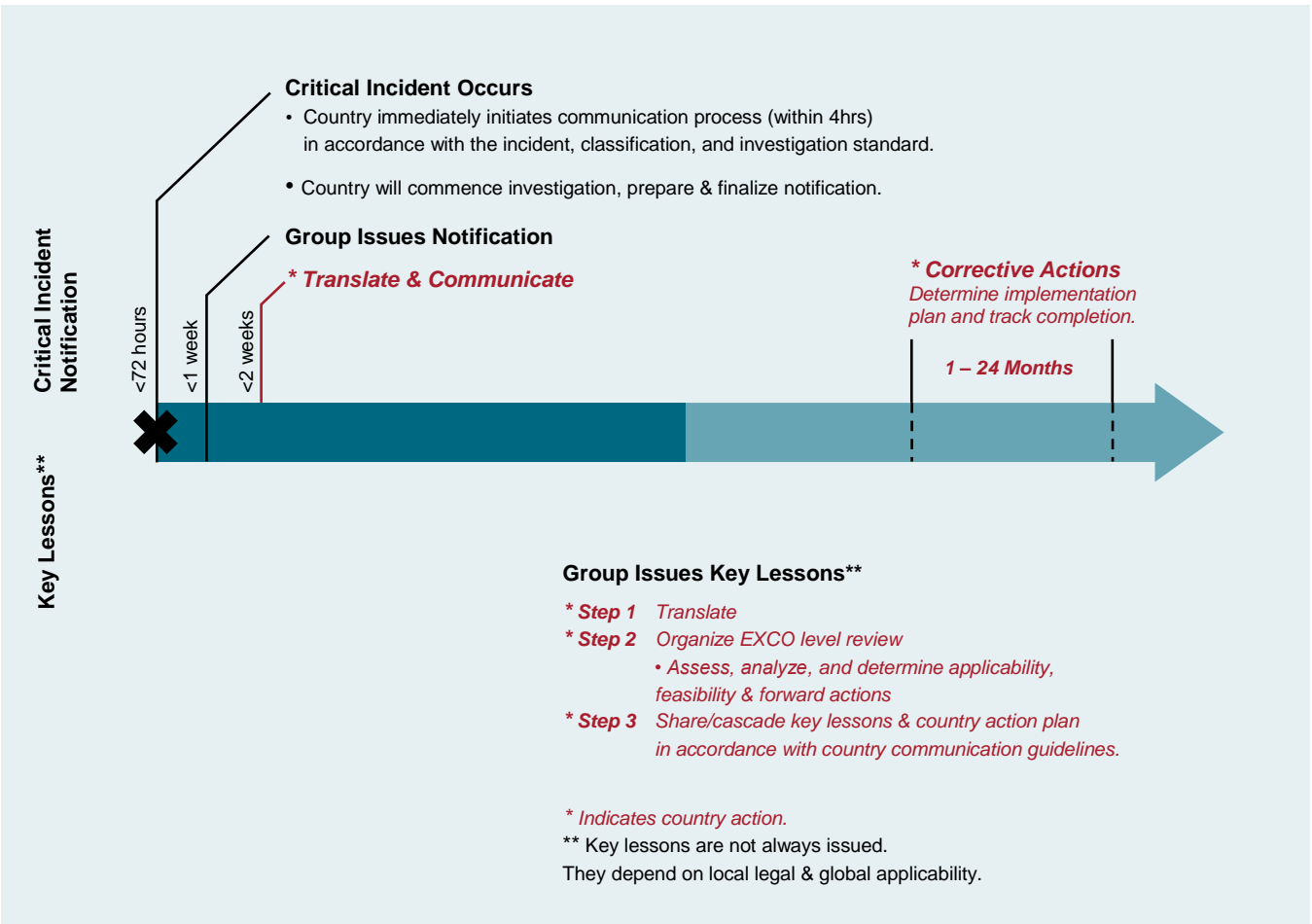
- Operations suspended pending review of procedures, risk assessment and method statements.
- Situation reviewed by EXCO Director, Senior Management, H&S & Geotechnical departments.
- Reviewed competence of mobile plant operators and managers.
- Refresher Geotechnical training organized for all managers and operators.
- Specific training package for large stockpiles and tips to be developed by Geotechnical department for delivery to appropriate personnel.
- Review of Geotechnical Assessments for management of stockpiles to be carried out clearly identifying suitability and limitations of available equipment for intended tasks.





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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