In December 2016, the Independent Monitor (IM) released a report on the environmental performance of McArthur River Mine (MRM) covering the period October 2014 to September 2015.

We take the findings of the IM Report seriously. Glencore has been transparent and open about the challenges facing MRM and we remain committed to engaging with the Northern Territory Government, the local community of Borroloola and other key stakeholders to provide information about our performance and ongoing progress.

Our top priorities remain the health and safety of our workforce, ensuring the long term sustainability of our operation and making a positive contribution to the community and the Northern Territory.

The IM Report covers a period that ended 14 months ago and further improvements have been made at the operation.

In the Report, the IM has noted substantial improvements at the site, including:

- Effective management of the Tailings Storage Facility including safety improvements.
- Placement of large woody debris into the McArthur River channel has seen the establishment of fish communities comparable to the natural channel.
- Significant improvements in the collection of data for both day to day management and the understanding of specific issues.
- Improved understanding of geochemical properties of key waste rock types, based on further testing.
- Upgraded water monitoring network which allows real-time analysis of water levels at MRM.

The IM recommended a number of areas for improvement, many of which have already been addressed.

This factsheet has been developed to provide our stakeholders with a high level summary of the key issues or observations made in the IM Report and to outline steps MRM has taken since the reporting period to address these matters.

### WASTE ROCK

In 2013, following detailed test work, MRM reported a change in the characterisation of waste rock to the regulator. MRM’s tests identified material in the waste rock that was saline and/or metalliferous, which may increase the potential for saline and metalliferous drainage at the mine.

MRM is currently undertaking an Environmental Impact Statement (EIS) to finalise a design for the long term management of our waste rock.

For the period October 2014 to September 2015, the IM has noted significant improvements in the management of waste rock, including:

- Better understanding of the geochemical properties of waste rock.
- Compaction testing frequencies generally meeting or exceeding specifications.
- Identification of additional clean waste sufficient for the waste rock cover design.
- The use of ‘paddock dumping’, compaction and protection layers to limit desiccation and cracking.
- Appointment of an Independent Certifying Engineer.

These improvements will be further supported by the current EIS process to ensure safe and environmentally sound long-term management of waste rock.

Further improvements achieved since the IM reporting period include:

- Removal and processing of Low Grade Ore stockpiles.
- Constructing the first High Density Polyethylene (HDPE) lined runoff dam.
- Continued refinement of the waste rock classification system.
TAILINGS STORAGE FACILITY

Tailings are finely ground rock and mineral waste products remaining after metal has been extracted from the mined ore. Tailings are piped from the MRM processing plant to the tailing storage facility (made up of different storage cells) where the rock material settles and the water typically moves to the centre where it is collected and recycled.

The MRM Tailings Storage Facility (TSF) is inspected regularly and continues to be monitored and reviewed by industry experts for dam safety and integrity at regular intervals. A detailed monthly report is submitted to the regulator covering a range of monitoring data including water inflows and outflows and seepage collection records.

For the period October 2014 to September 2015, the IM has noted the most significant success for the TSF is the effective pond management, with evidence that a beach of at least 50 metres is being maintained, that pond water is being efficiently reclaimed and the establishment of safe operating levels.

The report also noted:

- The construction of 1 metre raise of the Cell 2 wall based on a successful field trial, with reviews by independent consultants and the Independent Tailings Review Board.
- Renewed efforts to identify and quantify TSF seepage potentially affecting Surprise Creek.
- Improvements to Cell 1 surface water management.
- Reductions in seepage through the spillway and southwest corner of TSF Cell 2.
- Training for personnel undertaking TSF inspections.
- The establishment of new operating guidelines, operating limits, triggers and actions.

Further improvements undertaken since the IM reporting period include:

- Installed continuous real time dust monitoring station at Bing Bong.

BING BONG LOADING FACILITY

MRM monitors dust on land surrounding Bing Bong Loading Facility and water quality in the swing basin and shipping channel that may be impacted by dust from our loading activities.

For the period October 2014 to September 2015, the report has noted:

- The dust extraction system in the Bing Bong Loading Facility concentrate shed has been repaired during the operational period.
- The whole of Bing Bong Loading Facility appeared to be cleaner/less dusty than during the previous site visit, despite the previous 14 months having been drier, likely due to better ‘housekeeping’ with regards to dust management.

Further improvements undertaken since the IM reporting period include:

- Installed continuous real time dust monitoring station at Bing Bong.

McARTHUR RIVER DIVERSION

For the period October 2014 to September 2015, the IM has noted that the monitoring of the aquatic ecosystem around McArthur River Mine continues to improve yearly. The most positive developments in the current reporting period include:

- Establishing a new method to monitor the performance of the McArthur River diversion channel that compares complex and bare bank habitats within and outside the river diversion.
- The extensive amounts of large woody debris installed at the downstream end of the McArthur River diversion channel has remained in place for two wet seasons and fish communities in the area are comparable to those in the natural channel.
- Revegetation of the McArthur River diversion channel continues to improve incrementally and as a result is providing shade and habitat in the diversion channel.
- Weed densities were very low or absent from revegetation monitoring sites in 2015, a very encouraging result of the weed management plan and the livestock management plan.
Further improvements undertaken since the IM reporting period include:
- Over 100 truckloads of Large woody debris (LWD) have been delivered to the diversion with LWD piles being installed in a further 550 m of the diversion.
- An additional 20,000 plants have been planted in the diversion waterline to assist revegetation of the riparian zone and enhance habitat.

FISH AND SHELLFISH
Fish and shellfish are monitored both on and away from the mine site. In previous years the IM has noted that while there was no evidence of mine derived lead in fish and shellfish off the mine site, there was an isolated location on the mine site itself where lead has been found in small non-eating fish.

For the period October 2014 to September 2015, the IM noted:
- Improvements in the monitoring of metals in aquatic fauna program to include more sites from Surprise and Barney creeks.
- The commissioning of two reports into the potential human health impacts of contaminants in fish caught in the McArthur River. They indicate the risks to human health posed by consuming fish from the McArthur River are low.
- The IM report notes that the low levels of contamination in areas away from the mining lease and the high quantities of biota that would need to be consumed over extended periods should allay concerns about whether or not fish from the McArthur River can be consumed.
- The installation of ‘no entry’ signage at sites along Barney and Surprise Creeks where fish may be impacted on the mining lease, such as the Barney and Surprise Creek bridges along the Carpentaria Highway.
- Declining levels of contamination in biota from beneath the internal mine haul road across Barney Creek likely due to controls implemented by MRM. For example the maximum concentration of lead recorded in rainbow fish has declined almost eight fold since 2013, and the mean by more than five times.

Since the IM reporting period, MRM has contracted Indo-Pacific Environmental to implement a detailed community consultation program with the local community in and around Borroloola.

Further improvements undertaken since the IM reporting period include:
- Increase in the frequency of aquatic monitoring.
- Lead in barramundi sampled in 2016 were 200 times below the safe eating limit of 0.5mg/kg.
- Lead in bream sampled in 2016 were 55 times below the safe eating limit of 0.5mg/kg.
- Lead in cherabin (giant freshwater prawn) sampled in 2016 were 80 times below the safe eating limit of 0.5mg/kg.

CATTLE
For the period October 2014 to September 2015, the IM report has noted the considerable efforts undertaken by MRM to exclude cattle and other animals from the mine site. The report noted:
- MRM has developed a livestock management plan to aid in the exclusion of cattle from the diversion channels and the greater mine area. It is a comprehensive document and is a valuable addition to MRM’s efforts to restrict livestock from the mine site.
- The exclusion of livestock is also believed to contribute to weed management.

LONG-TERM CLOSURE STRATEGY
For the period October 2014 to September 2015, the IM Report noted the need for a long-term closure strategy for the mine. Extensive work has been done in this regard as part of the EIS process and this has continued beyond the reporting period. This has included extensive consultation with the local community and other stakeholders on their long-term vision for post mining activities.
MRM is undertaking an Environmental Impact Statement for long term safe and environmentally sound management of waste rock.

NT Government studies found that eating fish from the McArthur River has very low risk to human health.

The extensive amounts of large woody debris installed at the downstream end of the McArthur River diversion channel.

Monitoring indicates that the mine’s impact on downstream water quality is limited.