



## Significant Incident Report No. 223

**Subject:** Worker stung by swarm of bees during rehabilitation operations

**Date:** 20 July 2015

### Summary of incident

As part of environmental rehabilitation operations on a mine site, a motor control centre (MCC) mounted on a pontoon required moving, after standing idle for six years.

An inspection of the MCC identified bees in the area, and a pest controller was called in the day before the scheduled move to spray the MCC. Three hives were identified and sprayed, including the area around a small hole near the base of the pontoon.

A few bees were seen near the MCC on the morning of the move. Later in the day, a worker positioned himself on the ground to act as a spotter for the MCC move. As the structure began to move, bees swarmed from the pontoon and repeatedly stung the worker.

He sought shelter in a light vehicle but bees quickly filled the vehicle's interior through an open door. The worker then tried to escape the swarm by running along the haul road. He was picked up by a vehicle travelling to the job and transported away from the swarm.

The worker was admitted to hospital with almost 90 stings to his head and upper body. Ongoing medical treatment was required before he could return to normal duties two weeks later. Fortunately, the individual was not allergic to bee stings otherwise the outcome could have been much worse.

### Direct causes

- Failure to identify the presence of a fourth colony of bees during pest treatment or afterwards.
- Movement of the MCC caused the bees to attack in response to a perceived threat.

### Contributory causes

- The mine site, situated in a wildflower area, had identified bees as a moderate risk in the site's risk register. There had been 61 incidents over 13 years, some involving medical treatment and lost time injuries. However, control measures:
  - did not include formal documented procedures or processes based on research
  - relied on chemical spraying without determining its effectiveness.
- The job safety analyses (JSAs) and field-level risk assessments completed for the task did not adequately assess the risk posed by the bees. Redundant equipment had been moved previously without incident so there was a reduced perception of risk.

- The JSA prepared on the day of the incident did not mention bees as a hazard and not all workers involved in the job signed onto the JSA.
- It was not possible to see inside the hole in the casing of the pontoon, making it difficult to identify the number of hives and verify the effectiveness of the pest treatment. A few bees were observed earlier in the day and at the time of the move but the presence of bees was deemed to be a normal sight and did not trigger further investigation.
- The personal protective equipment (PPE) and clothing worn did not provide adequate protection against bee stings.

## **Actions required**

Mine operators are reminded of the importance of identifying hazards associated with fauna on site and developing safe systems of work to manage the risks. The following actions are recommended.

- Risk assessments should consider the potential for faunal hazards given site-specific environment and circumstances. Historical information (e.g. incident data) should be used where available.
- The controls measures selected should:
  - be based on an understanding of the hazard and appropriate controls
  - consider the hierarchy of controls, including habitat control and prevention, formal procedures and work processes, training of employees and provision of appropriate PPE
  - be verified and monitored for effectiveness.
- Mining operators need to guard against the “normalisation of risk” where workers accept a certain level of risk as standard, and therefore miss opportunities to identify warning signs and take action to prevent unwanted events.
- Site emergency plans and resources should consider medical emergencies related to hazardous fauna. Importantly, relevant information should be available regarding workers’ allergies and medical conditions.
- JSAs and field-level risk assessments should be properly completed and involve management in their preparation and approval
- All personnel should sign onto the JSA for the task and fully understand the hazards and control measures involved.

## **Further information**

Visit [www.dmp.wa.gov.au/ResourcesSafety](http://www.dmp.wa.gov.au/ResourcesSafety) for information on occupational safety and health in the resources sector.

This Significant Incident Report was approved for release by the State Mining Engineer on 20 July 2015