Northern Territory Environment Protection Authority

SECTION 14 INCIDENT REPORT (*Waste Management and Pollution Control Act*)

Date and Time of Notification:	EPA was notified via phone call to the Pollution Hotline on 20th October 2022, 12:00.
Person / Company:	GEMCO Mining Pty Ltd.
Incident:	The Eastern Leases Project Area experienced a rain event on the afternoon of the 19th of October. As a result, the Emerald River Tributary Crossing (also known as CP1C2) had sediment-laden water flowing from the site down the ephemeral tributary. The sediment laden water extended off lease before stopping. By the time this issue was identified the water had started to recede with no follow up rainfall. The water did not connect to the perennial flows of the Emerald River. Refer Figure 1-4.
(a) the incident causing or threatening to cause pollution	Sediment-laden runoff from the construction area down an ephemeral tributary of the Emerald River.
(b) the place where the incident occurred	GEMCO Eastern Leases Access Authority (AA31711) at Culvert CP1C2 that crosses a tributary of the Emerald River.
(c) the date and time of the incident	The incident occurred on Wednesday 19th October, 2022 at approximately 14:00. The incident was reported internally via Global 360 – EVT #0058834.
(d) how the pollution has occurred, is occurring or may occur	An 8.5km haul road is currently under construction to join two GEMCO Mineral Leases. A rain event in the afternoon of the 19th of October exceeded the capacity of the temporary erosion and sediment controls.
(e) the attempts made to prevent, reduce, control, rectify or clean up the pollution or resultant environmental harm caused or threatening to be caused by the incident	By the time the event was identified, the water line within the ephemeral tributary was receding. Actions are being taken to improve temporary erosion and sediment controls to mitigate the risk of repeat events. While the aesthetics of the ephemeral tributary may be temporarily impacted, it is anticipated that there will be no ongoing environmental impact from this release.
(f) the identity of the person notifying the NT EPA	Michael Smith, Manager Technical Services; GEMCO

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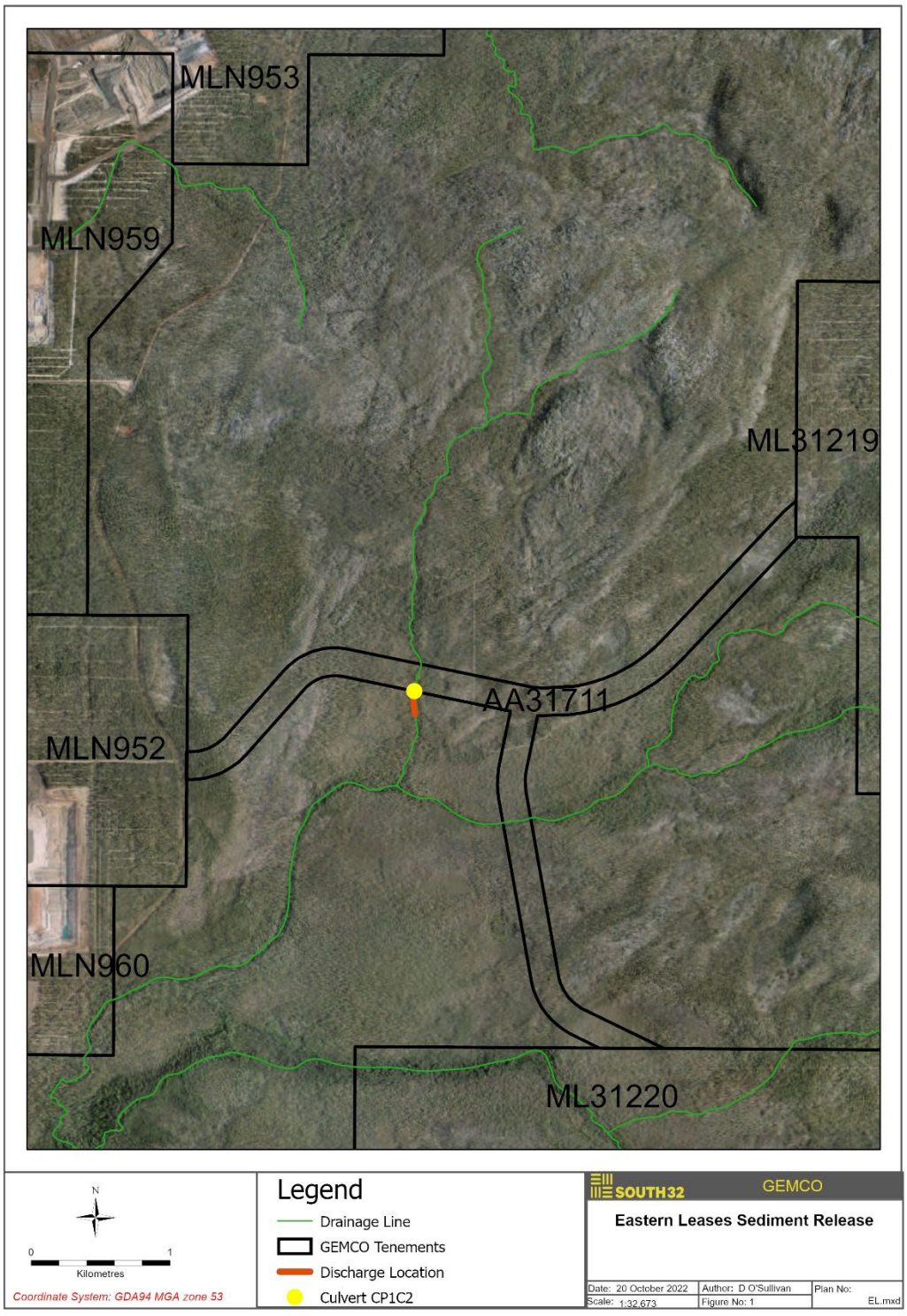

Figure 1: Location of discharge event

Figure 2: Sediment event in Emerald River Tributary 19 October 2022. Photograph taken from the approximate location of the lease boundary facing towards the construction area. The white rock visible in the tributary is a temporary crossing/culvert.

Figure 3: Sediment event in Emerald River Tributary 19 October 2022. Photograph taken from the approximate location of the lease boundary facing away from the construction

area.

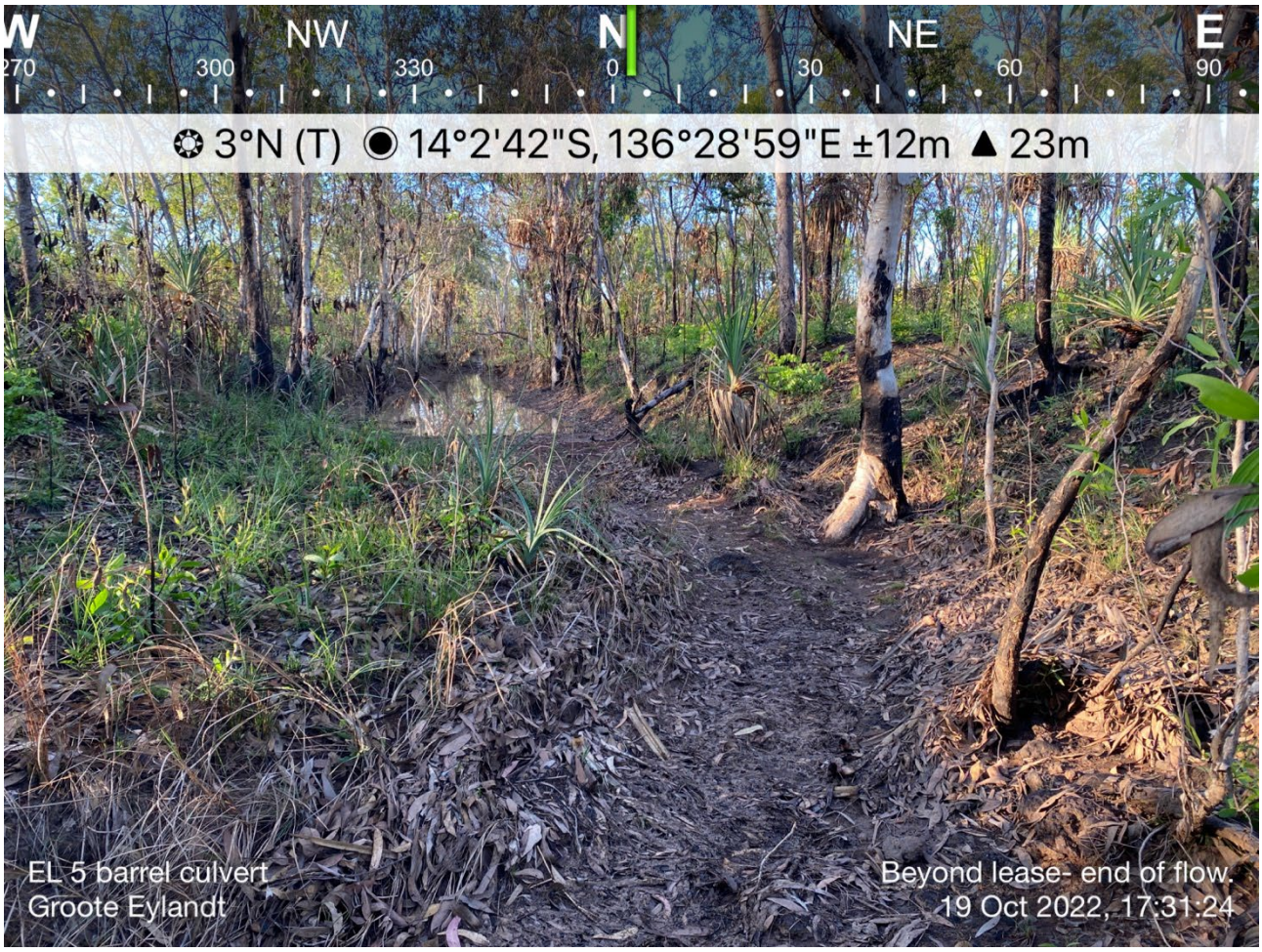

Figure 4: Sediment event in Emerald River Tributary 19 October 2022. Photograph taken from the end of flow. Approximately 150m from the edge of lease.

EASTERN LEASES | GEMCO

NTEPA RFI 21/10/2022 | Incident: PRL11215 | Response: 24/10/2022

NTEPA RFI	GEMCO RESPONSE
How much rain was recorded during this rainfall event and how was this figure obtained? Only 3mm of rain have been recorded on the BOM website for the Groote Eylandt Airport since 14/10/2022.	Major Projects has a rain gauge installed at the Emerald River Arch Bridge approximately 1.25 km south of CP1C2 (the site of the incident). The rain gauge recorded 9mm of rain on the 19/10/2022. There was no flow down the Emerald River at the site of the Arch Bridge rain gauge. Storm cells on Groote Eylandt can be highly localized and it is therefore possible that the actual rainfall received in the catchment for CP1C2 was different to the data captured at the rain gauge.
What were the ESC measures that failed in this instance? **Do you have any photos of the ESC measures that failed and what they were replaced with? If so please send through an amended s14 report with these additional photos attached.**	The following temporary erosion and sediment controls were in place on the 19/10/22. • All clean water diversion bunds were in place. Noting that they require final shaping. • Diversion bunds were installed on the westerly side of the catchment to divert all haul road stormwater into a borrow pit (Fig 5). • Stabilised outlets had been installed from the construction access track into the bush (Fig 5, Fig 6) • The temporary crossing is geofab-lined and clean filled to support filtration of stormwater captured by the haul road. The catchment for CP1C2 is currently under construction and as such: • There was an active scraper circuit on the eastern side of the catchment which prevented the installation of diversion bunds in this part of the catchment. • Both sides of the culvert are currently being built up to enable the construction of sediment ponds. Consequently, the area immediately adjacent to the waterway is open.
What temp ESC have been installed in response to the event?	As of 24/10/22 South32 Major Projects has taken the following steps to improve temporary ESC in consultation with a suitably qualified professional: • Increased frequency of outlets along the construction access track, particularly along the eastern approach; • Increased the catchment of the stabilized outlets by installing woah boys to channel water from construction access track into stabilized outlets (Fig 7); • Increased frequency of diversion bunds along the haul road (Fig 8); • Improved the capacity of the temporary crossing to hold and filter stormwater by building up the white rock bunds on the edges of the temporary crossing and blocking the culvert pipe with white rock (Fig 9); • Removed all sediment build up from behind the temporary crossing. The following additional works are scheduled for the week ending 30/10/22 • Installation of sediment fencing around the topsoil stockpile; • Rock armour all diversion bund outlets; • Install coir logs beside the waterway and around the temporary crossing area. • Installation of sediment ponds (final design will be achieved after 30/10/2022).
If there is an ESC Plan for this road construction project, we would like a copy of it to review.	See attached documents: • PLN6504 Erosion and Sediment Control Standard ○ NB: *Under internal review since 08/22* • MP – 175 Eastern Leases South – MC01 CP1C2 - ESCP ○ Temporary Erosion and Sediment Control Plans for CP1C2 • Catchment pro-forma for CP1C2

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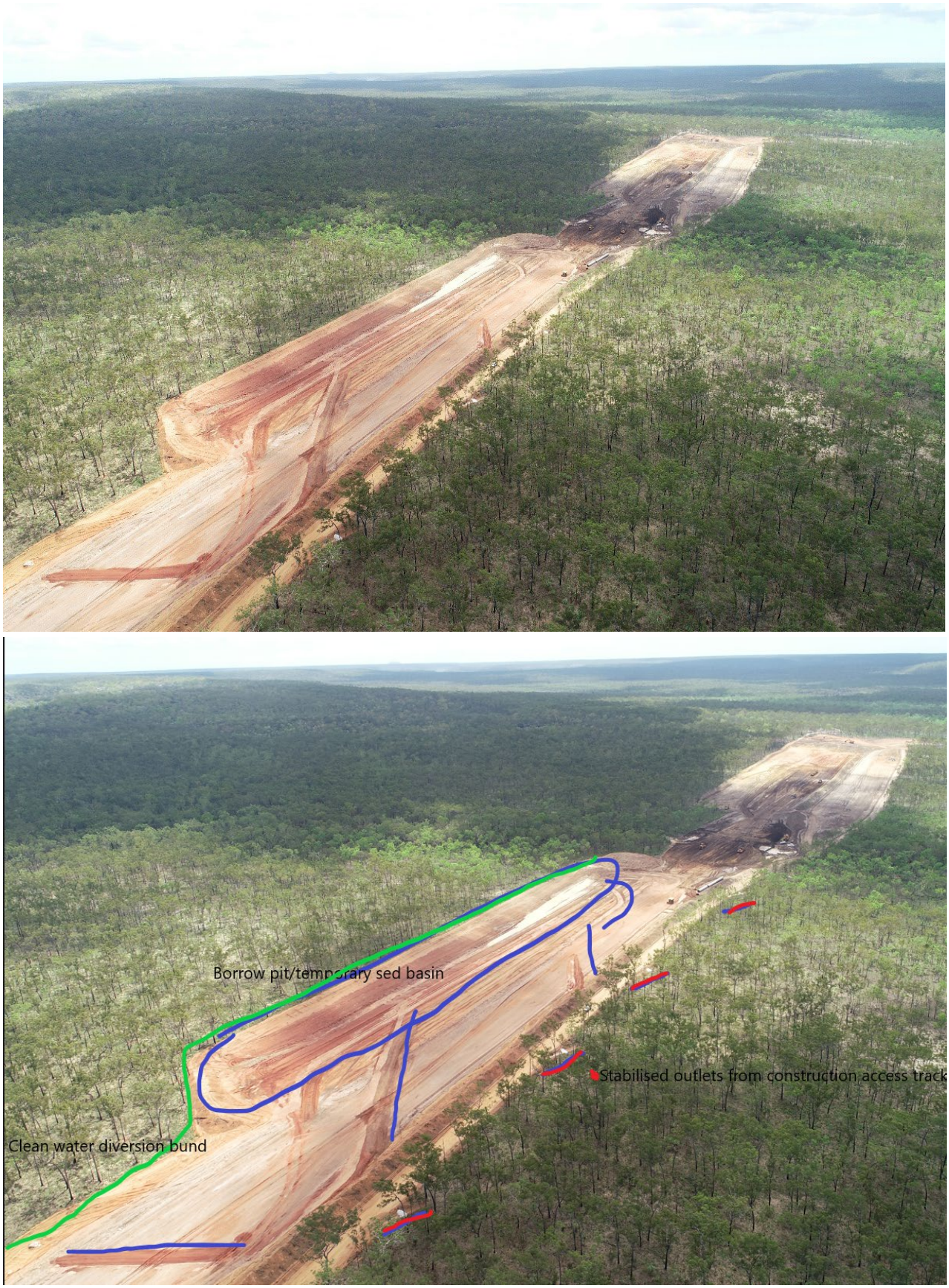

Figure 5: Temporary ESC at time of the event (facing east)

Figure 6: Temporary ESC at the time of the event: Stabilised outlets from the construction access track.

Figure 7. Improved temporary ESC: Woah boys installed to support stabilised outlets from construction access track.

Figure 8: Improved ESC: Increased frequency of diversion bunds along the haul road.

Note active scraper circuit precludes installation of diversions to the left of shot.
In the centre of shot diversion bunds have been installed at regular intervals to slow water and redirect it towards what will become the sediment ponds.
Woah boys on the construction track on the edge of bush channel surface water flows into the vegetation.

Figure 8: Improved ESC: Improved bunding on the outer edge of the temporary access track to ensure surface water flows don't overtop.
Sediment in front of culverts has been dredged out.
Additional white rock with clean sand has been installed in front of the temporary crossing to slow water and enable it to filter through the geofab and sand before flowing downstream.