27 March 2014

Recovery from tank incident

Update #3

Employee information sheet

Leach Tank 1 has now been safely dismantled and the surrounding area cleared. The independent investigation into the incident is also complete, and has identified the root cause.

Key points:

- Work to dismantle and remove Leach Tank 1 and associated infrastructure is complete.
- The dismantled sections from the failed tank have been removed to another area on site.
- The final clean-up of slurry material from the exclusion zone around Leach Tank 1 is complete.
- The investigation commissioned by ERA into the failure of Leach Tank 1 is complete.
- ERA's investigation was undertaken in two phases and was led by independent experts with experience in major incident investigation and asset integrity and maintenance, respectively.

Root cause:

- The root cause investigation found that the rubber lining inside Leach Tank 1, which protects the tank from corrosion, had been damaged by a baffle plate which had partially failed inside the tank.
- The damaged rubber lining allowed acidic slurry mixture to come into contact with the tank's steel wall. The acid corroded the steel and this led to the failure of the tank.
- In 2009, Leach Tank 1 was modified to include a high powered agitator to process laterite ore, when it had previously processed primary ore. The investigation has found that these mofications were likely to have contributed to the baffle failing.
- This modification was only made to Leach Tank 1.

What happens next:

- The six other leach tanks on site, which all process primary ore, have been emptied and thorough inspections of the tanks are underway.
- These inspections identified some metal fatigue in the baffle supports in Leach Tank 6.
- As a result of this, ERA has decided to redesign and replace the baffles in all of the leach tanks before they are returned to service.
- The next phase of the investigation has focussed on assessment of the condition of critical assets at the processing plant and the associated asset maintenance strategies. For more information on this, please talk to your leader.
- ERA's investigation is separate from but run in parallel with the investigation being undertaken by the Government-appointed taskforce, which is still ongoing.
- The restart of processing operations remains subject to approval from the Commonwealth Minister for Industry, the Northern Territory Executive Director of the Department of Mines and Energy and the ERA Board.
- Ongoing monitoring confirms that this incident has had no impact on the surrounding environment or Kakadu National Park.

What is a baffle?

A baffle is a plate that is used in many applications, usually to influence the movement of material.

In our leach tanks, the baffles are used to influence the movement of the slurry material in the tanks to ensure effective mixing.

The base of Leach Tank 1 following the removal of the tank and other infrastructure.