

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

Date and Time of Notification:	Email notification – 25 March 2024 at 20:15																		
Person / Company:	McArthur River Mining Pty Ltd (MRM)																		
Incident:	<p>Releases of water to Barney Creek (BC) during significant flooding, this included the following:</p> <ul style="list-style-type: none"> • a minor leak from a pipeline at the BC Haul Bridge; • inundation of the BC South-East Sump (BC SES), BC South-West Sump (BC SWS) and BC North-West Sump (BC NWS) causing some release of this water to BC; and • inundation of a pond at the Mill causing some release of this water to BC. 																		
(a) the incident causing or threatening to cause pollution	Water was released at five locations along BC, within the operational area of McArthur River Mine (the Mine). The released water is determined to have been significantly diluted by extreme floodwaters, therefore the environmental risk downstream of the Mine is considered to be extremely low.																		
(b) the place where the incident occurred	<p>The incident occurred at various locations along BC, within the operational area of the Mine. See Figure 1 for a map with the incident locations with reference to the Mine.</p> <p>The Global Positioning System (GPS) points for the incident locations are provided in Table 1 below.</p> <p><i>Table 1. GPS Coordinates of the incident locations.</i></p> <table border="1"> <thead> <tr> <th>Incident location</th> <th>Easting*</th> <th>Northing*</th> </tr> </thead> <tbody> <tr> <td>Barney Creek Haul Bridge</td> <td>617663.6</td> <td>8184021</td> </tr> <tr> <td>Barney Creek South-East Sump (SES)</td> <td>617680</td> <td>8183894</td> </tr> <tr> <td>Barney Creek South-West Sump (SWS)</td> <td>617584.5</td> <td>8183954.1</td> </tr> <tr> <td>Barney Creek North-West Sump (NSW)</td> <td>617589.9</td> <td>8184100</td> </tr> <tr> <td>Mill Pond</td> <td>616402.5</td> <td>8183191</td> </tr> </tbody> </table> <p><i>*All coordinates were taken using the MGA Zone 53 (GDA94) coordinate reference system.</i></p>	Incident location	Easting*	Northing*	Barney Creek Haul Bridge	617663.6	8184021	Barney Creek South-East Sump (SES)	617680	8183894	Barney Creek South-West Sump (SWS)	617584.5	8183954.1	Barney Creek North-West Sump (NSW)	617589.9	8184100	Mill Pond	616402.5	8183191
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SECTION 14 INCIDENT REPORT (*Waste Management and Pollution Control Act*)

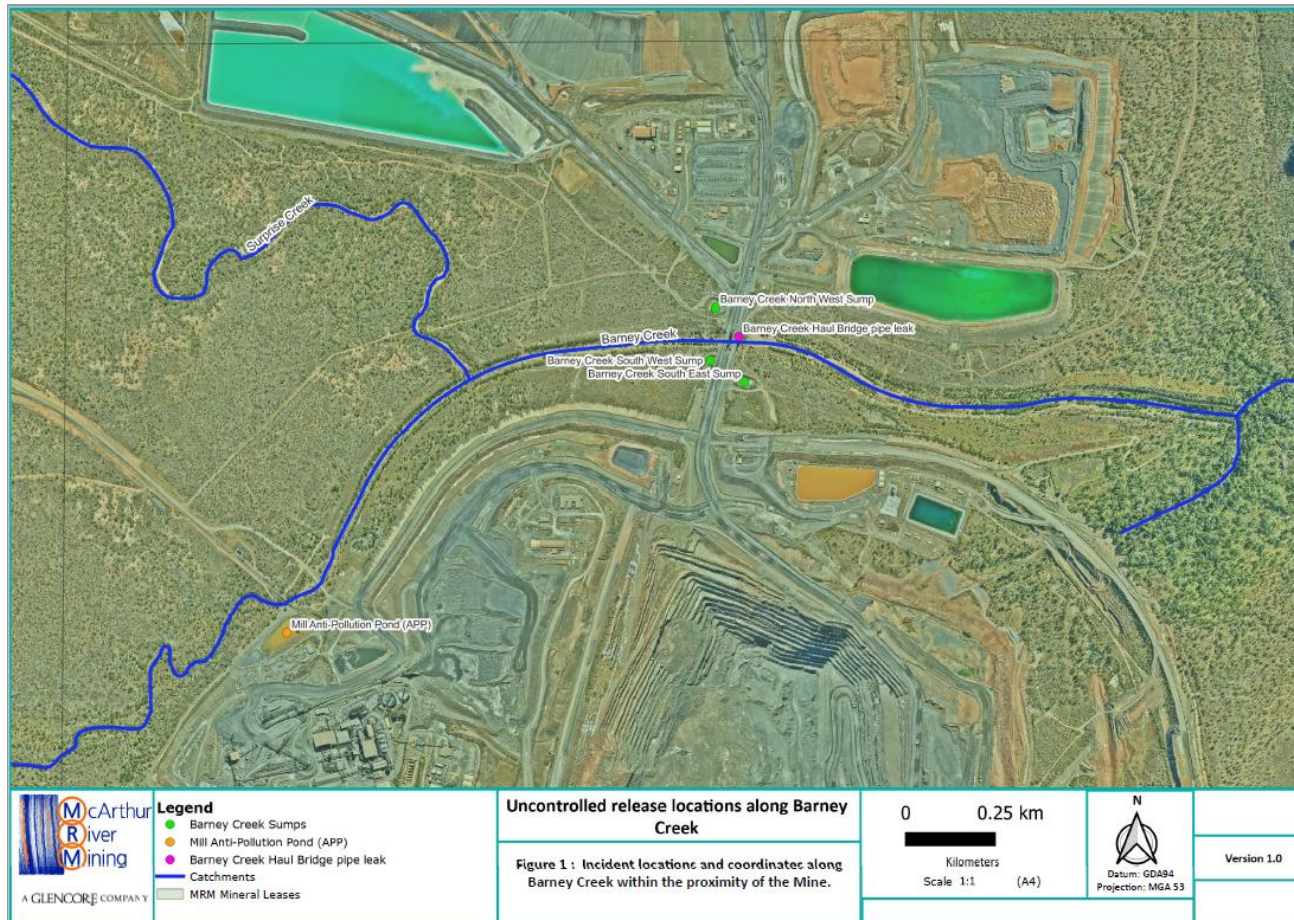



Figure 1. Incident locations along BC within the mining lease. [OB]

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

<p>(c) the date and time of the incident</p>	<p>The exact date and time of the incidents are not known however would have occurred between 19 and 21 March during significant flooding associated with ex-Tropical Cyclone (TC) Megan.</p>
<p>(d) how the pollution has occurred, is occurring or may occur</p>	<p>In March 2024, the McArthur River Mine (the Mine) and surrounding area experienced significant rainfall as a result of ex-Tropical Cyclone Megan passing through the region. The resulting 24-hour rainfall recorded at the Mine was up to approximately 1 in 85-year intensity, which is the highest recorded rainfall at the Mine since the beginning of monitoring in 1969. The severe intensity of this event has resulted in a significant increase of site water inventory, and flows in the McArthur River up to approximately 7,200 cubic metres per second, with maximum river heights of up to 18 metres. Over the ensuing days when floodwaters receded, and after it was deemed safe, inspections of the Mine commenced to provide an update on river levels and potential infrastructure damage at the Mine. Five potential releases of water were identified, including:</p> <ul style="list-style-type: none"> • a minor leak from a pipeline at the Barney Creek Haul Bridge (Figure 2); • inundation of the BC South-East Sump (BC SES), BC South-West Sump (BC SWS) and BC North-West Sump (BC NWS) causing some release of this water to BC (Figure 3); and; • inundation of the Mill Pond causing some release of this water to BC (Figure 4). <p>Any water released at this time is considered to have been significantly diluted and represents a very low risk to the environment downstream of the Mine.</p> <div data-bbox="454 1467 1452 1915" style="text-align: center;">  </div> <p><i>Figure 2. LA pipe burst at BC Haul Bridge.</i></p>

SECTION 14 INCIDENT REPORT



Figure 3. Inundation of the BC SES, BC SWS and BC NWS at BC.



Figure 4. Location where BC floodwaters inundated the Mill Pond.



Figure 5. BC SES, BC SWS and BC NWS no longer inundated by BC.

SECTION 14 INCIDENT REPORT

<p>(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</p>	<p>When floodwaters receded, and after it was deemed safe, the pipe on BC Haul Bridge, identified as the Lake Archer water transfer pipe, was isolated and the transfer ceased. Additionally, the three sumps adjacent to the BC Haul Bridge and Mill Pond were no longer inundated when floodwaters receded (Figure 5).</p> <p>Any water released at this time is considered to have been significantly diluted and represents a very low risk to the environment downstream of the Mine. This is discussed further in the below section.</p> <p>Potential for Environmental Harm</p> <p><u>Barney Creek Haul Bridge Pipeline</u></p> <p>The water released from the pipeline at the BC Haul Bridge is estimated to be <0.1 megalitres (ML), which in comparison to the estimated total stream discharge volume of 69,120 ML in Barney Creek over the same time period, is considered to be minor.</p> <p><u>Barney Creek Haul Bridge Sumps (SES, SWS & NWS)</u></p> <p>The containment sumps on either side of Barney Creek capture surface runoff from the road and approach to the Haul Road Bridges. The most recent samples prior to inundation were taken from these sumps on 27 February 2024. At that time, the water quality was classified as Class 4 – managed release water.</p> <p>In addition, these sumps were dewatered prior to the event as part of preparatory works associated with ex-TC Megan, and the water quality was likely being in the managed release class (or better). The flow in the McArthur River at that time was also high, providing significant dilution of any waters released from the sump.</p> <p><u>Mill Pond</u></p> <p>The Mill Pond is a pond that collects runoff from areas of the Mill catchment. It also receives pumped inflows from distribution points such as Pete’s Pond and Van Duncan’s Dam.</p> <p>The most recent sample prior to inundation was taken on 27 February 2024. At that time, the water quality in the Mill Pond was classified as Class 6 (process water equivalent). However, the flow in the McArthur River at the time of inundation was high, providing significant dilution of any Mill Pond waters released. This magnitude of dilution presents negligible risk to the receiving waters.</p> <p><u>Water Quality Results</u></p> <p>On 19 March 2024, samples were collected at three locations along Barney Creek (SW03, SW19 and SW20) and on 25 March 2024 a water sample was taken from SW11, located downstream of the Mine. Results from SW11 shows that all analytes were well below the Waste Discharge Licence (WDL) 174-14 Site Specific Trigger Values (SSTVs) (see Table 3 below).</p>
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SECTION 14 INCIDENT REPORT

Given the above points, the released water that occurred from the incident has undergone significant dilution and therefore the potential for environmental harm is considered to be extremely low.

Table 3. SW11 west and Barney Creek Monitoring Results

Parameter	Units	WDL 174-14 SSTV	SW11 west 25/03/24	SW03 19/03/24	SW19 19/03/24	SW20 19/03/24
EC	µS/cm	1000	216	27	418	214
NO3	µg/L	10600	113	<100	165	110
SO4_F	mg/L	1000	56	3.8	162	76
Al_F	µg/L	269	29	89	7	9
As_F	µg/L	24	<0.5	<0.5	<0.5	<0.5
Cd_F	µg/L	1.73	<0.2	<0.2	0.5	0.6
Co_F	µg/L	1.4	<1	<1	<1	<1
Cu_F	µg/L	9	<1	<1	<1	<1
Fe_F	µg/L	347	64	72	10	13
Mn_F	µg/L	1900	16	<0.5	14	0.7
Ni_F	µg/L	11	<1	<1	<1	<1
Pb_F	µg/L	17	<0.5	1.2	<0.5	<0.5
Tl_F	µg/L	58	0.3	<0.1	0.9	0.7
Zn_F	µg/L	32	24	38	212	251

Table 4. Barney Creek water sample details and locations.

Site ID	Date	Time	Easting	Northing
SW19	19/03/24	9:16	617708	8183997
SW20	19/03/24	10:30	618862	8183828
SW03	19/03/24	14:15	616466	8183325

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

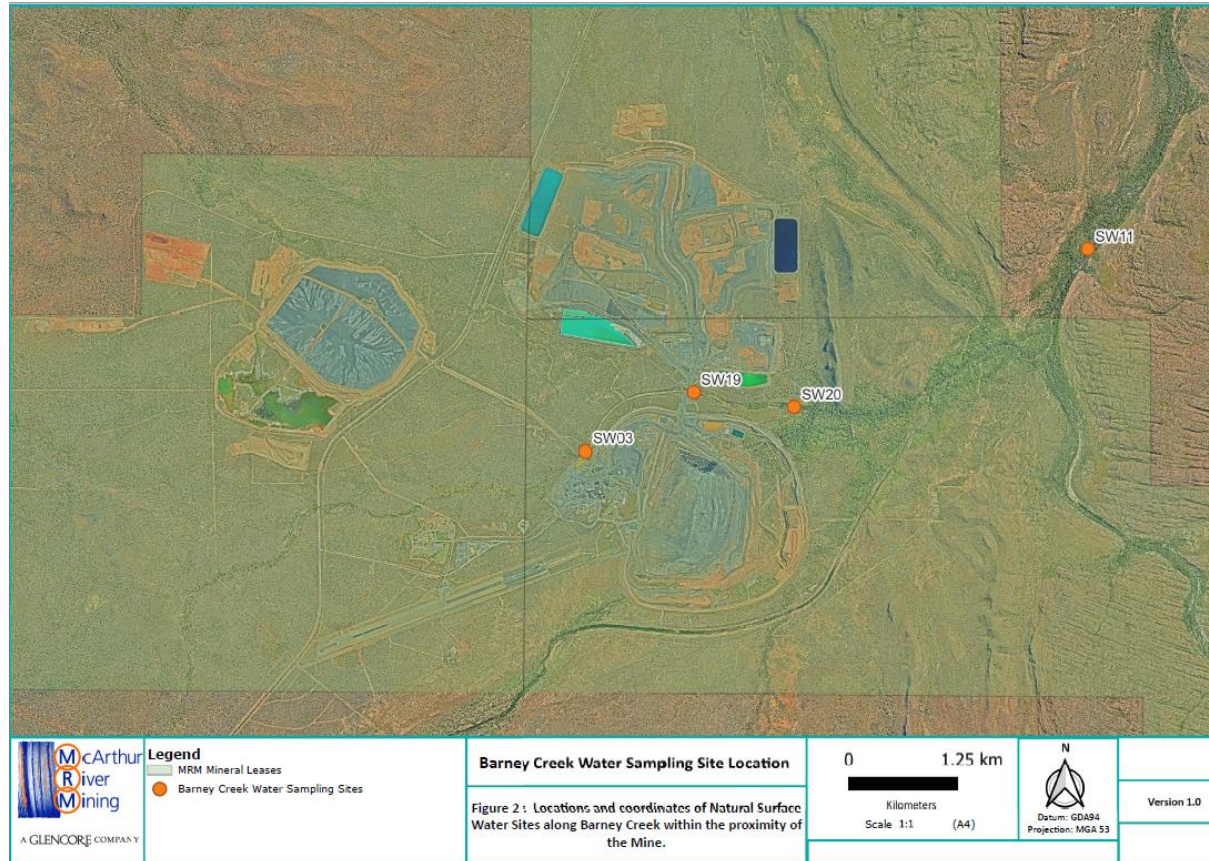


Figure 2. Barney Creek water sample locations

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

(f) the identity of the person notifying the NT EPA	Simon Longhurst Superintendent – Environment
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