



BARTO GOLD MINING PTY LTD | SOUTHERN CROSS OPERATIONS

# SOUTHERN CROSS OPERATIONS L4597/1988/14

## ANNUAL ENVIRONMENTAL REPORT 2024 - 2025





## REVISIONS

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0.0	23/10/2025	First draft	█	
0.1	28/10/2025	Final Version	█	█

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## 1. ACRONYMS & DEFINITIONS

Acronym	Definition
<b>BG</b>	Barto Gold Mining Pty Ltd
<b>SCO</b>	Southern Cross Operations
<b>EPAct</b>	Environmental Protection Act 1986
<b>AACR</b>	Annual Audit Compliance Report
<b>GMR</b>	Groundwater Monitoring Report
<b>GMS</b>	Groundwater monitoring summary
<b>AER</b>	Annual Environmental Report
<b>DMPE</b>	Department of Mines, Petroleum and Exploration
<b>DWER</b>	Department of Water and Environmental Regulation
<b>RIWA</b>	Rights in Water and Irrigation Act of 1914
<b>kL</b>	Kilolitres (1,000 L)
<b>km</b>	Kilometres
<b>L/s</b>	Litres per second
<b>m<sup>3</sup></b>	Cubic meters
<b>TDS</b>	Total dissolved solids
<b>mbgl</b>	Meters below ground level
<b>Ha</b>	Hectare
<b>MP</b>	Mining Proposal
<b>SWL</b>	Standing Water Level
<b>ug/m3</b>	Micrograms
<b>Barto</b>	Barto Gold Mining Pty Ltd
<b>mbtoc</b>	Meters below top of collar
<b>TSF</b>	Tailings Storage Facility



## 2. EXECUTIVE SUMMARY

Barto Gold Mining Pty Ltd (Barto) owns and operates the Southern Cross Operations (SXO), located in the eastern wheatbelt region of Western Australia, within the Shire of Yilgarn.

As a Prescribed Premise, Barto currently holds a Licence (L4597/1988/14) from the Department of Water and Environmental Regulation (DWER), issued under the *Environmental Protection Act 1986 Act* (EP Act). This licence permits dewatering discharge, processing of ore, waste storage and disposal activities at the SXO.

Barto has prepared an Annual Environmental Report (AER) to fulfil the requirements of conditions detailed within the Southern Cross Operations Licence L4597/1988/14 (the Licence). This AER addresses all the reporting requirements listed in Conditions 44 and 45 of the Licence.



### 3. INTRODUCTION

The Southern Cross Operations covers approximately 562 km<sup>2</sup> of tenements with operations centred at Marvel Loch, 30 km south of the town of Southern Cross.

The township of Southern Cross is located approximately 375 km east of Perth and 235 km west of Kalgoorlie on the Great Eastern Highway. The administrative centre for SXO is located at Marvel Loch, approximately 32 km south of Southern Cross. SXO tenements are entirely located within the Shire of Yilgarn. The current Premises boundary, as listed under L4597/1988/14, is provided in **Error! Reference source not found..**

A summary of the Prescribed Activities currently listed under Licence L4597/1988/14 is provided in **Error! Reference source not found.** below.

**Table 1: Prescribed Activity details**

Category number	Category Description	Approved Premises production or design capacity
5	Processing or beneficiation of metallic or non-metallic ore	2,600,000 tonnes per annual period
6	Mine dewatering	6,000,000 tonnes per annual period
64	Class II or III putrescible landfill	2,000 tonnes per annual period
57	Used tyre storage	200 tyres

Two licence amendments were granted for Barto during this reporting period of October 1<sup>st</sup>, 2024, to September 30<sup>th</sup>, 2025, as shown in Table 2 below.

**Table 2: Barto's approved licence amendments during the reporting period.**

Instrument	Issued	Description
L4597/1988/14	17/02/2025	Amendment (APP-0026261) to: Allow the construction and operation of stage 3-7 embankment raises for TSF3 cells 1 and 2; Allow the construction and operation of the Frasers landfill: and To remove a section of Mining tenement M77/109 from the prescribed premises boundary Expiry date extended to 25/09/2030
L4597/1988/14	04/08/2025	Amendment (APP-0028981) to: Add tenements L77/31 and L77/42 to the prescribed premise boundary. Addition of dewater discharge points: Lenneberg, Mary Lena and Treasury pits. Include the construction and operation of an additional dewater pipeline from Frasers underground mine to Polaris South Pit; Upgrade sections of pipelines from Polaris South pit to Cornishman complex pits: and Amended the required diameter of pipelines for Yilgarn Star/Nevoria dewatering pipelines.



This Annual Environmental Report (AER) has been prepared to meet annual reporting requirements for the Department of Water and Environmental Regulation (DWER), as specified under Condition 44 of the Prescribed Premises Licence L4597/1988/14 (Appendix 1).

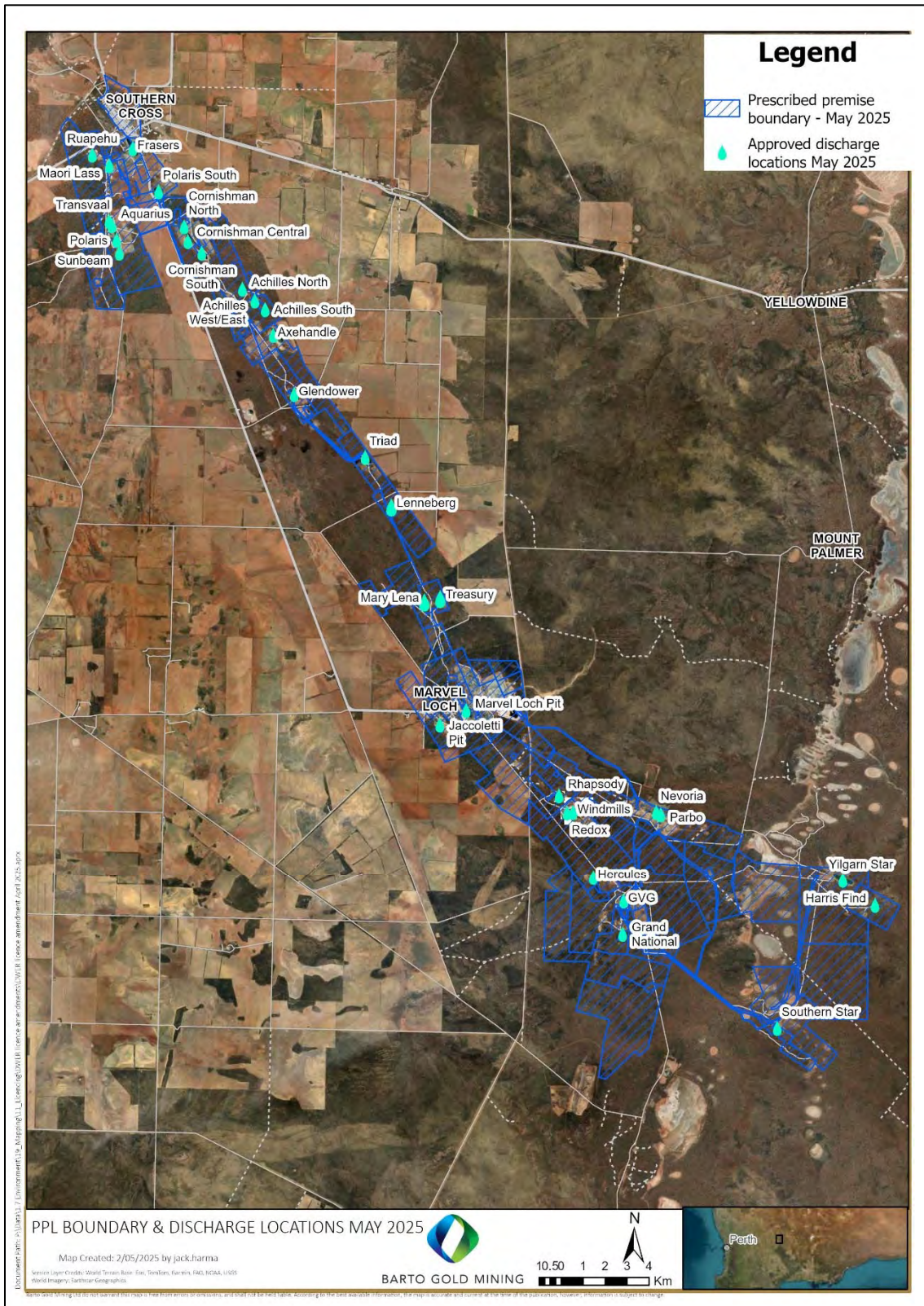


Figure 1: Location Map – Current approved prescribed premise boundary L4597/1988/14



Table 3 below provides a reference location for the specified annual reporting requirements, as listed in Condition 44 of the Licence.

**Table 3: Annual Environmental Report Structure**

Condition or Table (if relevant)	Parameter	AER Document reference
<b>NA</b>	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the year and action taken	Section 4.1: Environmental incidents Table 4: Environmental incidents
<b>Condition 42</b>	Compliance	Section 4.2: Annual Audit Compliance Report summary Appendix 2: Annual Audit Compliance Report Appendix 3: Licence Condition Compliance
<b>Condition 43</b>	Complaints Summary	Section 5.1: Stakeholder Complaints
<b>Table 2</b>	Embankment structural integrity assessment	Section 6: Annual TSF audit- the 2024/2025 audit to be provided separately to DWER once received from consultant. Under preparation at time of AER submission.
<b>Condition 11</b>	TSF water balance	Section 7: TSF Water Balance
<b>Table 8</b>	Monitoring of point source emissions to land	Section 8: Groundwater Discharge Appendix 4: GR1 Form - Water Quality Monitoring
<b>Table 9 and 10</b>	Any pit water sampling data conducted during the annual period	Section 8.1.1: Discharge Water Quality Appendix 4: GR1 Form - Water Quality Monitoring Appendix 5: Water Quality Monitoring - Methodology Summary
<b>Table 11</b>	Process monitoring	Section 9: Process Monitoring
<b>Table 12</b>	Monitoring of ambient groundwater quality	Section 10.1: SWLs & Ambient Water Quality Appendix 6: Monitoring Bore SWLs Appendix 7: Monitoring Bore Water Quality
<b>Table 13</b>	Monitoring of ambient air quality	Section 9.2: Ambient Air Quality Appendix 7: Monitoring Bore Water Quality



## 4. COMPLIANCE

### 4.1. ENVIRONMENTAL INCIDENTS

For the reporting period, a total of 10 environmental incidents were reported as occurring across Barto’s tenure.

Summaries from the reported incidents are provided below in Table 4 below.

**Table 4: Reported environmental incidents during the reporting period.**

Date	Report ID	Location	Details	Action Taken	Externally Reported	Environmental Impact
18/11/2024	16573	Marvel Loch Pit	It was noted that the Marvel Loch WRL seepage pond was pumping to the Marvel Loch Pit.	Activity ceased and the line was redirected to the North TSF seepage dam for collection	No	Nil – pit is dewatered for processing.
18/11/2024	16575	Marvel Loch- Nevoria	Water from the Marvel loch process dam was being pumped directly to Nevoria.	Pump was turned off. Serviced crew installed a T piece so the Marvel Loch UG water can bypass the process day and be discharge directly to Nevoria as required.	No	Nil – process water dam has received only raw water for over two years.
13/12/2024	16623	Marvel Loch – North Seepage	The TSF seepage pond overflowed during the recent rainfall event.	Ongoing discussions with DMPE have occurred as to the improvements required here. Is subject to a DTM.	Yes	Minor – the majority of the impacted area was previously disturbed and a clearing permit was active.
20/03/2025	16731	Frasers	Ground disturbance occurred without an approved SDP.	Job was put on hold until appropriate paperwork was completed.	No	Nil – occurred in a previously disturbed area – was identified at onset of works.
01/05/2025	16755	Frasers to Maori Lass pipeline	The 10-meter freeboard limit was breached at Maori Lass Pit.	The discharge to Maori Lass ceased. Transvaal discharge re-commenced.	No	Nil – ample freeboard remained to cope with rainfall events.
15/05/2025	16764	Marvel Loch site landfill	An IBC of hydrocarbon contaminated waste was disposed of in the site landfill.	Contractor instructed to clean up the non-permitted items and ensure all	No	Nil – IBC removed.



				crews used the hydrocarbon designated bins.		
28/06/2025	16792	Frasers Underground	Frasers pipeline split. water released to adjacent bund.	Pipeline was repaired. No further action taken as spill was captured by the bund.	No	Nil – within bunding.
10/07/2025	16805	Marvel Loch – Process water dam	The process water dam freeboard level was breached.	Water sources entering the dam were shut off. Telemetry was repaired.	No	Nil – dam was lowered with use in the plant.
23/08/2025	16837	Achilles	Achilles washbay was not made compliant with Bartos DWER licence prior to commissioning.	Minor improvements were made to the washbay to align with the licence conditions.	No	Minor soils contamination – remediation via the bioremediation pad.

**4.1.1. EXTERNALLY REPORTABLE INCIDENTS**

There was one environmental incident reported externally to DWER from October 2024 to September 2025 as seen in Table 4 above.

**4.2. ANNUAL AUDIT COMPLIANCE REPORT**

As required under Condition 42 of the Licence, an Annual Audit Compliance Report (AACR) for the reporting period 1 October 2024 – 30 September 2025 is provided in Appendix 2. Supporting information for Sections C (Statement of Actual Production) and D (Statement of Actual Part 2 Waste Discharge Quality) of the 2025 AACR submission is provided in Table 6 and Table 7 respectively.

A summary of all Licence Conditions and their compliance status is provided in Appendix 3, with Licence Conditions categorised as Compliant, Non-compliant or Not applicable. For the reporting period, a total of 35 conditions were classed as Compliant, 10 conditions as non-compliant (conditions with multiple elements where one or more elements were not met), and 2 conditions not applicable. Non-compliant items are summarised below and within the AACR (Appendix 2).

**Table 5: Non-compliant and partial non-compliant licence conditions October 2024- September 2025**

Licence Condition	Description	Reasoning for non-compliance/ partial non-compliance
1	The Licence Holder must ensure that all pipelines containing saline water, tails, or process water are either: a) equipped with telemetry and pressure sensors along pipeline routes to allow the detection of leaks and failures; b) equipped with automatic cut-offs in the event	The Nevoria pipeline swale was identified to have deteriorated during the reporting year.



	<p>of a failure; or</p> <p>c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.</p>	
4	<p>The licence holder must maintain a minimum 300mm embankment freeboard on the settling ponds or storage facilities, including tailings storage facilities and turkeys nests, and ensure that the facility is designed to hold any inflow received as a result of a 1:100 year, 72 hour duration storm, for at least 72 hours.</p> <p>The Licence Holder must manage TSFs such that:</p> <p>A) A minimum top of embankment freeboard of 300mm is maintained across the full surface of the TSF</p> <p>B) A seepage collection and recovery system is provided and used to capture seepage from the TSF; and</p> <p>C) Seepage is returned to the TSF of the process.</p>	<p>The infrastructure at North seepage dam was not engineered and maintained to avoid inundation from a large rainfall event. Pump mechanism relied on manual intervention to turn pumps on and off, no automated water level switch available at time of the incident causing the freeboard to be breached.</p>
5	<p>The licence holder must maintain a minimum 300mm embankment freeboard on the settling ponds or storage facilities, including tailings storage facilities and turkeys nests, and ensure that the facility is designed to hold any inflow received as a result of a 1:100 year, 72 hour duration storm event, for at least 72 hours.</p>	<p>A communication breakdown between cross shifts regarding the management of the dewatering discharge was the cause of the 10-meter free board breach.</p>
12	<p>The licence Holder must collect waste lubricants, hydraulic fluids and spent radiator coolant / inhibitors in holding tanks in bunded area for subsequent disposal off-site or recycling.</p>	<p>The Nevoria underground operation was put into care &amp; maintenance in late 2022. Since then, the workshop area has been utilized by several of Barto's contractors. It is believed the IBCs belonged to a contractor who has since departed the SXO. These IBCs were legacy items.</p>
16	<p>The licence Holder must ensure that wastes accepted onto the premises are only subjected to the processes set out in Table 4 and in accordance with any process limits described in that table</p>	<p>Barto believes that a potential lack of education and appropriate signage has contributed to the burial of tyres in inappropriate process limits.</p>
29a	<p>The licence Holder must ensure that:</p> <p>a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;</p> <p>b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;</p> <p>c) all samples are submitted to a laboratory with current NATA accreditation for the parameters to be measures unless indicated otherwise in relevant table.</p>	<p>Condition 29a specifies that water samples to comply specifically to AS/NZS 5667:1. Field Blanks and Transport blanks were not collected during the reporting period due to a lack of comprehensive AS knowledge.</p>



<b>34,35 &amp; 36</b>	The Licence Holder must conduct Pit water sampling program in accordance with the requirements specified in Table 9 and Table 10 and record the results of all activity conducted under the program.	A misinterpretation of imposed conditions regarding point source emissions to land and the frequency of such occurred and therefore are non-compliant.
<b>38</b>	The licence holder must undertake the monitoring in Table 11 according to the specifications in that Table.	Some SWLs were not recorded during the reporting year on all 12 occasions due to staff turnover and access issues.



**Table 6: AACR - Section C Supporting Information**

Production Type	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TOTAL
Mill Dry Tonnes (t)	122,337	109,782	128,928	93,776	106,413	113,063	123,434	90,568	100,993	123,665	159,845	150,727	<b>1,423,531</b>

**Table 7: AACR - Section D Supporting Information**

Part 2 Waste Type	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TOTAL
Tailings Slurry Volume (m <sup>3</sup> )	189,622	170,162	199,838	145,352	164,940	175,247	191,322	140,380	156,539	191,680	247,758	233,626	<b>2,206,473</b>
Tailings Solids Tonnes (t)	122,337	109,782	128,928	93,776	106,413	113,063	123,434	90,568	100,993	123,665	159,845	150,727	<b>1,423,531</b>
ML TSF 1/2 Seepage (kL)	3,188	4,309	8,191	6,164	6,164	6,164	6,164	6,164	6,164	4,446	4,986	11,868	<b>73,972</b>



## 5. COMPLAINTS SUMMARY

### 5.1. STAKEHOLDER COMPLAINTS

In accordance with Condition 43 of the Licence, a stakeholder complaints register is implemented at SXO. All complaints received are recorded in the operation’s stakeholder consultation register, immediate actions are taken to address the issue and longer-term plans implemented as required. If complaints are made directly to the Department of Mines, Petroleum and Exploration(DMPE) or other government departments, the department receiving the complaint will initiate their own investigations involving Barto as required. 4 complaints were received during the reporting period and are listed in Table 8 below.

**Table 8: Community complaints register 2024/2025**

Date	Location	Details of complaint	Action Taken
22/11/2024	Fraser’s – Southern Cross	A community complaint was received by the Shire of Yilgarn regarding the release of visible dust on the 16 <sup>th</sup> November 2024.	Blasting procedure for the Fraser’s North drive was reviewed. Wind conditions to be considered going forward. Notice period are required for informing the community of upcoming blasts in the Fraser’s north drive.
16/01/2025	Fraser’s – Southern Cross	A community complaint was received regarding the vibrations during the Fraser’s blast in the morning of the 16/01/2025	Barto spoke with the community member about the activities occurring at the Fraser mine. The community members email address was requested and was added to the blast notification mailing list. They were also made aware that the activities at Fraser north were finite and be completed soon.
21/03/2025	Marvel Loch	A community complaint was received regarding the noise from Barto’s crushing circuit of processing plant at Marvel Loch.	Marvel Loch noise exceedances are known to Barto and are currently in the process of Regulation 17 assessment and approval with DWER.
08/08/2025	Marvel Loch	A community complaint was received via email regarding the vibrations from Barto’s operations at Marvel Loch.	Barto responded and addressed all matters listed in the email complaint. It was relayed that Barto has geophones set up within the Marvel Loch town boundary. Community meetings have been held on several occasions since to keep the locals informed.



## 6. EMBANKMENT STRUCTURAL INTEGRITY ASSESSMENT

SXO currently has one operational TSF (TSF3), which is located at the Marvel Loch operations. In addition, SXO also have several decommissioned TSF's, which are addressed in the company's approved Mine Closure Plan by DMIRs.

The 2025 Annual TSF audit has been completed and the report is being prepared by consultants, Tetrattech. This will be referenced in next year's AER and provided to DWER separately once received. A summary of the TSF water balance for the period July 2024 – June 2025 is provided in Section 7, which addresses reporting requirements as stated in Condition 11 of the Licence.



## 7. TSF WATER BALANCE

An updated Water Balance was generated as part of the TSF audit, as required by Condition 11 of the Licence. Table 9 below contains a summary of the water balance.

**Table 9: TSF3 Water Balance (July 2024 – June 2025)**

Item	Quantity (m <sup>3</sup> )	% of Inflows/ Outflows
<b>INFLOW</b>		
Slurry Water Inflow	1,876,501	93.78%
Rainfall Inflow	124,272	6.22%
<b>TOTAL</b>	<b>2,000,773</b>	<b>100%</b>
<b>OUTFLOW</b>		
Evaporation from Pond and beaches	127,871	6.37%
Evapo-transpiration from drying tailings	77,442	3.86%
Water Retained 40% m/c	601,048	29.97%
TSF 3 Seepage	253,414	12.63%
Return water available	945,540	47.15%
<b>TOTAL</b>	<b>2,005,315</b>	<b>100%</b>
'Out of Balance' <sup>1</sup>	4,542 m <sup>3</sup>	



## 8. MONITORING OF INPUTS & OUTPUTS

### 8.1. GROUNDWATER DISCHARGE

As required under Condition 37, Table 10 of the Licence, a summary of discharge volumes for the listed mine dewatering discharge points is provided in Table 10 below.

**Table 10: Monthly Discharge Point Volumes (October 2024 - September 2025)**

Month	Frasers to Transvaal	Cornishman to Polaris South	Frasers to Maori Lass	Jaccoletti to Marvel Loch	Nevoria to Marvel Loch*	ML to Nevoria
Oct 24	168,940	14,782	0	0	62,599	0
Nov 24	48,027	0	0	0	32,833	0
Dec 24	156,112	0	0	0	33,346	0
Jan 25	130,307	0	0	0	34,881	0
Feb 25	130,308	0	0	0	34,881	0
Mar 25	124,398	0	16,295	0	31,112	0
Apr 25	281,820	0	0	0	10,543	0
May 25	134,404	0	0	0	16,252	0
June 25	118,387	0	0	0	13,246	0
July 25	150,970	0	0	0	0	0
Aug 25	134,597	0	0	0	0	0
Sep 25	124,953	0	0	0	16,250	0
<b>Total</b>	<b>1,573,045</b>	<b>14,782</b>	<b>16,295</b>	<b>0</b>	<b>285,943</b>	<b>0</b>
<b>Combined Total kl</b>	<b>1,890,065</b>					

\*Pumped to the Marvel Loch processing dam for used in the processing circuit.

#### 8.1.1. DISCHARGE WATER QUALITY

As required under Condition 33, Table 8 of the Licence, monitoring of point source emissions to land are required. Mine dewatering discharge point chemistry is presented in Appendix 4 in the GR1 format. As seen in table 10 above, four different discharges occurred over the course of the reporting period being; Frasers to Transvaal complex, Cornishman to Polaris South, Frasers to Maori Lass and Nevoria to Marvel Loch for processing purposes. Water quality from Nevoria can be classed as hypersaline with an average total dissolved solids (TDS) over the reporting period of 142,666 mg/L. Sodium and chloride were the dominant ions with an average of 50,333 mg/L and 94,666 mg/L respectively. The pH of the Nevoria water was around neutral with an average from the reporting period of 7.15 pH units. Cornishman pit can also be classed as hypersaline. An average TDS over the reporting period of 113,000mg/L was recorded. Like Nevoria, sodium and chloride were the dominant ions with an average of 41,333 mg/L and 79,333 mg/L respectively. The pH of the Cornishman pit was around neutral with an average from the reporting period of 7.6 pH units. Similarly to the above, Frasers pit shares some similarities with the Cornishman and Nevoria. The total dissolved solids (TDS) over the reporting period of 127,500mg/L. Sodium and chloride



were yet again the dominant ions with an average of 46,583 mg/L and 80,650 mg/L respectively. The pH of the Frasers discharge water averaged 7.56 pH units over the reporting period.

Samples representing the listed discharge points are collected from either abstraction points or discharge locations. For example, mine dewater from the Nevoria pit which is sent to Marvel Loch for processing is sampled at the Nevoria turkeys nest dam. Appendix provides the sampling methodologies for the respective water quality parameters measured.

Volumetric flow rates to Marvel Loch, Transvaal, Maori Lass and Polaris South were calculated and presented below.

**Table 11: Volumetric flow rates to emission points as required under condition 33.**

Emission Point	Parameter	Result	Averaging Period	Dates & Times
Nevoria to Marvel Loch*	Volumetric Flow Rate	9.06 L/s	Oct 2024- Sept 2025	Monthly
Frasers to Transvaal		49.88 L/s		
Cornishman to Polaris South		0.468 L/s		
Frasers to Maori Lass		0.516 L/s		

\*Water for processing – not discharge to the Marvel Loch pit



## 9. PROCESS MONITORING

As required under Condition 37 of the Licence, the following sections address monitoring requirements as specified in Table 10 of the Licence.

### *9.1.1. TAILINGS AND PROCESSING VOLUMES*

During the reporting period, the Marvel Loch processing plant milled a total of 1,423,531 dry tonnes. Mill feed comprising of ore from; Rhapsody, Achilles and Pakistani/Vintage Crop open pits, the Jaccoletti/Marvel Loch underground and the Frasers underground mines, A total of 2,206,473 tonnes of tailings slurry was disposed to the operation's Tailings Storage Facility (TSF), which currently consists of two operating cells: TSF 3 Cell 1 and TSF 3 Cell 2.

TSF 1 and 2 were again inactive for the duration of the reporting period.

During this reporting period both TSF 3 Cell 1 and TSF 3 Cell 2 received tailings. Cell 2 was raised during the later part of reporting period with deposition starting in Cell 2 during October 2025.

### *9.1.2. TSF WATER BALANCE*

As described in Section 7, a review of the Marvel Loch TSF water balance was undertaken as a component of the 2025 TSF audit. This has been provided in section 7.

### *9.1.3. WASTE TO LANDFILL*

Three of the approved site landfills were utilised during the reporting period being Marvel Loch, Axehandle and Nevoria. It is estimated that a total of 1140 m<sup>3</sup> of mostly inert type wastes were disposed of at these sites. As described in the licence conditions compliance report, volumes of waste are estimated based on the percentage the trenches are full in m<sup>3</sup>. A conversion factor is then applied to the volume of 0.3t/m<sup>3</sup> to give estimated density, and approx. 342 tonnes.



## 10. ENVIRONMENTAL MONITORING

As required under Condition 38 of the Licence, the following sections address monitoring requirements as specified in Table 11.

### 10.1. STANDING WATER LEVELS & WATER QUALITY

Figure 6 below provides the location of the 14 TSF phreatic surface monitoring bores and 12 TSF3 monitoring bores listed in Table 10 of the Licence.

#### 10.1.1. STANDING WATER LEVELS

Appendix 6 contains all the standing water level (SWL) data for each of the monitoring bores for the period October 2023 to September 2024 with a summary of the standing water levels below.

The 21 series bores were installed around TSF3 in early 2021 hence the 21 pre-fixes. Six locations were chosen with 2 bores (A series deeper bore and a B series shallower bore) constructed at each location. All the shallower B series bores have been dry since construction except for 21/B6 (refer Figure 2). In general, minor level changes have occurred since January 2021. No significant trends can be observed to date except that the deposition of slurry into TSF 3 has yet to impact the surrounding groundwater levels on the outside of the toe drain. Monthly SWLs will continue to be measured in the subsequent reporting period.

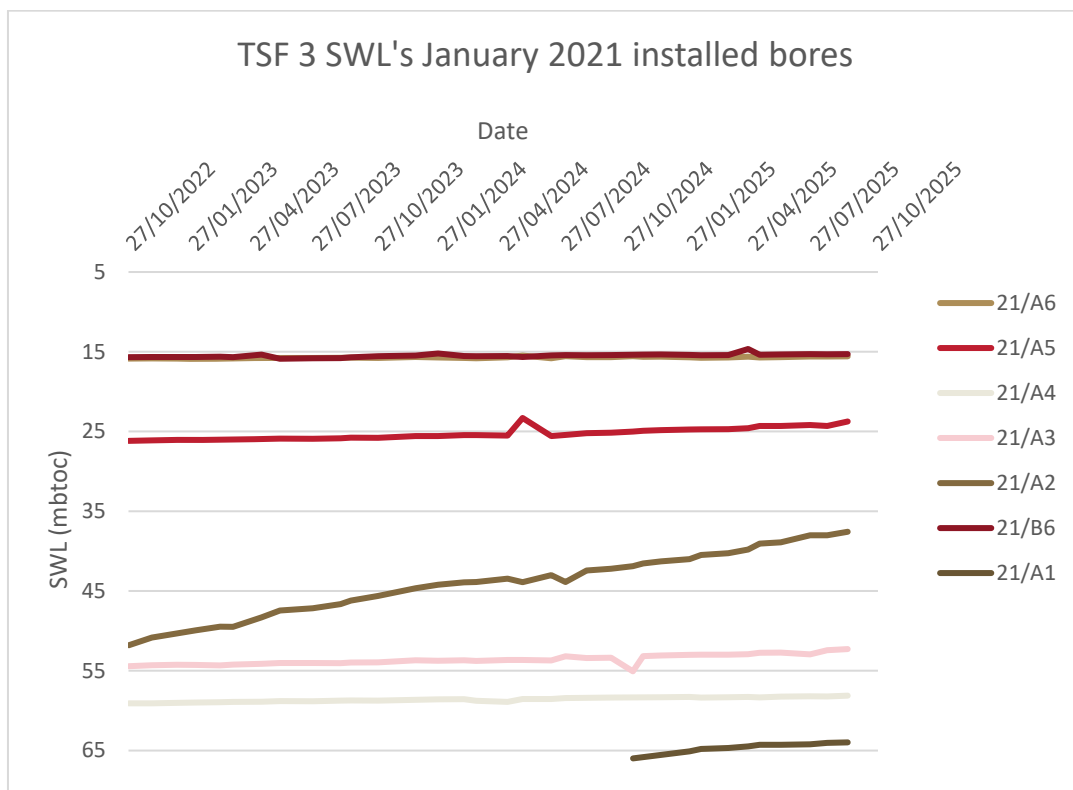


Figure 2: TSF 3 monitoring bore SWLs since construction.



During the construction of the original Marvel Loch TSF (1/2) in 1993/1994, monitoring bores were installed close to the toe of the TSF. These are referred to as the 94 series monitoring bores. All levels were generally consistent in the reporting period. Monitoring bore MB94G1 has continued to exceed the standing water limit set by DWER of 4.0 mbgl during the monitoring period. This has been occurring since 2017 and Barto submitted its Groundwater Recovery Plan to DWER (as required under Condition 9) in 2019. It must be noted that TSF 1 and TSF 2 are no longer in use and going forward, both phreatic and groundwater levels should be observed to gradually drop.

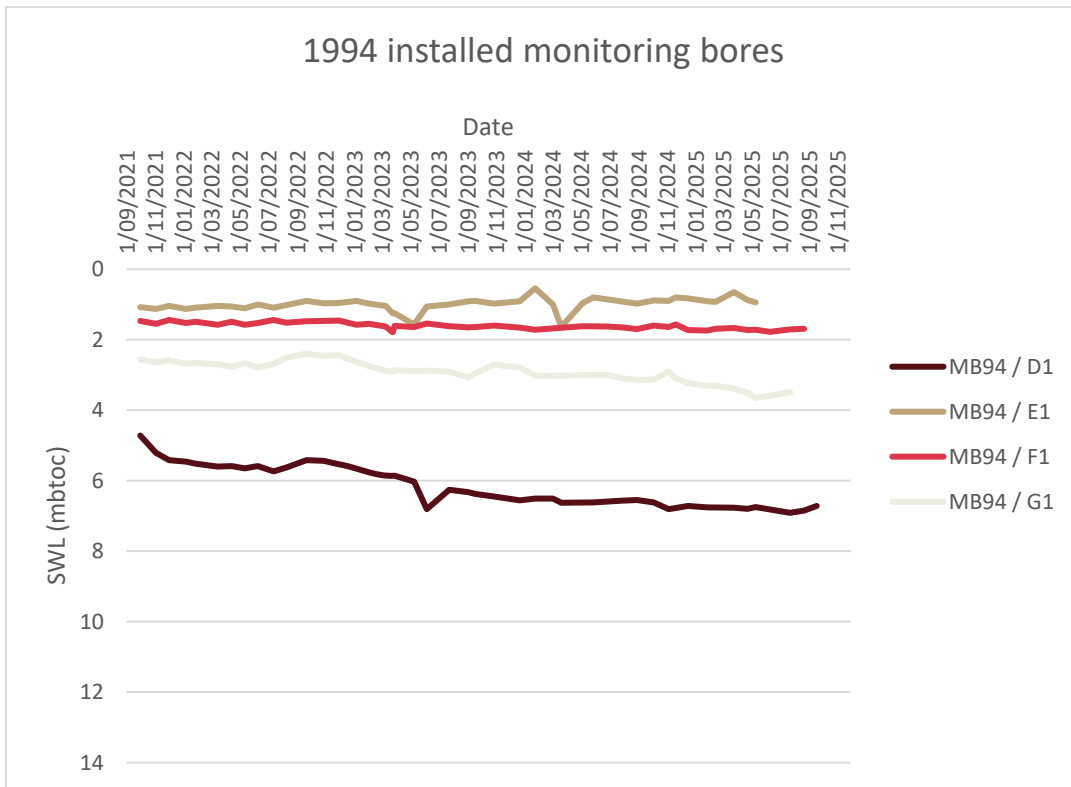


Figure 3: 1994 TSF monitoring bores adjacent to TSF 1 and TSF 2



As per licence conditions, monitoring of standing water levels occurred monthly throughout the reporting period at TSF 1 and TSF 2. TSF 1 and 2 have been built to design and completed with regards to tailings deposition. TSF 2 was the last cell to receive tailings in 2020. For the 1999 installed piezometers on the first bench of the TSF, levels during the reporting period were consistent with the previous reporting periods. PZ99/D1 was dry for the majority of the reporting period and hence no plottable data seen in Figure 4 below.

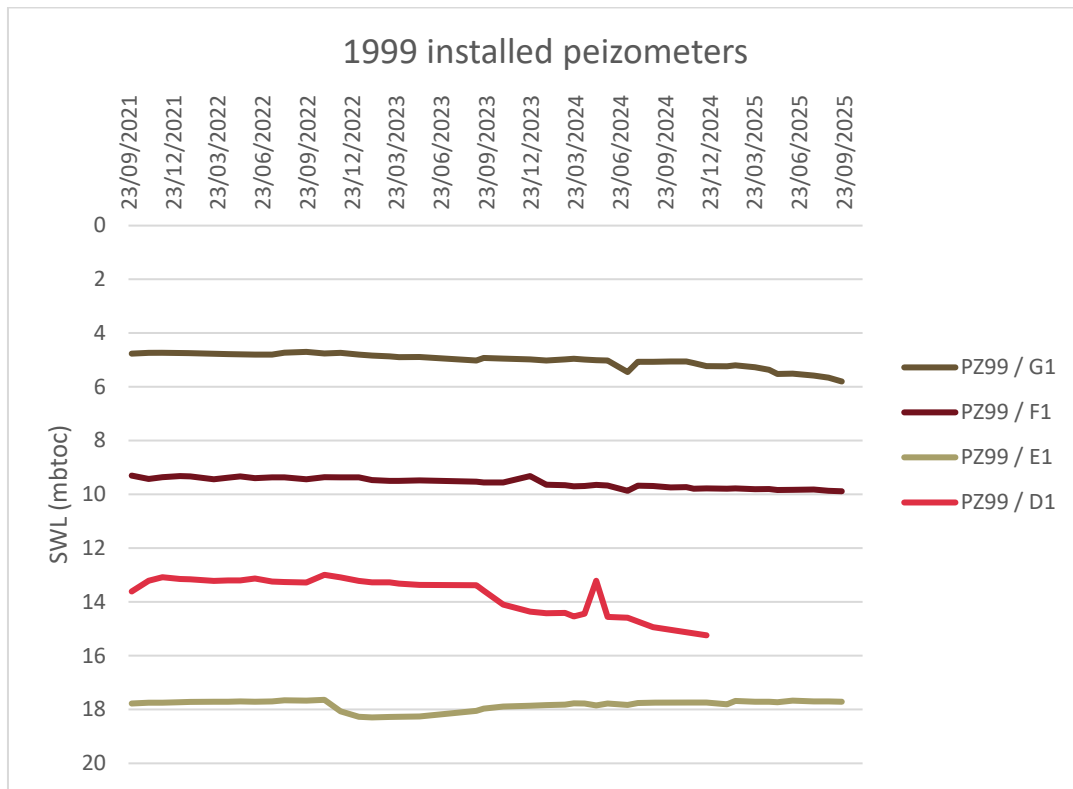


Figure 4: 1999 installed piezometers on the first bench of TSF 1 and TSF 2

As TSF 1 and TSF 2 filled with tailings, more approvals for TSF raises were applied for and subsequently approved by DWER. As part of these approvals, new piezometers were installed on the next bench around the TSF. These were installed in 2005 and 2007 and numbered TSF 1 through 9. Figure 5 below identifies two noticeable trends over the last few reporting periods. Firstly, the phreatic levels of TSF 1,2,6 and 9 have been dropping over the last three reporting periods. These are located on the north and south benches of TSF 1 and TSF 2 and don't share any direct walls with TSF 3. The trend depicts a drying out of the TSFs, as can be expected due to inactivity.

The second trend is that piezometers TSF 4 and TSF5 had risen somewhat over the reporting years of 2021 and 2022. Like the behaviour of PZ99B1, this can possibly be attributed to the deposition of tailings into TSF 3 as it shares a wall with the bench that these two piezometers sit within. It can be noted though that both TSF4 and TSF 5 began lowering since early 2023 and therefore throughout this reporting period.

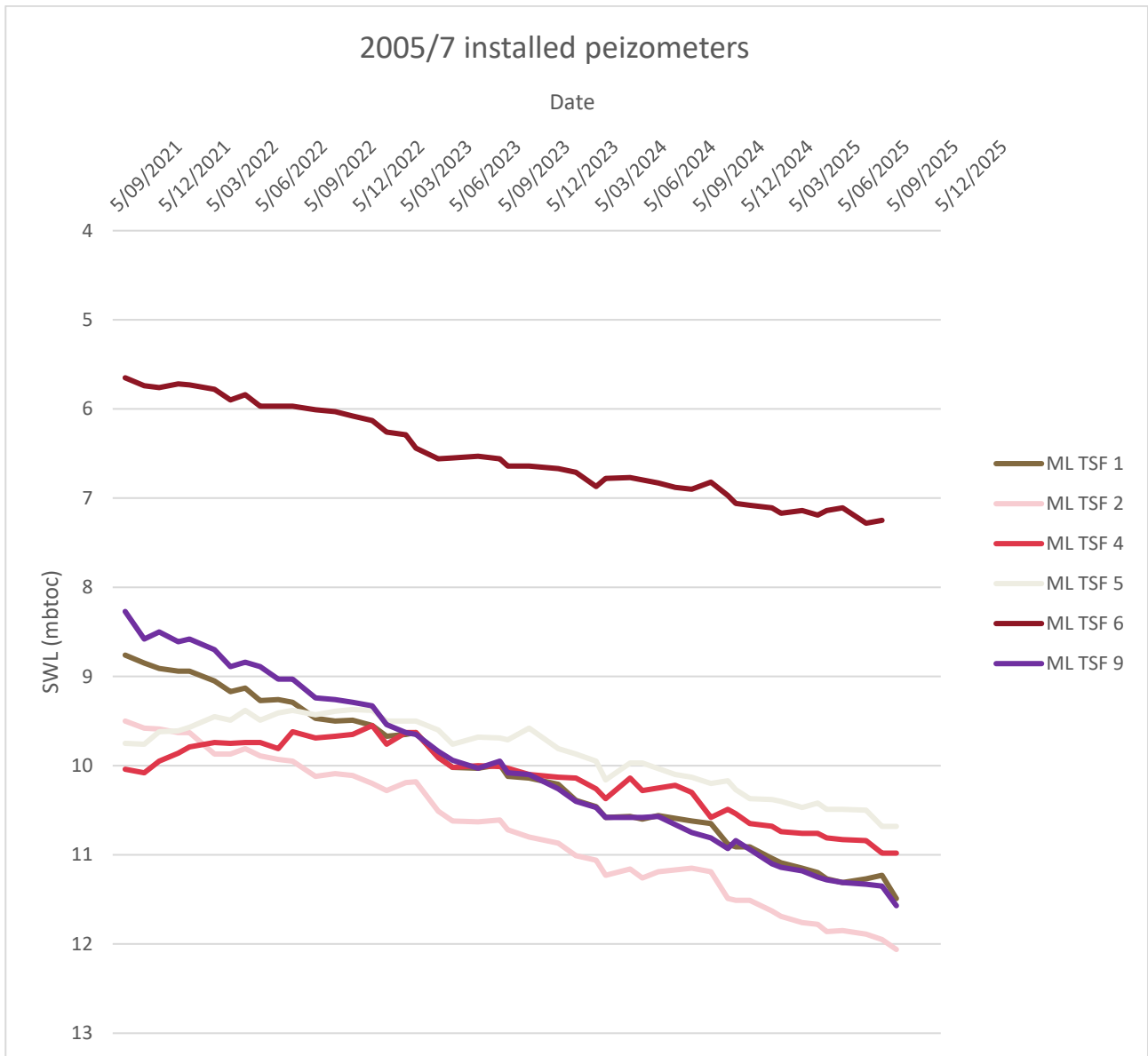


Figure 5: 2005/7 installed piezometers on the second bench TSF 1 and TSF 2

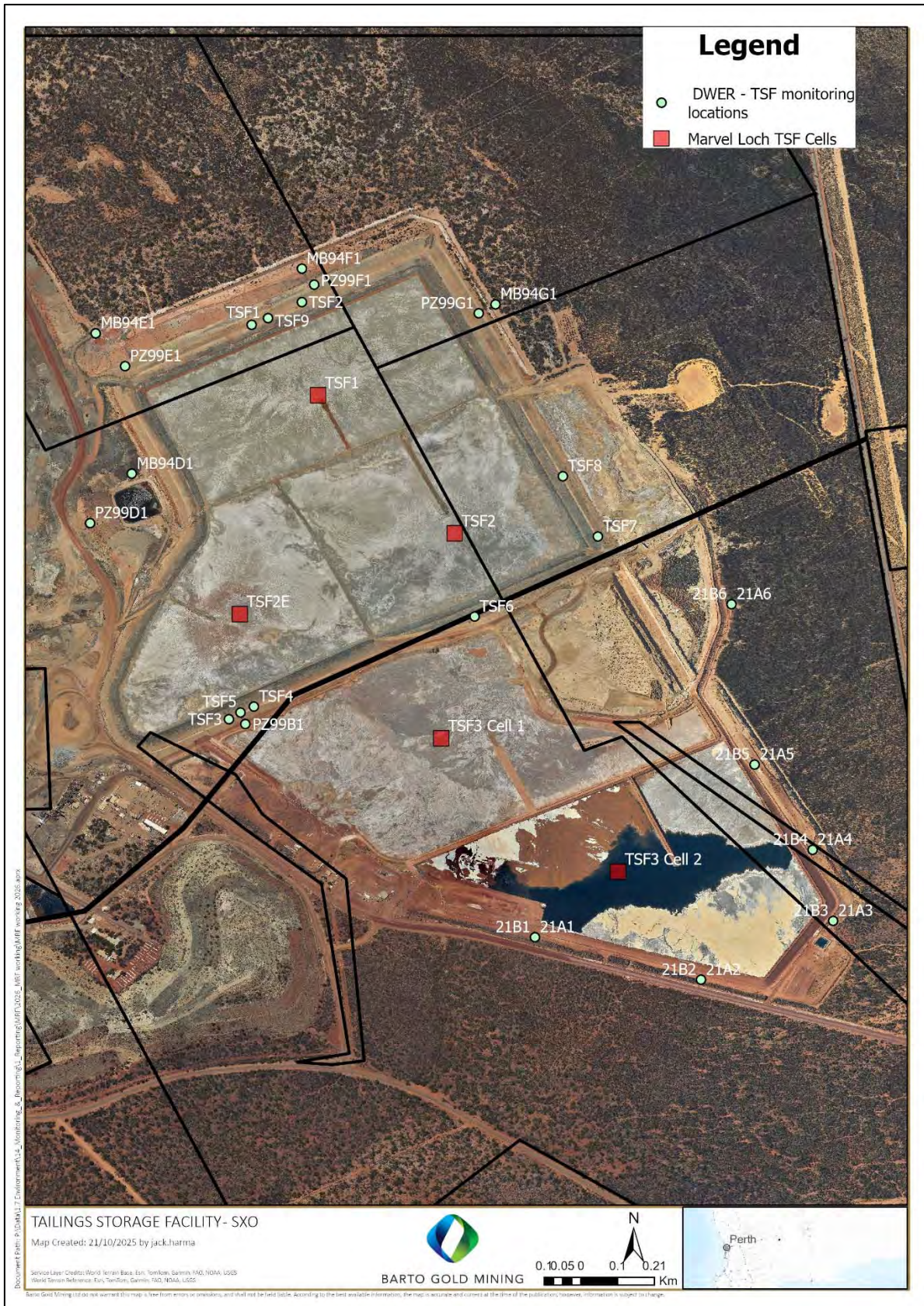


Figure 6: Marvel Loch TSF monitoring bore locations.



### 10.1.2. WATER QUALITY

Water quality monitoring for monitoring reference points was undertaken during the reporting period, with all monitoring results provided in Appendix 7.

No exceedance of any water quality limit was recorded for the reporting period. The MB94 series bore data that was collected is analogous to previous reporting periods. Water quality data for MB94 D1 and MB94 E1 was not collected during the reporting period as was the case in previous reporting periods. MB94F1 is highly acidic with a pH of approximately 3.06. Its TDS is around 68,000 mg/L with sodium and chloride the dominant ions. The acidic pH can possibly be explained by a process known as ferrollysis in which has acidified the soil over a period. These clay rich soils and the groundwater interact with the aluminium of the soil being exchanged for the sodium of the groundwater. It is interesting to note that the aluminium content of MB94F1 is more than 10 times that of MB94G1. MB94 G1 is similar in one sense to MB94F1 as it is also hypersaline. The average TDS for the reporting period is 63,500 mg/L with dominant ions also sodium and chloride. Its pH is variable though with the lowest laboratory reading of 4.6 and highest being 6.0. MB94 E1 has been damaged, and a sample is unable to be taken, however, the water quality is anticipated to be the same as that from the north seepage point. MB94 D1 contains a small water column in which is unable to be sampled via pumping methods.

The newly installed 21 series bores also show some unique characteristics. 21-A6 and 21-B6 are located to the north of TSF3 and are adjacent to each other. Despite their location, they possess differing characteristics. 21-A6 is hypersaline with a TDS of around 83,750mg/L and a pH of 4.175. 21-B6 although saline, its TDS averaged 32,750mg/L during the reporting period and pH averaged 5.775. The differing depths drilled and subsequent interactions with the surrounding soil may explain these differences. Interesting to note that 21-A3 and 21-A4, in which are close in location to the seepage of toe drain, are the closest to brackish water with TDS of around 3300 mg/L for the reporting period. Their pH were both above neutral in nature with an average of 7.90. 21 A2 and 21 A5 can be classed as saline with similar averaged TDS of 25,000 mg/L.

A location map showing all monitoring reference points is provided in Figure 6.

### 10.2. AMBIENT AIR QUALITY

As required under Condition 39 Table 13 of the Licence, Barto must undertake ambient dust monitoring at Marvel Loch.

The dust monitor gathers data in real time continuously at 10-minute intervals and is downloaded and analysed as required. It is located just west of the Marvel Loch pit and processing plant as depicted in Figure 7 below.

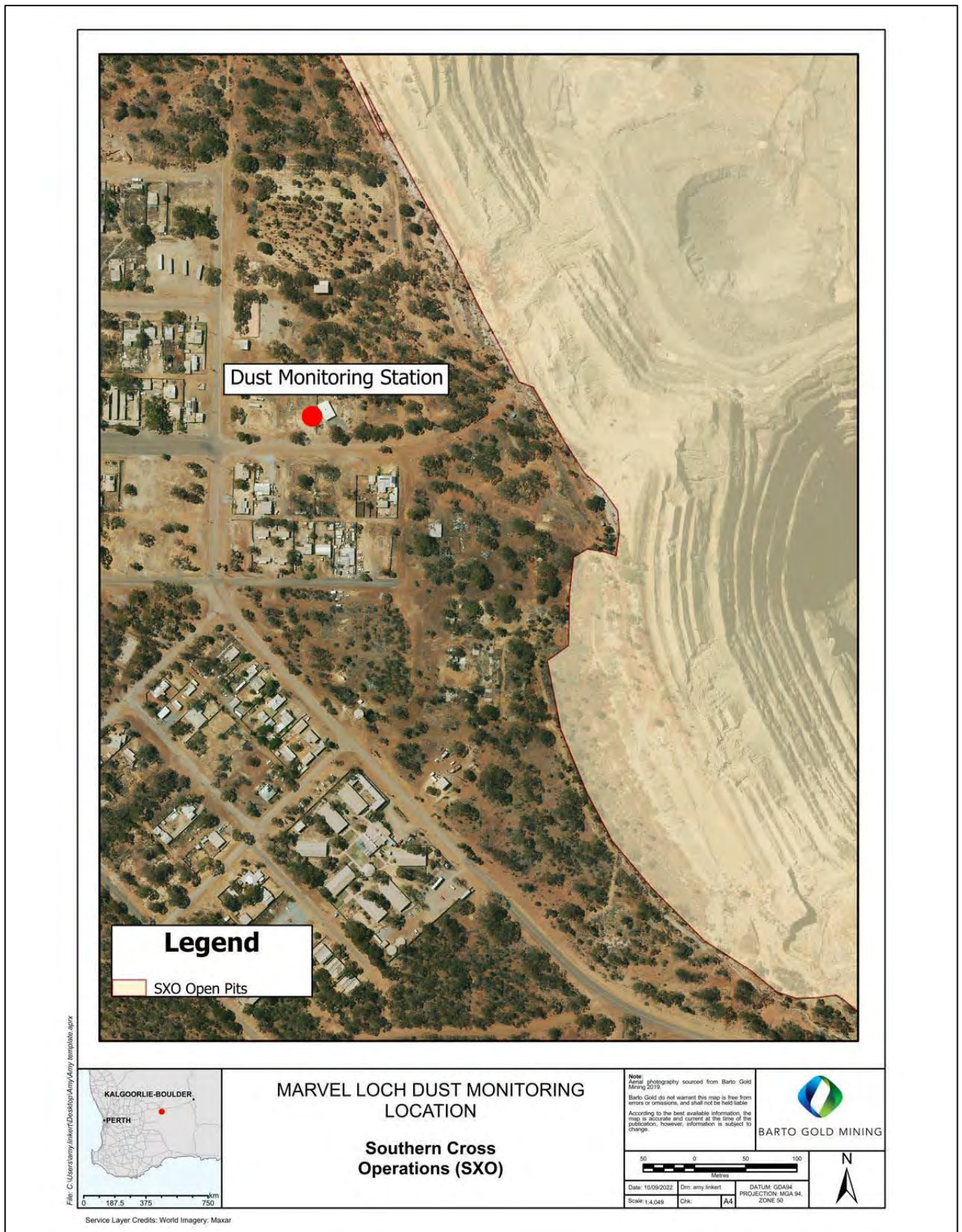


Figure 7 : Dust monitoring location within the Marvel Loch town boundary.



At the time of reporting the dust monitor had been operational for almost 5 years (since December 2020). The greatest daily reading during the reporting period was 18 ug/m<sup>3</sup> on the 08/03/2025. The daily average reading for the reporting period is ~3.4 ug/m<sup>3</sup>. Dust monitoring during the reporting period show the levels are well below NEPM Guidelines.

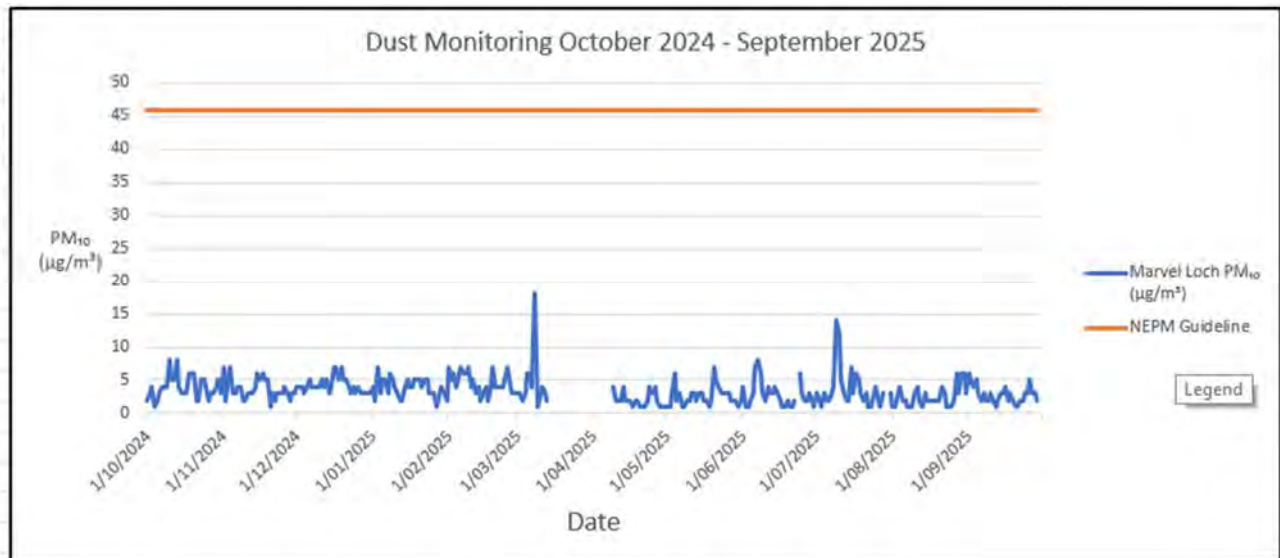


Figure 8: Average daily dust monitoring readings for the current reporting period.

From Figure 8 above it can be seen that there was a break in data in March 2025. This was attributed to a power issue as can be noted below in the extract from Barto’s air monitoring monthly report from March.

### Barto Mine Particulate Monitoring Station

Report No: DAT22623

#### 5.0 Valid Data Exception Report

The table below details all changes made to the raw data set during the validation process.

Table 8: Valid Data Exception Table

Start Date	End Date	Reason	Change Details	User Name	Change Date
10-03-2025 05:00:00	14-03-2025 11:20:00	Intermittent data transmission errors	All parameters	SS	28-04-2025
14-03-2025 11:40:00	01-04-2025 12:00:00	Power interruption	All parameters	SS	28-04-2025

The complete daily dust data for the reporting period is attached as appendix 8 of this AER.

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**APPENDIX 1: PRESCRIBED PREMISES LICENCE L4597/1988/14**



**Licence Number** L4597/1988/14

**Licence Holder** Barto Gold Mining Pty Ltd

**ACN** 161 566 490

**Registered business address** Level 3, 66 Kings Park Road  
WEST PERTH WA 6005

**DWER File Number** DER2014/000887-1~11

**Internal Number** INS-0001160

**Duration** 20/09/2013 to 25/09/2030

**Date of issue** 20/09/2013

**Date of amendment** 04/08/2025

**Premises details** Southern Cross Operations  
MARVEL LOCH WA 6426  
Mining Leases M77/7, M77/8, M77/10, M77/26,  
M77/31, M77/66, M77/72, M77/86, part of M77/109,  
M77/112, M77/113, M77/114, M77/133, M77/137,  
M77/138, M77/159, M77/175, M77/193, M77/197,  
M77/198, M77/217, M77/221, M77/224, M77/225,  
M77/239, M77/251, M77/347, M77/352, M77/380,  
M77/408, M77/424, M77/431, M77/432, M77/525,  
M77/554, M77/555, M77/593, M77/631, M77/638,  
M77/640, M77/660, M77/655, M77/668, M77/702,  
M77/745, M77/721, M77/746, M77/747, M77/722,  
M77/765, M77/766, M77/768, M77/775, M77/790,  
M77/791, M77/792, M77/793, M77/794, M77/811,  
M77/969, M77/977, M77/1009, M77/1036, M77/1052  
and M77/1275, Miscellaneous Licences L77/31, L77/42,  
L77/51, L77/87, L77/106, L77/112, L77/113, L77/114,  
L77/126, L77/128, L77/162, L77/167, L77/168, L77/173,  
L77/281, L77/290 and General Purpose Leases G77/1-  
3.  
As defined in Figure 1 and Figure 2 in Schedule 1: Maps

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed production capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore.	2,600,000 tonnes per annual period.
Category 6: Mine dewatering.	6,000,000 tonnes per annual period.
Category 64: Class II or III putrescible landfill.	2,000 tonnes per annual period.
Category 57: Used tyre storage.	200 tyres.

This amended Licence is granted to the Licence Holder, subject to the following conditions, on 4 August 2025 by:

Christine Pustkuchen  
Digitally signed by Christine Pustkuchen  
Date: 2025.08.04 09:40:44 +08'00'

Manager, Resources Industries  
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

## Licence History

Instrument log		
Instrument	Issued	Description
W4732/2010/1	24/6/2010	Works Approval for TSF lift
L4597/1988/13	16/05/2013	Transfer of licence to Hanking Gold Mining Pty Ltd
W4732/2010/2	05/09/2013	Works Approval amendment to extend period of instrument relating to TSF lift.
L4597/1988/14	19/09/2013	Licence reissue in REFIRE format
L4597/1988/14	26/03/2015	Licence amendment to remove requirement for settling ponds from the Licence, to include the construction of the Nevoria landfill and to remove monitoring related to the zone of influence.
W5818/2015/1	21/05/2015	Works Approval to construct dewatering infrastructure and 3 km pipeline from Axehandle pit deposit to Glendower pit.
L4597/1988/14	07/01/2016	Licence amendment to include the Axehandle dewatering operations, monitoring and reporting requirements plus discharge points within the premises boundary plus remove the improvement condition and Nevoria landfill compliance condition as these have been satisfactorily completed.
L4597/1988/14	28/04/2016	Licence amendment to include 5 km pipeline from Glendower to Triad.
L4597/1988/14	29/04/2016	Department initiated amendment in accordance with section 59(1)(k) of the <i>Environmental Protection Act 1986</i> to amend the duration of the licence date month year.
L4597/1988/14	8/02/2017	Amendment Notice 1: the licensee applied for an amendment to licence to include the Axehandle landfill as an approved location to undertake disposal under Category 64 - Class II or III putrescible landfill.
L4597/1988/14	8/12/2017	Amendment Notice 2 – an amendment to: <ul style="list-style-type: none"> <li>• Change Licence Holder's legal entity from 'Hanking Gold Mining Pty Ltd' to 'Tianye SXO Gold Mining Pty Ltd';</li> <li>• Increasing the Category 6 Mine dewatering design capacity from 4.8 million tonnes to 6 million tonnes per annual period;</li> <li>• Inclusion of Category 57: Used tyre storage;</li> <li>• Inclusion of an additional location under Category 64: Class II or II putrescible landfill site at the Transvaal (Aquarius) pit; and</li> <li>• Inclusion of conditions for the construction of the Tailings Storage Facility 3 (TSF3).</li> </ul>
L4597/1988/14	18/04/2018	Amendment Notice 3: an amendment to: <ul style="list-style-type: none"> <li>▪ Relocate the Aquarius dewatering pipeline route that was previously approved under Amendment Notice 2; and</li> <li>▪ Addition of mining tenements M77/251, M77/593 and L77/87. To premises boundary description.</li> </ul>
L4597/1988/14	21/11/2019	Amendment to allow the discharge of mine dewater to Marvel Loch pit. Also, to amalgamate Amendment Notices 1 – 3 into the Licence document to produce a single instrument.
L4597/1988/14	19/03/2021	Amendment to allow the replacement of crushing infrastructure within the Marvel Loch processing plant area.
L4597/1988/14	30/07/2021	Amendment to include the Victoria pipeline, Victoria turkey's nest and updates to tailings storage facility management.

Instrument log		
Instrument	Issued	Description
L4597/1988/14	13/05/2022	Amendment to: <ul style="list-style-type: none"> <li>• Addition of mining tenement M77/775;</li> <li>• Include Windmills pipeline, Windmills turkey's nest and Windmills landfill.</li> </ul>
L4597/1988/14	19/08/2022	Amendment to: <ul style="list-style-type: none"> <li>▪ Addition of mining tenements M77/197, M77/224, M77/1275, M77/408, M77/655, M77/66 and miscellaneous tenement L77/51 and L77/290 to premises boundary</li> <li>▪ Removal of tenements P77/3793, L77/91 and L77/145</li> <li>▪ Include Axehandle pipeline, Transvaal landfill, and Axehandle pit as a new authorised discharge points.</li> </ul>
L4597/1988/14	27/01/2023	Amendment to: <ul style="list-style-type: none"> <li>▪ Addition of secondary pipeline from Yilgarn Star to Nevoria complex; and</li> <li>▪ Addition of mining tenements M77/792 and M77/793 to the premises boundary.</li> </ul>
L4597/1988/14	04/07/2023	Amendment to: <ul style="list-style-type: none"> <li>▪ Allow the discharge of mine dewater from Frasers pit to the Transvaal complex (<i>comprised of Transvaal, Aquarius, Polaris and Sunbeam pits</i>).</li> <li>▪ Add mining tenements M77/72, M77/159, M77/198, M77/217, M77/432, M77/722, M77/765, M77/766, M77/768, M77/791, M77/794, M77/1009, M77/1052 and miscellaneous tenements L77/106 and L77/168 to the prescribed premises.</li> <li>▪ Removed items in Table 6 (Crushing circuit infrastructure and Dust monitoring infrastructure) due to construction being completed.</li> </ul>
L4597/1988/14	04/07/2024	Amendment to: <ul style="list-style-type: none"> <li>▪ Construct new dewater pipelines: Rhapsody to Windmills/Redox Pipeline and Achilles to Axehandle;</li> <li>▪ Reinstate existing dewater pipelines: Nevoria to Southern Star Pipeline, Yilgarn Star to Harris Find Pipeline and Ruapehu to Maori Lass/Frasers Pipeline;</li> <li>▪ Addition of dewater discharge points: Cornishman Complex Pits, Achilles Complex Pits, Rhapsody Pit, Windmills Pit, Redox Pit, GVG Pit, Hercules Pit, Grand National Pit, Southern Star Pit, Harris Find Pit, Ruapehu Pit, Maori Lass Pit; and</li> <li>▪ Addition of mining tenement M77/133 to premises details.</li> </ul>
L4597/1988/14	17/02/2025	Amendment (APP-0026261) to: <ul style="list-style-type: none"> <li>▪ allow the construction and operation of stage 3-7 embankment raises for TSF3 cells 1 and 2;</li> <li>▪ allow the construction and operation of Fraser's landfill; and</li> <li>▪ to remove a section of mining tenement M77/109 from the prescribed premises boundary.</li> <li>▪ Expiry date extended to 25/09/2030</li> </ul>
L4597/1988/14	4/08/2025	Amendment (APP-0028981) to: <ul style="list-style-type: none"> <li>▪ Add tenements L77/31 and L77/42 to the prescribed premises boundary.</li> <li>▪ Addition of dewater discharge points: Lenneberg, Mary Lena and Treasury pits.</li> </ul>

Instrument log		
Instrument	Issued	Description
		<ul style="list-style-type: none"> <li>▪ Include the construction and operation of an additional dewater pipeline from Frasers underground mine to Polaris South Pit;</li> <li>▪ Upgrade section of pipelines from Polaris South Pit to Cornishman complex pits; and</li> <li>▪ Amended the required diameter of pipelines for Yilgarn Star / Nevoria dewatering pipelines.</li> </ul>

## Interpretation

In this licence:

- (a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
  - (i) if dated, refers to that particular version; and
  - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- f) unless specified otherwise, all definitions are in accordance with the EP Act.

**NOTE:** This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

## Licence Conditions

### Premises operation

1. The Licence Holder must ensure that all pipelines containing saline water, tails, or process water are either:
  - (a) equipped with telemetry systems and pressure sensors along pipeline routes to allow the detection of leaks and failures;
  - (b) equipped with automatic cut-outs in the event of a pipe failure; or
  - (c) provided with secondary containment, including bunding, sufficient to contain any spill for a period equal to the time between routine inspections.
  
2. The Licence Holder must ensure that tailings, decant water and dewatering effluent are only discharged into containment cells, dams or ponds, which are provided with the infrastructure detailed in Table 1.

**Table 1: Containment infrastructure**

Containment cell or dam number(s)	Material	Infrastructure requirements
TSF 1, 2 and 3	Tailings	Lined with in-situ clay to limit seepage to groundwater.
TSF1, 2 and 3 decant water ponds	Decant Water	Lined with 1 mm High-density Polyethylene (HDPE) to achieve a permeability of at least $<10^{-9}$ m/s or equivalent.
Dewater discharge pits: Marvel Loch Pit, Glendower Pit, Jaccoletti Pit, Nevoria Pit, Fraser's Pit, Triad Pit, Polaris South Pit, Yilgarn Star pit, Axehandle Pit, Transvaal complex (Transvaal Pit, Aquarius Pit, Polaris Pit and Sunbeam Pit), Achilles West/East Pit, Achilles South Pit, Achilles North Pit, Rhapsody Pit, Windmills Pit, Redox Pit, Cornishman Complex Pits, GVG Pit, Hercules Pit, Grand National Pit, Southern Star Pit, Harris Find Pit, Ruapehu Pit, Maori Lass Pit-, Lenneberg Pit, Mary Lena Pit and Treasury Pit.	Mine dewater	Bedrock.
Bioremediation pad	Hydrocarbon contaminated waste	Ensure soil is bioremediated by: <ul style="list-style-type: none"> <li>• maintaining a suitable soil thickness;</li> <li>• maintaining an appropriate moisture content and nutrient level within the soil which sustains biological activity; and</li> <li>• at least quarterly soil aeration.</li> </ul>
Turkeys nest dewater transfer dams (including Victoria's turkey's nest, Nevoria, Yilgarn Star, Cornishman, Windmills and Achilles)	Mine Dewater	<ul style="list-style-type: none"> <li>• Lined with HDPE to achieve a permeability of at least <math>&lt;10^{-9}</math> m/s or equivalent; and</li> <li>• Minimum 300 mm freeboard to be maintained.</li> </ul>

3. The Licence Holder must:
- (a) undertake inspections as detailed in Table 2;
  - (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and
  - (c) maintain a record of all inspections undertaken.

**Table 2: Inspection of infrastructure**

Scope of inspection	Type of inspection	Frequency of inspection
Tailings pipelines	Visual condition and leak assessment	Daily
Return water lines		
Fuel storage areas, ore treatment plant and workshop	Visual condition, leak assessment and spills	Daily
Borefields and pump stations	Visual integrity	Daily
Mine de-water pipelines	Visual condition and leak assessment	Twice daily during operation
Dewater discharge pits: Marvel Loch Pit, Glendower Pit, Jaccoletti Pit, Nevoria Pit, Fraser's Pit, Triad Pit, Polaris South Pit, Yilgarn Star pit, Axehandle Pit, Transvaal complex (Transvaal Pit, Aquarius Pit, Polaris Pit and Sunbeam Pit), Achilles West/East Pit, Achilles South Pit Achilles North Pit, Rhapsody Pit, Windmills Pit, Redox Pit, Cornishman Complex Pits, GVG Pit, Hercules Pit, Grand National Pit, Southern Star Pit, Harris Find Pit, Ruapehu Pit, Maori Lass Pit, Lenneberg Pit, Mary Lena Pit and Treasury Pit.	Visual to confirm required freeboard is available	Twice daily during operations
TSF Embankment freeboard	Visual to confirm required freeboard is available	Daily and after a rain event
Native vegetation health around infrastructure	Visual health assessment	Weekly
TSF Embankment	Structural integrity assessment	Annual
Dewater transfer turkeys nests at Nevoria, Yilgarn Star, Axehandle, Victoria, Cornishman, Windmills and Achilles	Visual to confirm required freeboard is available	Daily

4. The Licence Holder must maintain a minimum 300 mm embankment freeboard on the settling ponds or storage facilities, including tailings storage facilities and turkey's nests, and ensure that the facility is designed to hold any inflow received as a result of a 1:100 year, 72-hour duration storm event, for at least 72 hours.
5. The Licence Holder must maintain a minimum 10 m embankment freeboard on the dewater discharge pits and ensure that the facility is designed to hold any inflow received as a result of a 1:100 year, 72-hour duration storm event, for at least 72 hours.

6. The Licence Holder must install and maintain protective bunding, skimmers, silt traps, neutralisation pits, fuel and oil traps, drains and /or sealed collection sumps around the process plant, maintenance workshops and laboratory to enable recovery of spillages and protection of surrounding soils and groundwater.
7. The Licence Holder must ensure that collected material from the sumps detailed in condition 6 are disposed off site in accordance with *the Environmental Protection (Controlled Waste) Regulations 2004*.
8. The Licence Holder must manage TSF's such that:
  - (a) a minimum top of embankment freeboard of 300 mm is maintained across the full surface of the TSF;
  - (b) a seepage collection and recovery system is provided and used to capture seepage from the TSF; and
  - (c) seepage is returned to the TSF or the process.
9. The Licence Holder must, upon becoming aware that depth to groundwater levels in monitoring bores around the TSF, listed in condition 38 (except for MB 94 F1 and MB 94 E1), are less than 6.0 mbgl, within six months, design and implement a Groundwater Recovery Plan.
10. The Licence Holder must ensure that the Groundwater Recovery Plan required by condition 9 includes but is not limited to:
  - (a) Notification to the CEO of when and in how many bores the groundwater level could not be met;
  - (b) Any environmental impacts observed;
  - (c) Strategies to achieve the groundwater level, including:
  - (d) Any additional recovery bores or trenches required;
  - (e) Maximising performance of existing recovery bores;
  - (f) Frequency of groundwater level monitoring;
  - (g) Minimising the normal operating supernatant pool area on the TSF;
  - (h) Frequency and scope of groundwater quality monitoring;
  - (i) Predicted increases in groundwater recovery;
  - (j) Predicted timeframes to achieve the groundwater level;
  - (k) Strategies to ensure the level will be met in the future; and
  - (l) Establishing and implementing appropriate vegetation monitoring.
11. The Licence Holder must undertake an annual water balance for the active TSF. The water balance shall as a minimum consider the following:
  - (a) site rainfall;
  - (b) evaporation;
  - (c) decant water recovery volumes;
  - (d) seepage recovery volumes; and
  - (e) volumes of tailings deposited.
12. The Licence Holder must collect waste lubricants, hydraulic fluids and spent radiator coolant/inhibitors in holding tanks in bunded areas for subsequent disposal off-site or recycling.
13. The Licence Holder must ensure that vehicle wash down areas are equipped with fuel/oil traps and provisions to ensure detergent, fuel and solvent containing waters are

contained and disposed of via an oil separator and a licensed Controlled Waste Carrier.

14. The Licence Holder must only accept waste on to the Landfill for burial if:
- it is of a type listed in Table 3;
  - the quantity accepted is below any quantity limit listed in Table 3; and
  - it meets any specification listed in Table 3.

**Table 3: Waste acceptance**

Waste type	Quantity limit tonnes/ annual period	Specification <sup>1</sup>
Clean fill	2,000 tonnes for all waste types	None Specified
Putrescible Waste		None Specified
Inert Waste Type 1		None Specified
Inert Waste Type 2		Tyres and plastic only

Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

15. The Licence Holder must ensure waste that does not comply with condition 14 is removed from the Premises to an appropriately authorised facility as soon as practicable.
16. The Licence Holder must ensure that wastes generated on the Premises are only subjected to the processes set out in Table 4 and in accordance with any process limits described in that Table 4.

**Table 4: Waste processing**

Waste type	Process(es)	Process limits <sup>1</sup>
All Waste	Handling and disposal of waste by land filling	<ol style="list-style-type: none"> <li>Disposal of waste by land filling shall only take place within the Nevorlia landfill, Axehandle mine landfill, Windmills landfill, Transvaal landfill, Marvel Loch landfill or Frasers landfill shown in Figure 6, Figure 7, Figure 8, Figure 9, Figure 10, Figure 11 respectively;</li> <li>The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2 m;</li> <li>waste is disposed of in a defined trench or within an area enclosed by earthen bunds;</li> <li>the tipping area is restricted to a maximum linear length of 30 meters;</li> <li>the tipping area is no greater than 2 meters in height;</li> <li>the active tipping area is wetted down as required to minimise fugitive dust emission; and</li> <li>there is a fire break of at least 3 meters around the boundary of the site.</li> </ol>
Inert Waste Type 1	Handling and disposal of waste by land filling	None specified

Waste type	Process(es)	Process limits <sup>1</sup>
Inert Waste Type 2	Handling and disposal of waste by land filling	To be stored in piles of up to 100 units with a 6m separation distance between piles. Tyres shall only be landfilled: (i) in a designated disposal area in the landfill; (ii) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 40 cubic meters of tyres reduced to pieces; or (iii) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 1000 whole tyres.
Putrescible Waste		None specified
Clean Fill		None specified

Note 1: Requirements for land filling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

17. The Licence Holder must manage the land filling activities to ensure:
- (a) waste is levelled and compacted as soon as practicable after it is discharged;
  - (b) waste is placed and compacted to ensure all faces are stable and capable of retaining restoration material; and
  - (c) rehabilitation of a cell or phase takes place within 6 months after disposal in that cell or phase has been completed.
18. The Licence Holder must ensure that cover is applied and maintained on landfilled wastes in accordance with Table 5 and that sufficient stockpiles of cover are maintained on site at all times.

**Table 5: Cover requirements**

Waste Type	Material	Depth	Timescales
Inert Waste Type 1	No cover required		N/A
Inert Waste Type 2	Type 1 Inert waste, clean fill or soil clean fill, subsoil	100 mm	By the end of the working week in which the waste was deposited.  Plastic waste with the potential to become windblown shall be covered as soon as practicable after deposit.
		Final cover must be > 500 mm	
All other wastes		150 mm	Continuous cover techniques, or a minimum of weekly

Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

19. The Licence Holder must:
- (a) Implement security measures at the landfill sites to prevent unauthorised access to the site;
  - (b) Undertake regular inspections of all security measures and repair damage; and
  - (c) Ensure the gates are closed and locked when the site is closed.
20. The Licence Holder must ensure that windblown waste is collected at least on a weekly basis and returned to the active tipping area.

21. The Licence Holder must not burn or allow the burning of any waste on the landfill.
22. The Licence Holder must ensure that any unauthorised fire on site is extinguished as soon as possible.
23. The Licence Holder must ensure that there are adequate water supplies and procedures in place at the premises so than any unauthorised fire is promptly extinguished.
24. The licence holder must construct and/or install the infrastructure listed in Table 6 in accordance with;
  - (a) the corresponding design and construction requirement; and
  - (b) at the corresponding infrastructure location as set out in Table 6.

**Table 6: Design and construction requirements**

Item of Infrastructure	Design and construction requirement / installation requirement	Infrastructure location
Crushing precinct stormwater management infrastructure	<ul style="list-style-type: none"> <li>• Perimeter surface water drains to be cleared of silt;</li> <li>• Access road culverts to be refurbished or repaired;</li> <li>• Diversion drain from access road culvert to the pump sump (duck pond) to be cleared of silt; and</li> <li>• Pump sump (duck pond) to be cleared of silt or increased in size to ensure a 1% AEP 24-hour duration storm event can be stored.</li> </ul>	As shown in Figure 26, Schedule 2.
Victoria's pipeline	<ul style="list-style-type: none"> <li>• 350 mm pipeline with 350 mm diameter Y piece to be laid within bunds; and</li> <li>• Fitted with valves and telemetry systems.</li> </ul> Required to meet the following standards: <ul style="list-style-type: none"> <li>• AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>• AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>• AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>• AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul>	As shown in Figure 15, Schedule 1.
Victoria's turkey's nest	<ul style="list-style-type: none"> <li>• Total storage volume 10,000 m<sup>3</sup>;</li> <li>• Constructed to a depth of 5m inclusive of 300 mm freeboard;</li> <li>• Constructed with 1.5 mm HDPE liner to achieve a permeability of at least &lt;math&gt;&lt;10^{-9}&lt;/math&gt; m/s or equivalent; and</li> <li>• Fitted with fauna egress batters on inside walls.</li> </ul>	As shown in Figure 15 Schedule 1 and Figure 29, Figure 30, Schedule 2.
Windmills dewatering pipeline	<ul style="list-style-type: none"> <li>• 350 mm pipeline with 350 mm diameter Y piece to be laid within bunds;</li> <li>• Fitted with valves and telemetry systems; and</li> </ul>	As shown in Figure 27, Schedule 2.

Item of Infrastructure	Design and construction requirement / installation requirement	Infrastructure location
	<ul style="list-style-type: none"> <li>• Required to meet the following standards:                             <ul style="list-style-type: none"> <li>○ AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>○ AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>○ AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </li> </ul>	
Windmills turkey's nest	<ul style="list-style-type: none"> <li>• Total storage volume no less than 45,120 m<sup>3</sup>;</li> <li>• Constructed to a depth of 5 m, inclusive of 300 mm freeboard;</li> <li>• Constructed with 1.5 mm HDPE liner to achieve a permeability of at least &lt;math&gt;&lt;10^{-9}&lt;/math&gt; m/s or equivalent;</li> <li>• Fitted with fauna egress batters on inside walls; and</li> <li>• Fugitive dust emissions controlled using water trucks for dust suppression during construction.</li> </ul>	As shown in Figure 28 and Figure 27, Schedule 2.
Windmills landfill	<ul style="list-style-type: none"> <li>• Placement of landfill has taken into consideration the predominant wind direction and topography to minimise odour impacts;</li> <li>• Constructed on Windmills Waste Rock Dump, with base of landfill cell being equal or no less than 2 m from the base of the Waste Rock Dump;</li> <li>• Constructed with 0.5 m safety bund around the edge of excavation;</li> <li>• Fugitive dust emissions controlled using water trucks for dust suppression; and</li> <li>• Depth to groundwater must be at least two meters from the base of each new cell.</li> </ul>	As shown in Figure 8, Schedule 1.
Transvaal-Sunbeam/Cornishman/Axehandle dewatering pipeline	<ul style="list-style-type: none"> <li>• Fitted with valves and telemetry system with 3 flow monitoring stations;</li> <li>• Leak detection to trigger automatic shut-off of transfer pumps;</li> <li>• Laid within a swale with bunding in section above ground;</li> <li>• Minimum cover of 600 mm when buried;</li> <li>• Minimum 1100 mm cover and minimum PN12.5 pressure rating when buried under heavy vehicle crossings;</li> <li>• Pipeline to be constructed from PE100 HDPE, and must be white above ground;</li> <li>• Scour valves to discharge into scour ponds sized to allow storage for both scour and pipe failure; and</li> <li>• 350 mm pipeline with 350 mm diameter Y piece;</li> <li>• Monitoring point installed along the pipeline to allow sampling for water quality</li> </ul>	As shown in Figure 17, Schedule 1.

Item of Infrastructure	Design and construction requirement / installation requirement	Infrastructure location
	<ul style="list-style-type: none"> <li>monitoring; and</li> <li>• Required to meet the following standards:               <ul style="list-style-type: none"> <li>○ AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>○ AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications; and</li> <li>○ AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </li> </ul>	
Transvaal landfill	<ul style="list-style-type: none"> <li>• Placement of landfill on previously cleared land;</li> <li>• Base of landfill cell will have a maximum of 2 meters depth to ground level;</li> <li>• Fugitive dust emissions controlled using water trucks for dust suppression; and</li> <li>• Tipping area will have a maximum linear length of 30 meters.</li> </ul>	As shown in Figure 9, Schedule 1.
Yilgarn Star / Nevorla dewatering pipelines	<ul style="list-style-type: none"> <li>• Fitted with valves and telemetry system with 3 flow monitoring stations;</li> <li>• Leak detection to trigger automatic shut-off of transfer pumps;</li> <li>• Laid within a swale with bunding in section above ground;</li> <li>• Minimum cover of 600 mm when buried;</li> <li>• Minimum 1100 mm cover and minimum PN10 pressure rating when buried under heavy vehicle crossings;</li> <li>• Pipeline to be constructed from PE100 HDPE, and must be white above ground;</li> <li>• Scour valves to discharge into scour ponds sized to allow storage for both scour and pipe failure;</li> <li>• Decommission and remove existing 600 mm pipeline;</li> <li>• Pipeline/s constructed to either:               <ul style="list-style-type: none"> <li>○ up to a maximum of two 450 mm diameter; or</li> <li>○ up to a maximum of one 710 mm diameter.</li> </ul> </li> <li>• Monitoring point installed along the pipeline to allow sampling for water quality monitoring; and</li> <li>• Required to meet the following standards:               <ul style="list-style-type: none"> <li>○ AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>○ AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications; and</li> <li>○ AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </li> </ul>	As shown in Figure 16, Schedule 1

Item of Infrastructure	Design and construction requirement / installation requirement	Infrastructure location
Achilles/Axehandle dewatering pipeline	<ul style="list-style-type: none"> <li>• Fitted with telemetry system;</li> <li>• Leak detection to trigger automatic shut-off of transfer pumps;</li> <li>• Laid within a bunded corridor with sumps;</li> <li>• Pipeline to be constructed from PE100 HDPE;</li> <li>• 200 mm (PN8) diameter pipeline;</li> <li>• Required to meet the following standards:               <ul style="list-style-type: none"> <li>○ AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>○ AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>○ AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </li> </ul>	As shown in Figure 18, Schedule 1.
Achilles turkey's nest	<ul style="list-style-type: none"> <li>• Constructed with 1.5 mm HDPE liner to achieve a permeability of at least <math>&lt;10^{-9}</math> m/s or equivalent;</li> <li>• Fitted with fauna egress batters on inside walls; and</li> <li>• Fugitive dust emissions controlled using water trucks for dust suppression during construction.</li> </ul>	As shown in Figure 18, Schedule 1.
Rhapsody/ Windmills-Redox pipeline	<ul style="list-style-type: none"> <li>• Fitted with telemetry system;</li> <li>• Leak detection to trigger automatic shut-off of transfer pumps;</li> <li>• Laid within a bunded corridor with sumps;</li> <li>• Pipeline to be constructed from PE100 HDPE;</li> <li>• 200 mm (PN8) diameter pipeline;</li> <li>• Required to meet the following standards:               <ul style="list-style-type: none"> <li>○ AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>○ AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>○ AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </li> </ul>	As shown in Figure 19 Schedule 1.
<p>Reinstatement of Nevorio/Southern Star pipeline</p> <p>Reinstatement of Yilgarn Star to Harris Find pipeline</p> <p>Reinstatement of Ruapehu/Maori Lass pipeline</p>	<ul style="list-style-type: none"> <li>• Reinstatement pipeline to ensure it is:               <ul style="list-style-type: none"> <li>○ Fitted with telemetry system;</li> <li>○ Fitted with Leak detection to trigger automatic shut-off of transfer pumps;</li> <li>○ Laid within a bunded corridor with sumps; and</li> <li>○ Meets the following standards:                   <ul style="list-style-type: none"> <li>▪ AS/NZS 2033:3008: Installation of polyethylene pipe systems; AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>▪ AS/NZS 4130:2009 Polyethylene</li> </ul> </li> </ul> </li> </ul>	<p>Nevoria/Southern Star pipeline as shown in Figure 20 and Figure 21 Schedule 1</p> <p>Yilgarn Star to Harris Find pipeline and Ruapehu/Maori Lass shown in</p>

Item of Infrastructure	Design and construction requirement / installation requirement	Infrastructure location
	<p>(PE) pipes for pressure applications; and</p> <ul style="list-style-type: none"> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul>	<p>Figure 22 Schedule 1 and Figure 23 Schedule 1 respectively.</p>
<p>TSF3 (Cell 1 and Cell 2) embankment lifts stages 3 to 7</p>	<ul style="list-style-type: none"> <li>• Stages 3 to 7 embankment lifts for Cell 1 and Cell 2 are to be constructed to the embankment heights specified in condition 26</li> <li>• Embankments to be constructed using upstream construction methods.</li> <li>• Embankments to have design slopes of 1:2.75 (V:H) downstream and 1:1.5 (V:H) upstream.</li> <li>• The dividing embankment access way to have design slopes of 1:1.5 (V: H) downstream and 1:1.5 (V:H) upstream.</li> <li>• Embankment lifts to be constructed in accordance with design drawings shown in Figure 32 to Figure 37, Schedule 2.</li> <li>• Dust suppression measures with water carts to be undertaken where necessary to manage dust emissions during construction</li> </ul>	<p>TSF3 as shown in Figure 4, Schedule 1</p>
<p>Fraser's Landfill</p>	<ul style="list-style-type: none"> <li>• Landfill to be located within the Fraser's Waste Rock landform as shown within Figure 21, Schedule 1.</li> <li>• Trenches size to be 40 m (length) x 4 (width) x 2 m (depth).</li> <li>• 0.5 m earthen bund to be constructed around the perimeter of each trench.</li> <li>• Depth to groundwater must be at least two meters from the base of each new cell.</li> <li>• Dust suppression measures with water carts to be undertaken where necessary to manage dust emissions during construction of the landfill trenches.</li> </ul>	<p>Located within M77/109 as shown in Figure 11, Schedule 1.</p>
<p>Fraser's underground mine to Polaris South Pit dewatering pipeline</p>	<ul style="list-style-type: none"> <li>• Maximum diameter pipeline of 450 mm;</li> <li>• Fitted with valves and telemetry system with flow monitoring stations;</li> <li>• Laid within a swale with bunding in any above ground sections;</li> <li>• Minimum cover of 600 mm in sections when buried;</li> <li>• Minimum 1100 mm cover and minimum PN10 pressure rating when buried under heavy vehicle crossings;</li> <li>• Pipeline to be constructed from HDPE;</li> <li>• Scour valves to discharge into scour ponds sized to allow storage for both scour and pipe failure;</li> <li>• Monitoring point installed along the pipeline to allow sampling for water quality monitoring; and</li> <li>• Pipeline to meet the following standards: <ul style="list-style-type: none"> <li>○ AS/NZS 2033:3008: Installation of</li> </ul> </li> </ul>	<p>As shown in Figure 24, Schedule 1.</p>

Item of Infrastructure	Design and construction requirement / installation requirement	Infrastructure location
	<p>polyethylene pipe systems;</p> <ul style="list-style-type: none"> <li>○ AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>○ AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications - provided someone does the calcs showing the PN rating is compliant with this – PN rating shouldn't matter; and</li> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul>	
<p>Upgrade section of pipeline from Polaris South Pit to Cornishman Complex Pits</p>	<p>Upgrade pipeline to achieve a maximum flow rate of up to 180 l/s and ensure the pipeline meets the following requirements:</p> <ul style="list-style-type: none"> <li>• Fitted with valves and telemetry system with flow monitoring stations;</li> <li>• Laid within a swale with bunding in any above ground sections;</li> <li>• Minimum cover of 600 mm in sections when buried;</li> <li>• Minimum 1100 mm cover and minimum PN10 pressure rating when buried under heavy vehicle crossings;</li> <li>• Pipeline to be constructed from HDPE;</li> <li>• Scour valves to discharge into scour ponds sized to allow storage for both scour and pipe failure;</li> <li>• Monitoring point installed along the pipeline to allow sampling for water quality monitoring; and</li> <li>• Pipeline to meet the following standards:               <ul style="list-style-type: none"> <li>○ AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>○ AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>○ AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications - provided someone does the calcs showing the PN rating is compliant with this – PN rating shouldn't matter; and</li> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </li> </ul>	<p>As shown in Figure 24, Schedule 1.</p>
<p>Marvel Loch underground mine to Triad pit pipeline</p>	<ul style="list-style-type: none"> <li>• Maximum diameter pipeline of 450 mm;</li> <li>• Fitted with valves and telemetry system with flow monitoring stations;</li> <li>• Laid within a swale with bunding in any above ground sections;</li> <li>• Minimum cover of 600 mm in sections when buried;</li> <li>• Minimum 1100 mm cover and minimum PN10 pressure rating when buried under heavy vehicle crossings;</li> <li>• Pipeline to be constructed from HDPE;</li> </ul>	<p>As shown in Figure 25, Schedule 1.</p>

Item of Infrastructure	Design and construction requirement / installation requirement	Infrastructure location
	<ul style="list-style-type: none"> <li>• Scour valves to discharge into scour ponds sized to allow storage for both scour and pipe failure;</li> <li>• Monitoring point installed along the pipeline to allow sampling for water quality monitoring; and</li> <li>• Pipeline to meet the following standards:                             <ul style="list-style-type: none"> <li>○ AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>○ AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>○ AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications - provided someone does the calcs showing the PN rating is compliant with this – PN rating shouldn't matter; and</li> <li>○ AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </li> <li>• Discharge points leading to Lenneberg, Mary Lena and Treasury pits;</li> <li>• Maximum flow rate of up to 180 l/s.</li> </ul>	

25. When construction authorised under this licence is to occur between 1 September and January 31, the licence holder must:
- (a) Within two weeks prior to undertaking any construction activity, engage an environmental specialist to conduct a survey of the area 100 m surrounding where construction activities to be undertaken, to identify and record active (in use) Malleefowl (*Leipoa ocellata*) mounds; and
  - (b) Where and active (in use) Malleefowl mound is identified under condition 25(a) of this licence, the licence holder must:
    - (i) record the location;
    - (ii) initiate management action(s) to reduce the disturbance/impact to the Malleefowl mound as far as reasonably practical; and
    - (iii) record all management actions undertaken.

26. The Licence Holder is authorised to:
- (a) construct embankment raises for TSF3 to the construction height; and
  - (b) operate TSF3 to the operating height, as specified in Table 7.

**Table 7: Tailings storage facility operating heights**

Stage	Infrastructure	Embankment elevation (mRL)	Maximum operating height (mRL) – with freeboard
Starter embankment	TSF3 Cell 1	442	441.7
	TSF3 Cell 2	442	441.7
Stage 1 Lift	TSF3 Cell 1	444	443.7
	TSF3 Cell 2	443.5	443.2
Stage 2 Lift	TSF3 Cell 1	446	445.7

	TSF3 Cell 2	446	445.7
Stage 3 Lift	TSF3 Cell 1	448	447.7
	TSF3 Cell 2	448	447.7
Stage 4 Lift	TSF3 Cell 1	450	449.7
	TSF3 Cell 2	450	449.7
Stage 5 Lift	TSF3 Cell 1	452	451.7
	TSF3 Cell 2	452	451.7
Stage 6 Lift	TSF3 Cell 1	454	453.7
	TSF3 Cell 2	454	453.7
Stage 7 Lift	TSF3 Cell 1	456	455.7
	TSF3 Cell 2	456	455.7

- 27.** The licence holder must within 30 days of each item of infrastructure required by condition 24 and each staged lift of condition 26 being constructed:
- undertake an audit of their compliance with the requirements of condition 24 and 25; and
  - prepare and submit to the CEO an environmental compliance report on that compliance.
- 28.** The environmental compliance report required by condition 27 must:
- be certified by a suitably qualified and experienced engineer (eligible for membership in the Institute of Engineers, Australia) that the items of infrastructure or component(s) thereof, as specified in condition 24 and 26, have been constructed in accordance with the relevant requirements specified in condition 24 and 26; and
  - as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 24 and 26; and
  - be signed by a person authorised to represent the licence holder and contain the printed name and position of that person within the company.

## Monitoring

### General monitoring

- 29.** The Licence Holder must ensure that:
- all water samples are collected and preserved in accordance with AS/NZS 5667.1;
  - all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
  - all samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured unless indicated otherwise in relevant table.
- 30.** The Licence Holder must ensure that
- monthly monitoring is undertaken at least 15 days apart;
  - quarterly monitoring is undertaken at least 45 days apart;
  - six monthly monitoring is undertaken at least 5 months apart; and
  - annual monitoring is undertaken at least 9 months apart.
- 31.** The Licence Holder must ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

32. The Licence Holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

### Monitoring of point source emissions to land

33. The Licence Holder must undertake the monitoring in Table 8 according to the specifications in that table.

**Table 8: Monitoring of point source emissions to land**

Emission point reference	Parameter	Units	Frequency
Mine dewatering discharge points: Marvel Loch, Fraser's, Glendower, Jaccoletti, Nevoria, Triad, Polaris South, Yilgarn Star, Axehandle, Transvaal, Aquarius, Polaris, Sunbeam, Achilles West/East, Achilles South, Rhapsody, Windmills, Redox, Cornishman North, Cornishman Central, Cornishman South, GVG, Hercules, Southern Star, Grand National, Harris Find, Ruapehu Maori Lass, Lenneberg Pit, Mary Lena Pit and Treasury Pit.	Volumetric flow rate	L/s	Monthly
	S; As; Cr; Co; Zn; Cu; Na; Cl; Al; Fe; Mg; Ca; K; Mn; Ni; Se; SO <sub>4</sub> <sup>2-</sup> ; HCO <sub>3</sub> <sup>-</sup> and Cd.	mg/L	Annually
	TSS (Total suspended solids) and TDS (Total dissolved solids)	mg/L	Six monthly
	pH	N/A	Six monthly  Monthly for discharge to Axehandle pit.  Monthly for pits receiving from Grand National.

### Sampling of pit water quality

34. The Licence Holder must conduct a Pit water sampling program in accordance with the requirements specified in Table 9 and Table 10 and record the results of all activity conducted under the program.
35. The Licence Holder must adhere to the field quality assurance and quality control procedures specified in Table 9 and Table 10 for the monitoring required by condition 36.

**Table 9: Sampling of pit water**

Pit water source	Parameter	Units	Frequency
Yilgarn Star, Nevoria Pit.	S; As; Cr; Co; Zn; Cu; Na; Cl; Al; Fe; Mg; Ca; K; Mn; Ni; Se; SO <sub>4</sub> <sup>2-</sup> ; HCO <sub>3</sub> <sup>-</sup> and Cd.	mg/L	Within 60 days of dewatering commencing

	TSS and TDS	mg/L	Within 60 days of dewatering commencing
	pH	N/A	Within 60 days of dewatering commencing

**Table 10: Sampling of pit water**

Pit water source	Parameter	Units	Frequency
Achilles West/East, Achilles South, Rhapsody, Windmills, Redox, Cornishman North, Cornishman Central, Cornishman South, GVG, Hercules, Southern Star, Grand National, Harris Find, Ruapehu Maori Lass.	S; As; Cr; Co; Zn; Cu; Na; Cl; Al; Fe; Mg; Ca; K; Mn; Ni; Se; SO <sub>4</sub> <sup>2-</sup> , HCO <sub>3</sub> <sup>-</sup> and Cd.	mg/L	Within the 30 days prior to dewatering discharge to the pit commencing
	TSS and TDS		
	pH	-	

36. The Licence Holder must, within 60 days of the pit water sampling specified in condition 35 being completed, submit to the CEO a report demonstrating compliance with conditions 35 - 37, and must include:

- (a) a clear statement of the scope of work carried out;
- (b) a description of the field methodologies;
- (c) a summary of the field and laboratory quality assurance / quality control (QA/QC) program;
- (d) copies of the field monitoring records and field QA/QC documentation;
- (e) an assessment of reliability of field procedures and laboratory results
- (f) a tabulated summary of results, as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file), with all results being clearly referenced to laboratory certificates of analysis;
- (g) trend graphs to provide a graphical representation of historical results and to support the interpretive summary.

### Process monitoring

37. The Licence Holder must undertake the monitoring specified in Table 11 according to the specifications of the table.

**Table 11: Process monitoring**

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
-	-	Volumes of tailings deposited into the	m <sup>3</sup>	Continuous	None specified

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
		TSF			
-	-	Volumes of water recovered from the TSF	m <sup>3</sup>	Continuous	None specified
-	-	Phreatic surface levels within TSF embankments	mAHD	Monthly	None specified
-	-	Volumes of seepage recovered	m <sup>3</sup>	Continuous	None specified
-	-	Volumes of ore processed	m <sup>3</sup>	Annual period	None specified
Mine dewatering discharge points Marvel Loch, Frasers, Glendower, Jaccoletti, Nevoria, Triad, Polaris South, Yilgarn Star, Axehandle, Transvaal, Aquarius, Polaris and Sunbeam Achilles West/East, Achilles South, Rhapsody, Windmills, Redox, Cornishman North, Cornishman Central, Cornishman South, GVG, Hercules, Grand National, Southern Star, Harris Find, Ruapehu and Maori Lass, Lenneberg Pit, Mary Lena Pit and Treasury Pit.	Mine dewatering	Cumulative volumes of mine dewater discharged to each pit (including the source of the dewater).	m <sup>3</sup>	Monthly	None specified
Nevoria landfill, Axehandle landfill, Marvel Loch landfill, Windmills landfill, Transvaal landfill and Frasers Landfill.	Putrescible landfill site	Volumes of waste disposed	tonnes	Monthly	None specified

**Ambient environmental quality monitoring**

38. The Licence Holder must undertake the monitoring in Table 12 according to the specifications in that table.

**Table 12: Monitoring of ambient groundwater quality**

Monitoring point reference	Parameter	Limit	Units	Averaging period	Frequency
MB 94 D1 MB 94 G1 21-A1 21-B1	Standing water level <sup>1</sup>	Greater than 4 m	mbgl	Spot sample	Quarterly

Monitoring point reference	Parameter	Limit	Units	Averaging period	Frequency
21-A2 21-B2 21-A3 21-B3 21-A4 21-B4 21-A5 21-B5 21-A6 21-B6					
MB 94 F1 MB 94 E1	Standing water level <sup>1</sup>	-			
MB 94 D1 MB 94 F1 MB 94 G1 MB 94 E1	pH*	-	N/A	Spot sample	Quarterly
21-A1 21-B1 21-A2 21-B2 21-A3 21-B3 21-A4 21-B4 21-A5 21-B5 21-A6 21-B6	Total Dissolved Solids (TDS); and Weak Acid Dissociable Cyanide	-	mg/L		Quarterly
	TSS; Cu; Na; Cl; Al; Cd; Fe; Mg; Ca; K; Mn; Ni; Se; As; Zn; Cr; Co; SO <sub>4</sub> <sup>2-</sup> HCO <sub>3</sub> <sup>-</sup> and Cd.	-	mg/L		Six monthly
PZ 99 B1; PZ 99 D1; PZ 99 E1; PZ 99 F1; PZ 99 G1; TSF 1; TSF 2; TSF 3; TSF 4; TSF 5; TSF 6; TSF 7; TSF 8; TSF9. AXEPB1 AXEPB2 AXEPB3	Standing water level <sup>1</sup>	Greater than 4 m	mbgl	Spot sample	Monthly

\* These parameters should be measured and recorded in the field to ensure representativeness. An exemption from NATA laboratory analysis is allowed given geographical remoteness of the sample site and short holding time of the parameter.  
 Note 1: SWL shall be determined prior to collection of all other water samples.

39. The licence holder must undertake the monitoring in Table 13 according to the specifications in that table.

**Table 13: Monitoring of ambient air quality**

Monitoring point reference & location	Parameter	Unit <sup>1</sup>	Averaging period	Frequency
---------------------------------------	-----------	-------------------	------------------	-----------

Dust monitor as shown on map in Figure 4, Schedule 1.	Particulates as PM <sub>10</sub>	µg/m <sup>3</sup>	24 hours	Continuous from day of installation.
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Note 1: All units are referenced to STP dry.

## Information

### Records

- 40.** All information and records required by the Licence must:
- be legible;
  - if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - except for records listed in 40(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
  - for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - off-site environmental effects; or
    - matters which affect the condition of the land or waters.
- 41.** The Licence Holder must ensure that:
- any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
  - any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 42.** The Licence Holder must complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 43.** The Licence Holder must implement a complaints management system that as a minimum record the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

### Reporting

- 44.** The Licence Holder must submit to the CEO an Annual Environmental Report within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 14 in the format or form specified in that table.

**Table 14: Annual Environmental Report**

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the year and any action taken	None specified
Condition 42	Compliance	Annual Audit Compliance Report (AACR)

Condition 43	Complaints summary	None specified
Table 2	Embankment structural integrity assessment	None specified
Condition 11	TSF water balance	None specified
Table 8	Monitoring of point source emissions to land	None specified
Table 9 and Table 10	Any pit water sampling data conducted during the annual period.	None specified
Table 11	Process Monitoring	None specified
Table 12	Monitoring of ambient groundwater quality	A tabulated summary of results, including: <ul style="list-style-type: none"> <li>any target or limit exceedances;</li> <li>raw data provided in an accompanying Microsoft Excel spreadsheet file;</li> <li>interpretation of results (SWL and quality data) and comparison against historical data; and</li> <li>discussion of groundwater mounding (if present), its extent and measures proposed to address it.</li> </ul>
Table 13	Monitoring of ambient air quality	None specified

Note 1: Forms are available at [www.dwer.wa.gov.au](http://www.dwer.wa.gov.au)

45. The Licence Holder must ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits.

**Notification**

46. The Licence Holder must ensure that the parameters listed in Table 15 are notified to the CEO in accordance with the notification requirements of the table.

**Table 15: Notification requirements**

Condition or table	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>
Condition 32	Calibration report	As soon as practicable.	None specified
Condition 10	Groundwater Recovery Plan	Within 30 calendar days of completion.	None specified
Condition 22	Unauthorised fire at landfill	Within 14 calendar days.	None specified
Table 3 & Table 12, Condition 4	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day.	N1
-	Any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	Part B: As soon as practicable.	

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are available at [www.dwer.wa.gov.au](http://www.dwer.wa.gov.au)

**Specified Action**

47. The Licence Holder must provide a report to the CEO on each item specified in Table 16, addressing the corresponding requirements within the timeframe specified.

**Table 16: Specified actions**

Item	Requirements	Timeframe
1.	<p><b>Groundwater monitoring bore investigation</b></p> <p>The Licence Holder is to undertake an assessment of the existing groundwater monitoring bore network surrounding TSF3 to determine whether it is adequate to monitor groundwater mounding and seepage impacts within the zone of influence of TSF3. The assessment must include but not limited to:</p> <ul style="list-style-type: none"> <li>(a) An investigation identifying any zones of higher permeability and preferential flow pathways for seepage and the extend of any existing groundwater mounding;</li> <li>(b) An assessment of both the spatial and lateral (i.e. aquifer being screened) distribution of the groundwater monitoring bores; and</li> <li>(c) if the monitoring bore network is found to be inadequate, additional groundwater monitoring locations (with bore depths, screen interval details) with relevant justification and timeframe for installation.</li> </ul>	Report to be submitted to the CEO by 8 August 2025

## Definitions

In this licence, the terms in Table 17 have the meanings defined.

**Table 17: Definitions**

Term	Definition
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
ACN	Australian Company Number
AER	Annual Environmental Report
AHD	Australian height datum
AMD	Acid Mine Drainage
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i>
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 <i>Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made</i>
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i>
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i>
annual period	a 12 month period commencing from 1 October until 30 September of the immediately following year.
averaging period	means the time over which a limit is measured
books	has the same meaning given to that term under the EP Act.
CEO	Chief Executive Officer of the Department of Water and Environmental Regulation
Clean fill	as defined in the Landfill Definitions
controlled waste	has the definition in <i>Environmental Protection (Controlled Waste) Regulations 2004</i>
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
DWER	means Department of Water and Environmental Regulation
emission	has the same meaning given to that term under the EP Act.

Term	Definition
Environmental specialist	Means a person who holds a tertiary qualification specializing in environmental science or equivalent, and has a minimum of two (2) years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the CEO as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the <i>Biodiversity Conservation Act 2016</i> .
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
freeboard	means the distance between the maximum waste surface elevations and the top of retaining banks or structures at their lowest point
HDPE	means High-density Polyethylene
Inert waste type 1	as defined in the Landfill Definitions
Inert waste type 2	as defined in the Landfill Definitions
Landfill definitions	<i>Landfill Waste Classification and Waste Definitions 1996</i> , as amended from time to time
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
m <sup>3</sup>	means cubic metres
mbgl	means meters below ground level
mRL	means meters reduced level
NATA	means the National Association of Testing Authorities, Australia
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis
PE	means polyethylene
PM <sub>10</sub>	means particulate matter with diameters that are 10 micrometers and smaller
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map Figure 1 and Figure 2 in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
quarterly	means the 4 inclusive periods from 1 October to 31 December and in the following year, 1 January to 31 March, 1 April to 30 June and from 1 July to 30 September

<b>Term</b>	<b>Definition</b>
rehabilitation	means the completion of the engineering of a landfill cell and includes capping and/or final cover
ROM	means Run of Mine
Schedule 1	means Schedule 1 of this Licence unless otherwise stated
Schedule 2	means Schedule 2 of this Licence unless otherwise stated
six monthly	means the 2 inclusive periods from 1 October to 31 March in the following year and then from 1 April to 30 September
spot sample	means a discrete sample representative at the time and place at which the sample is taken
structural integrity assessment'	means conducting an inspection of the TSF, evaporation ponds and similar impoundments to ensure their structural integrity meets the requirements of the Western Australian Department of Mines and Petroleum and the ANCOLD 2003 Dam Safety Management Guidelines
SWL	means standing water level
Transvaal Complex	comprises of Transvaal Pit, Aquarius Pit, Polaris Pit and Sunbeam Pit
TSF	means Tailing Storage Facility - engineered containment pond or dam used to store tailings
usual working day'	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia
waste	has the same meaning given to that term under the EP Act.

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**END OF CONDITIONS**

# Schedule 1: Maps

## Premises map

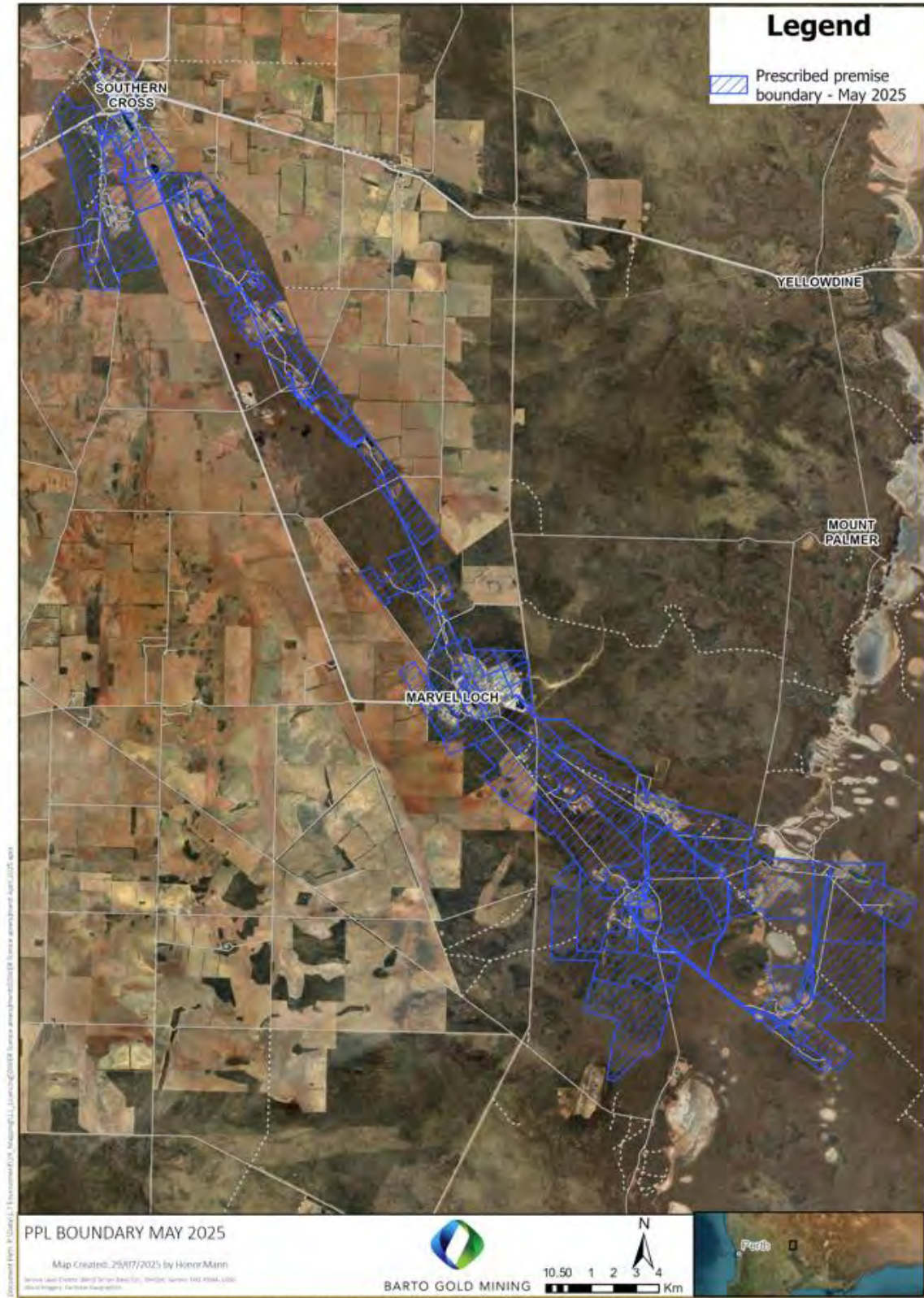


Figure 1: Map of Prescribed Premises. Blue line depicts Premises boundary

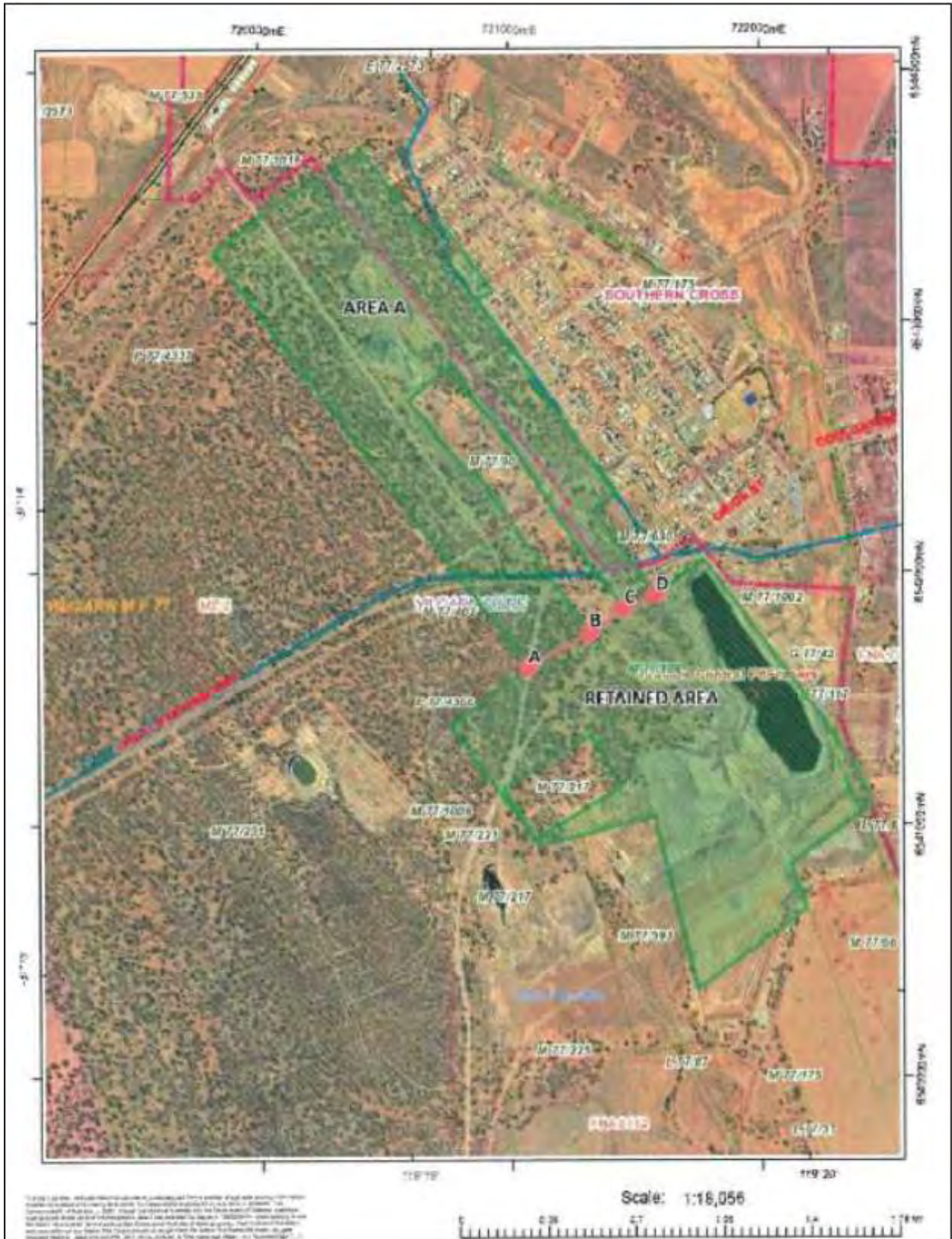


Figure 2: Map showing boundary of part M77/109 that has been removed from the prescribed premises boundary.

Map of emission points

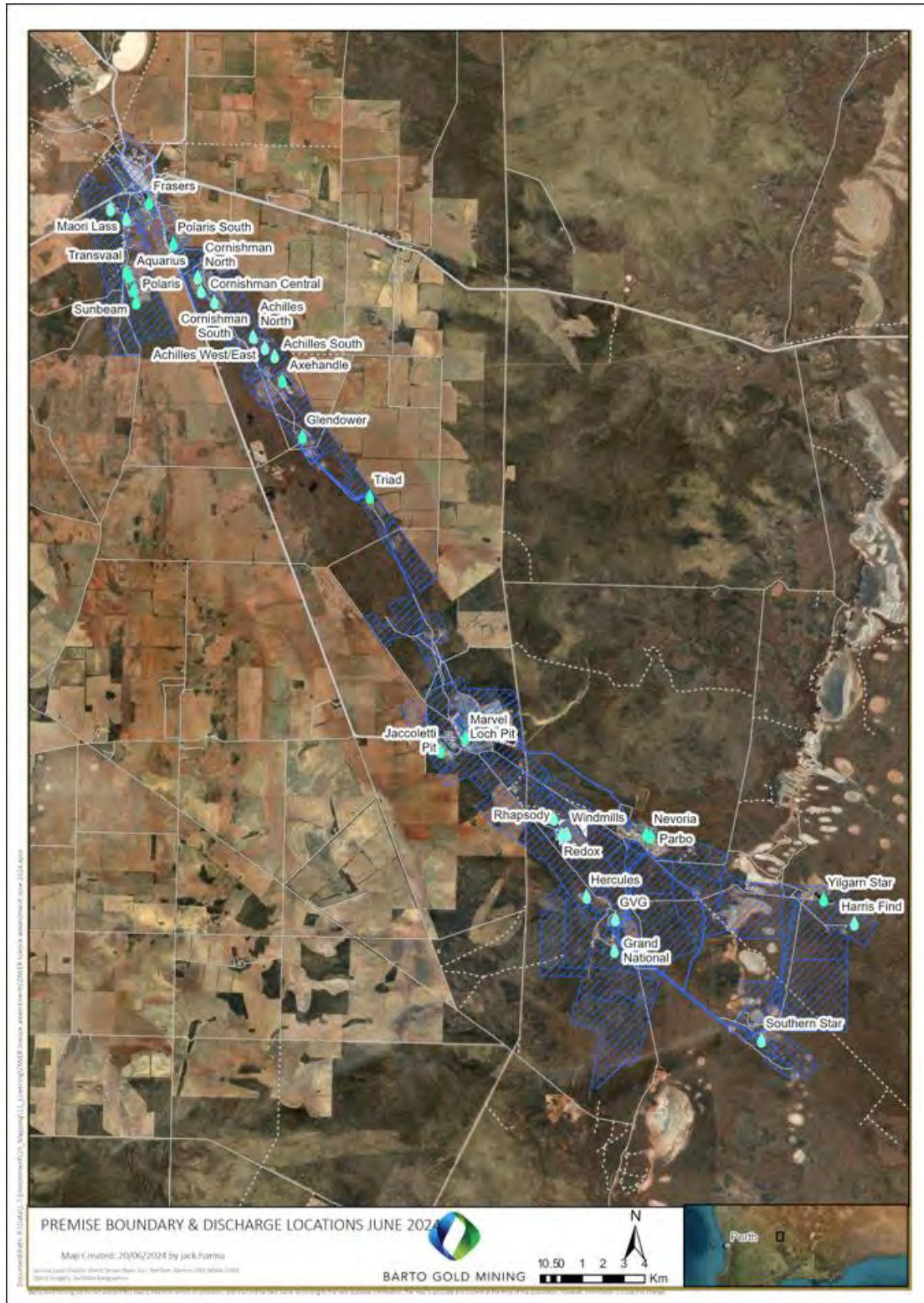


Figure 3: Location of emission points in Table 8, Condition 33 are shown above

Maps of monitoring locations

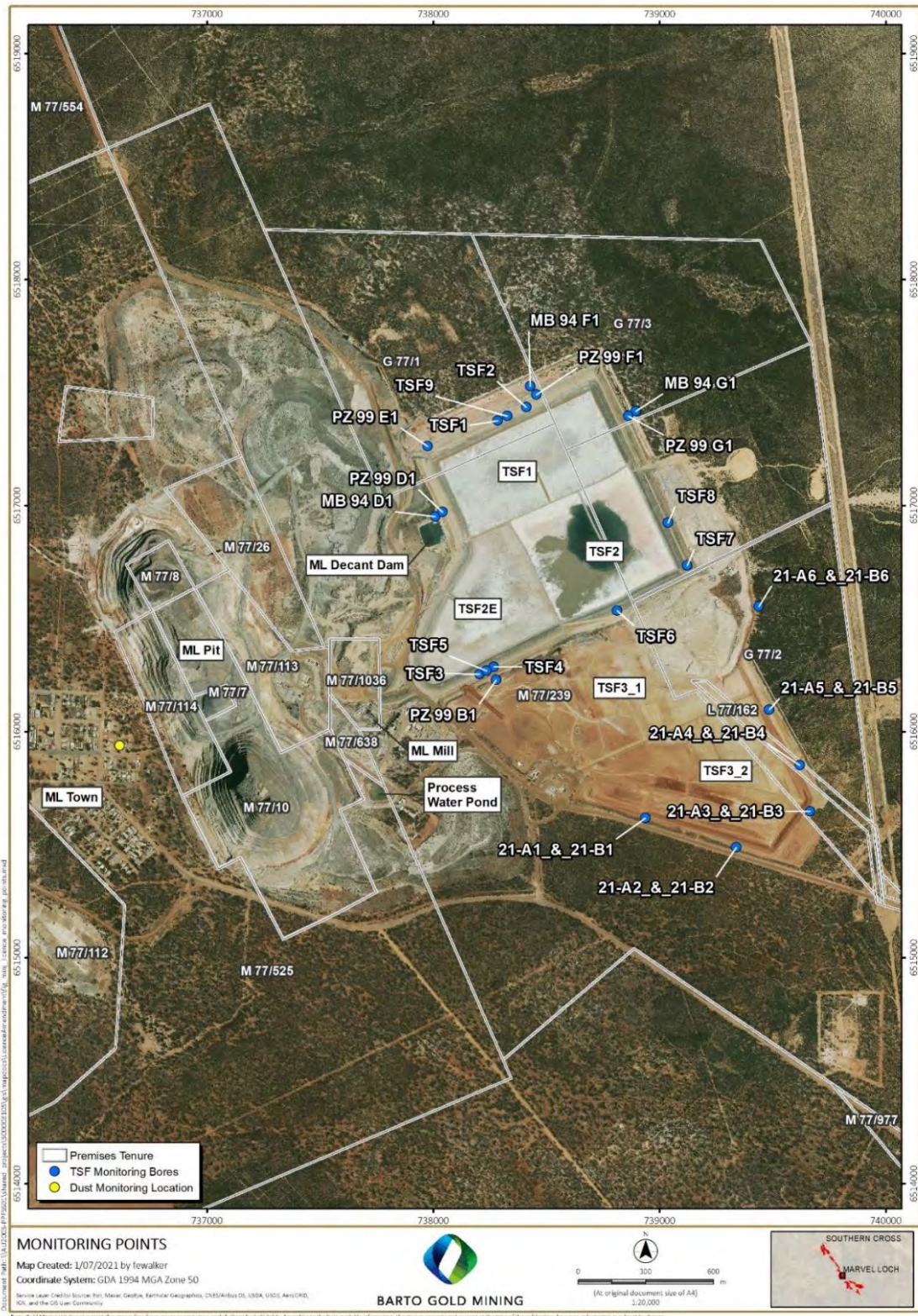


Figure 4: Location of monitoring points as depicted in Table 12, Condition 38 and Table 13, Condition 39



Figure 5: Location of existing monitoring bores defined in Table 12, Condition 38 surrounding Axehandle Pit

Map of landfill locations



Figure 6: Location of the Nevoria landfill defined in Table 4, Condition 16



Figure 7: Location of the Axehandle landfill defined in Table 4, Condition 16

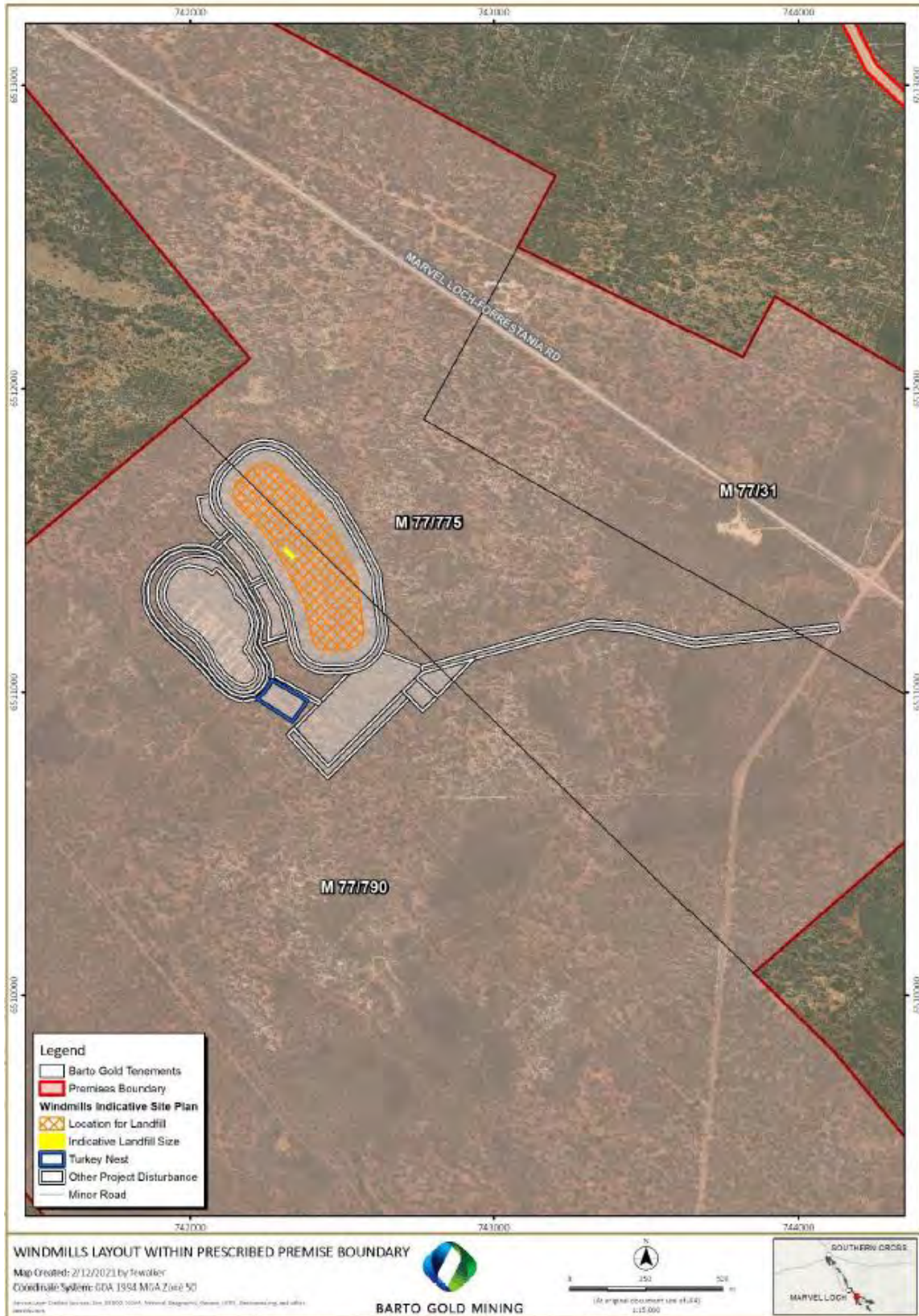


Figure 8: Location of the Windmills landfill defined in Table 4, Condition 16

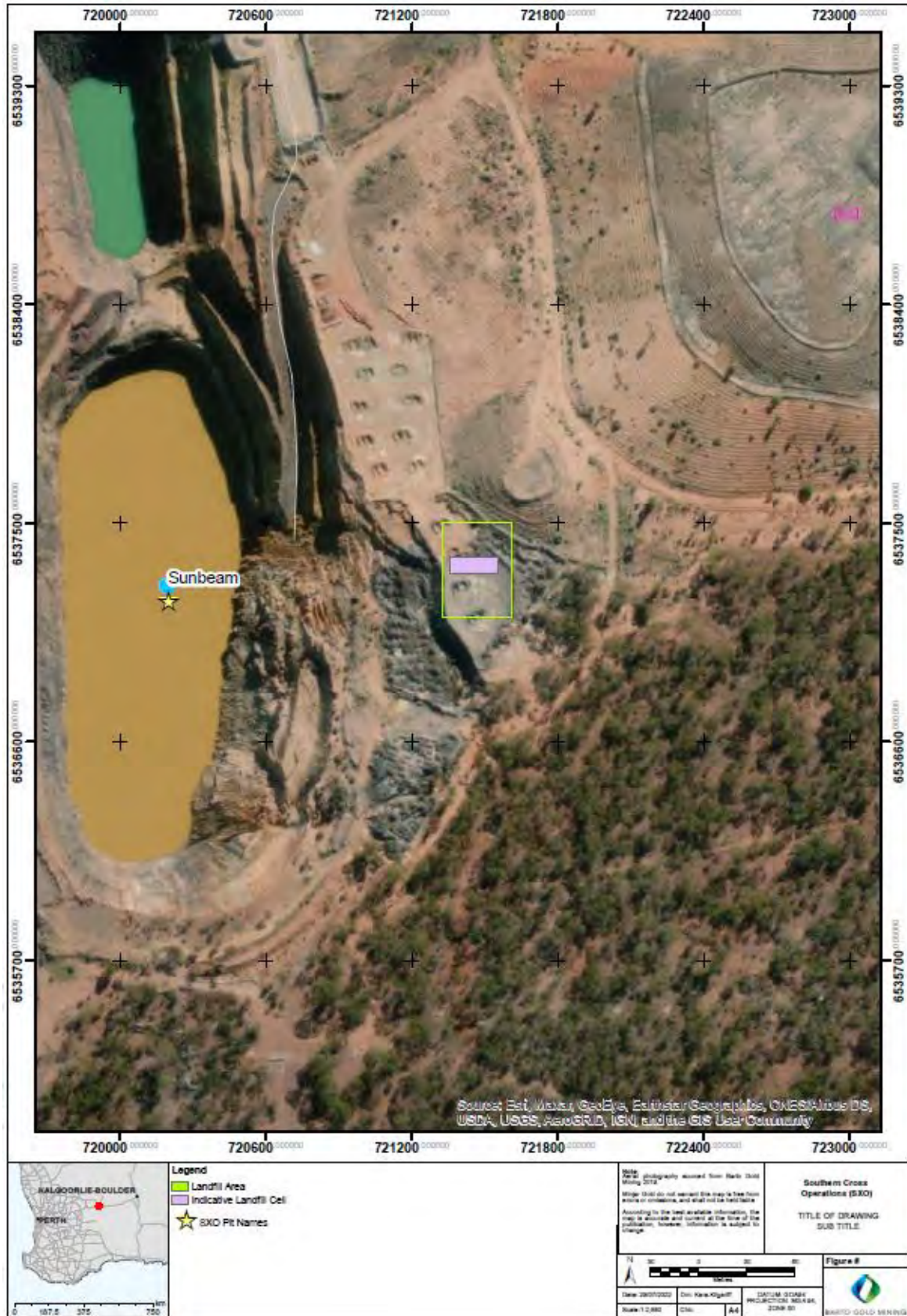


Figure 9: Location of the Transvaal landfill defined in Table 4, Condition 16



Figure 10: Location of Marvel Loch landfill defined in Table 4, Condition 16

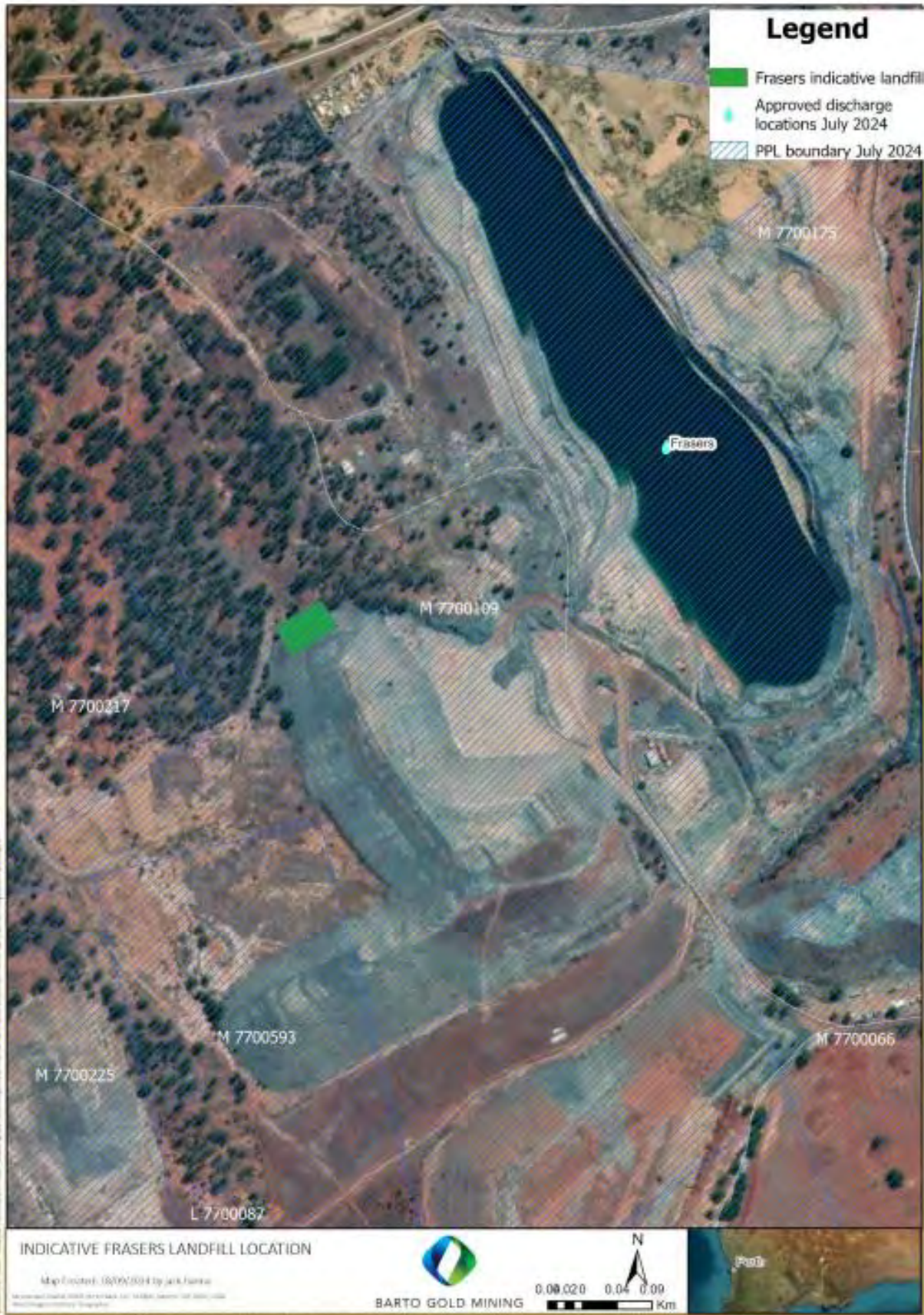


Figure 11: Location of the Fraser's landfill defined in Table 4, Condition 16

Maps of Dewatering Pipelines

Detailed maps of some of the dewater pipeline locations required to be inspected by condition 3 is shown below.

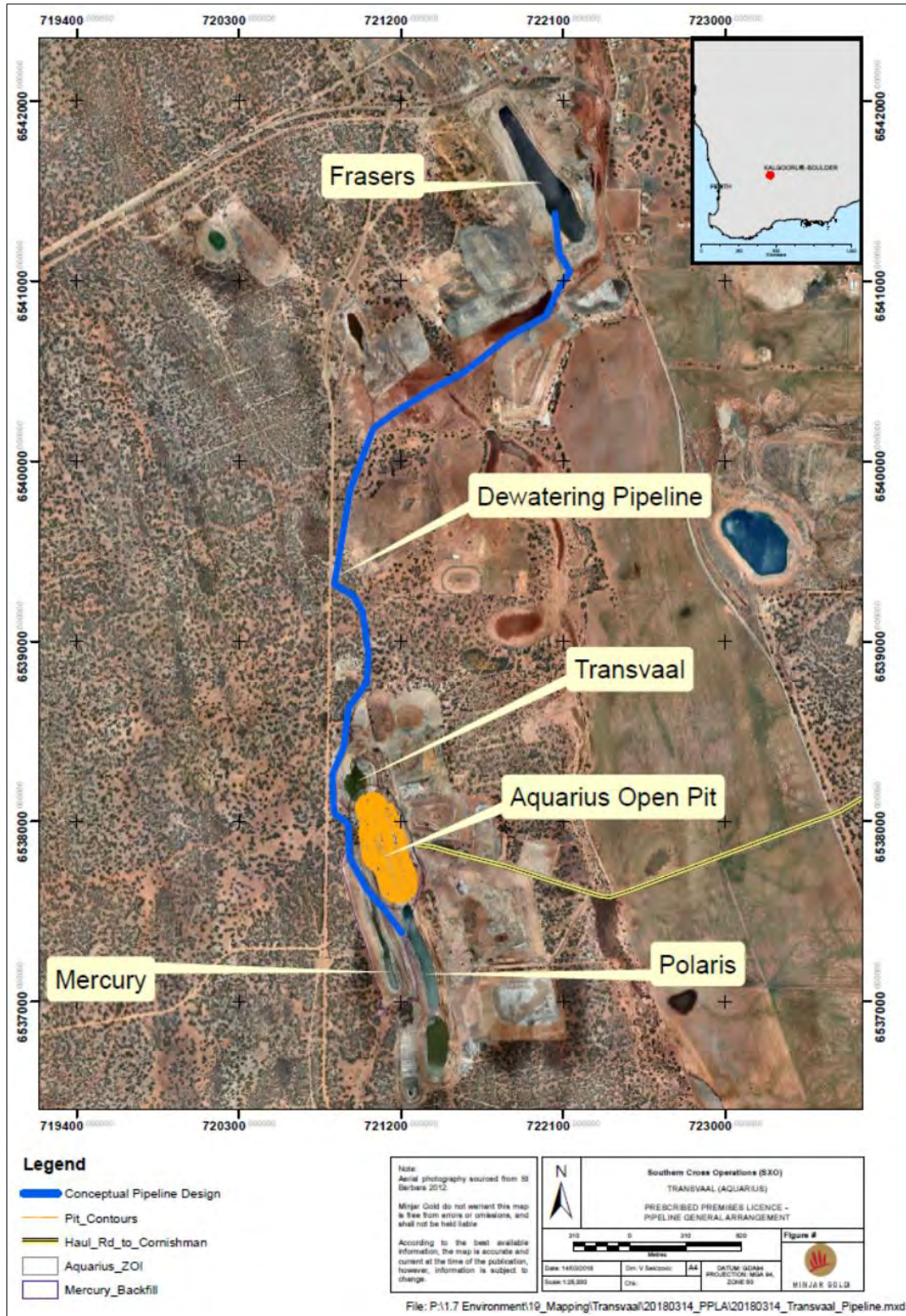


Figure 12: Dewatering pipeline from Frasers to the Transvaal complex

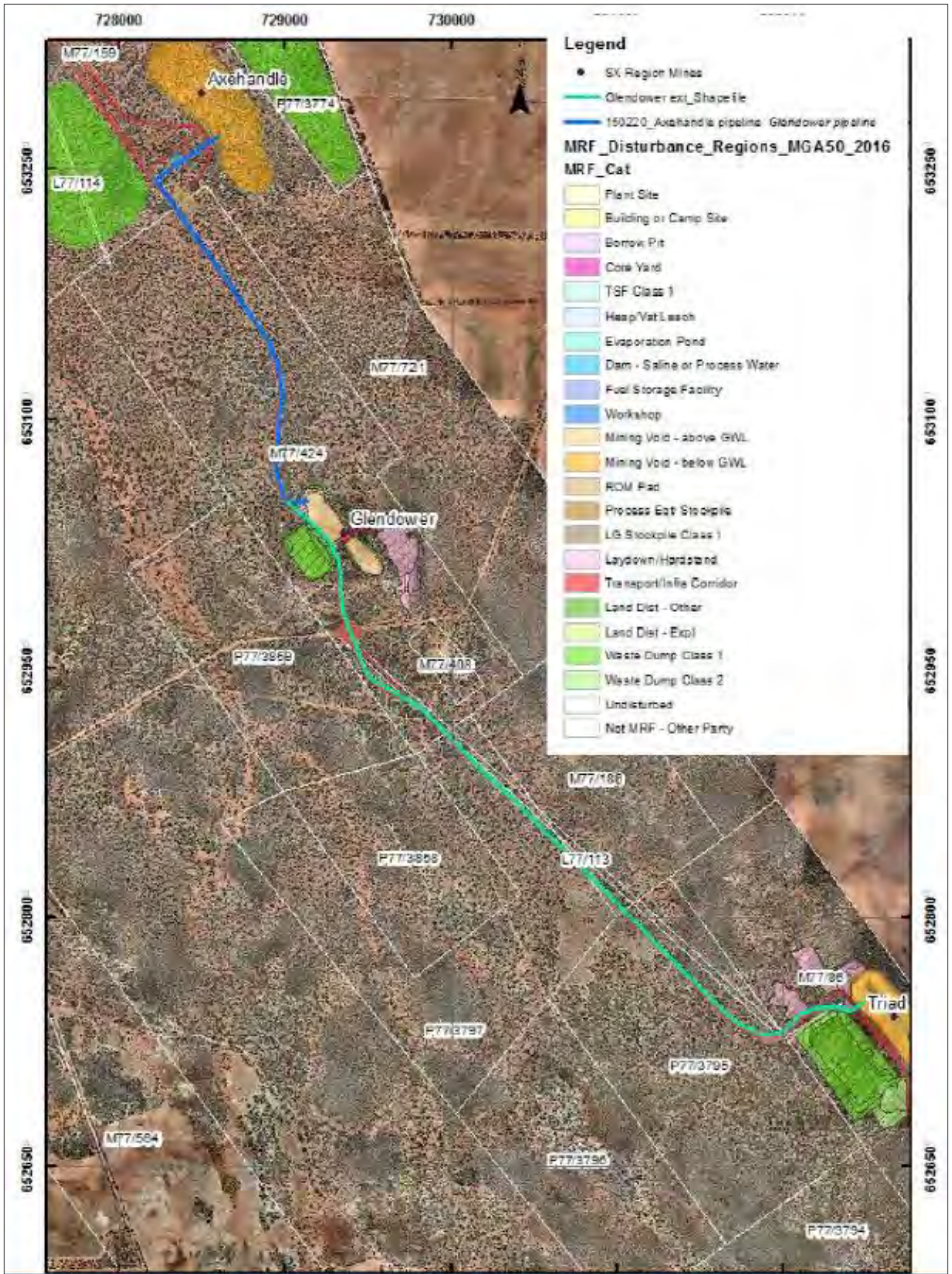


Figure 13: Dewatering pipeline from Axehandle to Glendower to Triad Pits





Figure 15: Location of Victoria's pipeline and Victoria's Turkey's Nest



Figure 16: Location of Yilgarn Star – Nevoria pipeline with sump locations

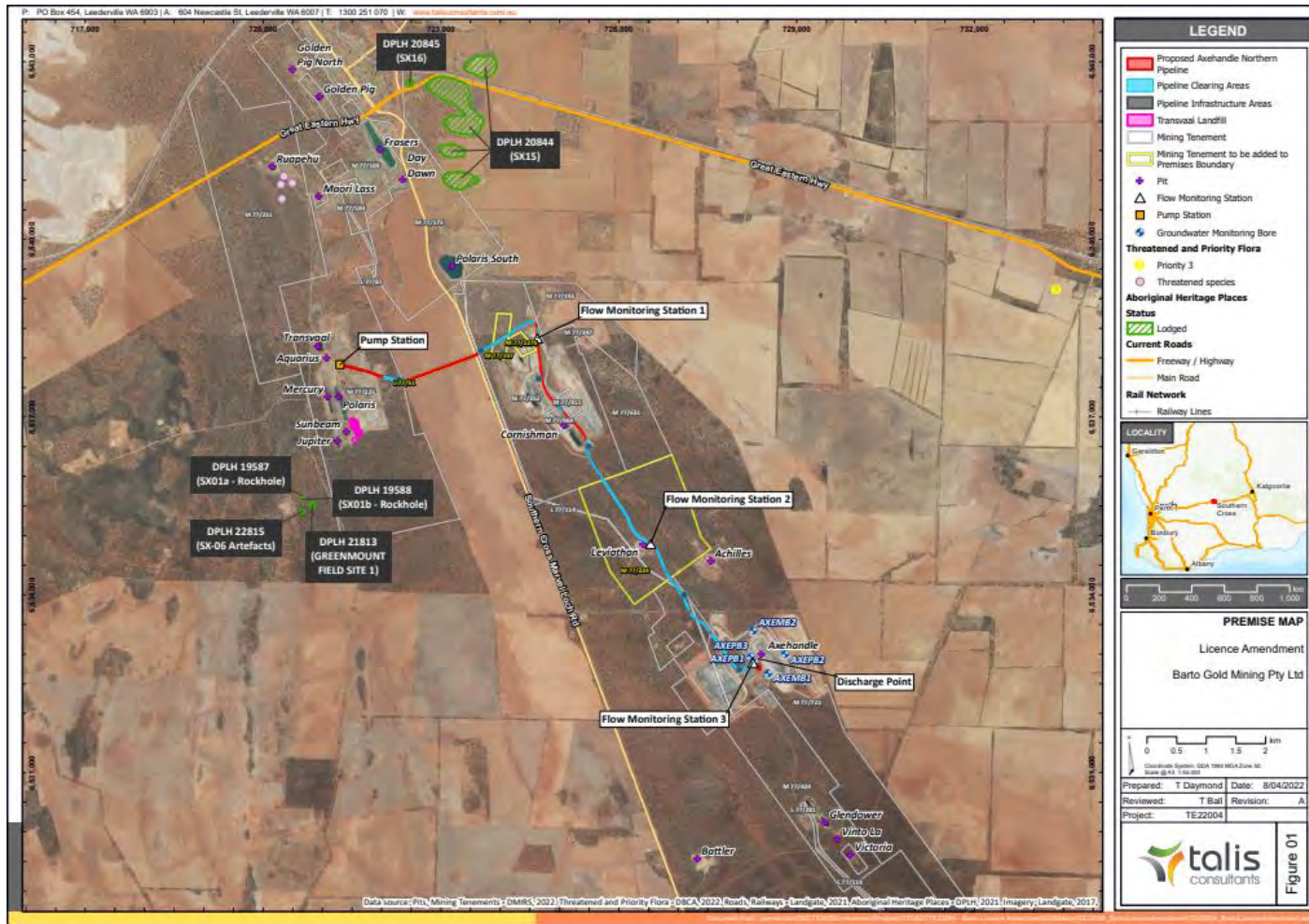


Figure 17: Location of Axehandle dewatering pipeline including the proposed location for the three flow monitoring stations and Cornishman complex discharge locations

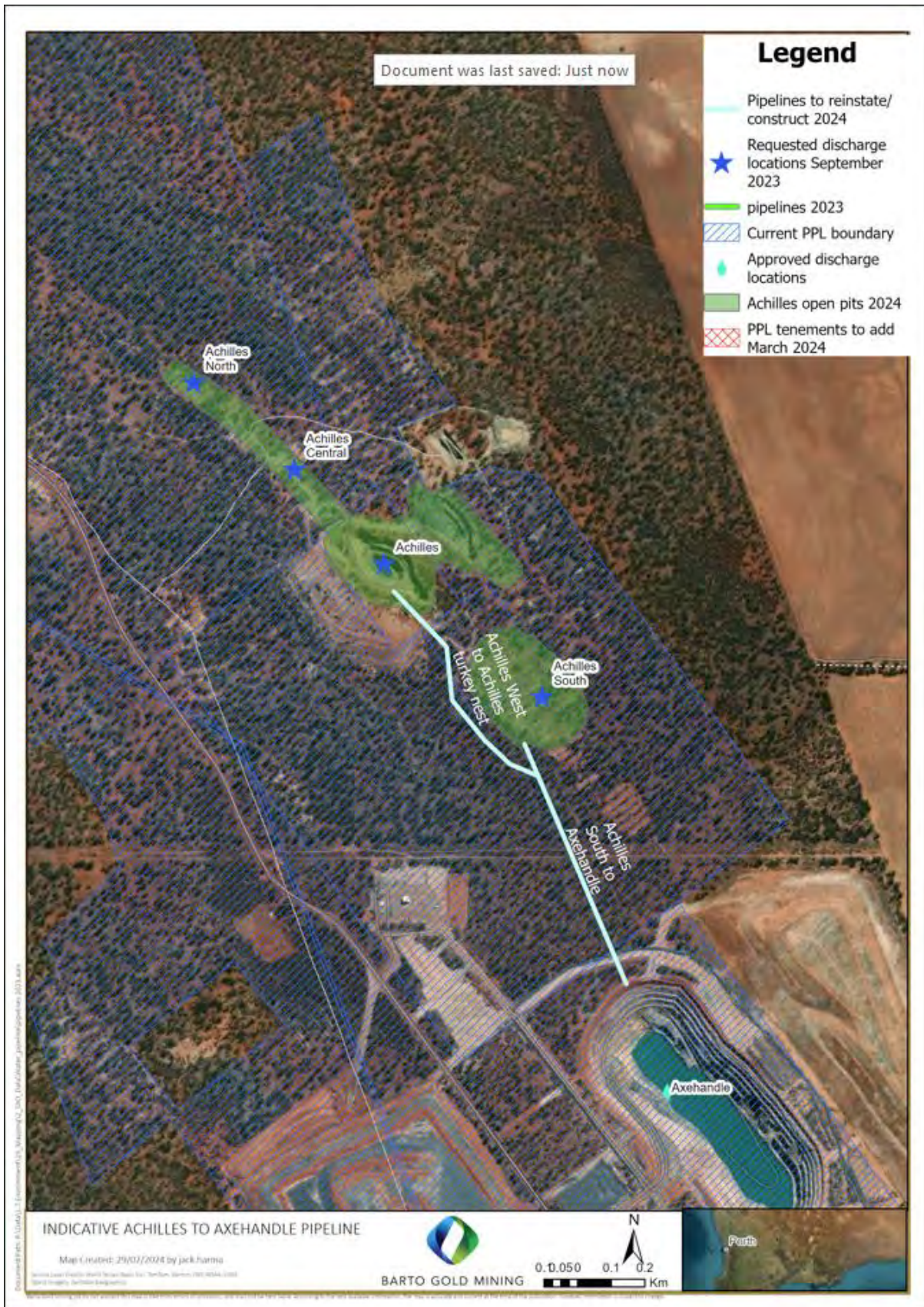


Figure 18: Location of pipeline from Achilles to Axehandle



Figure 19: Location of pipeline from Rhapsody Pit to Windmills Pit



Figure 20: Nevoria to Southern Star Pipeline (Section 1)



Figure 21: Nevoria to Southern Star Pipeline (Section 2)



Figure 22: Yilgarn Star to Harris Find Pipeline



Figure 23: Ruapehu Pit to Maori Lass Pit to Frasers-Transvaal Pipeline

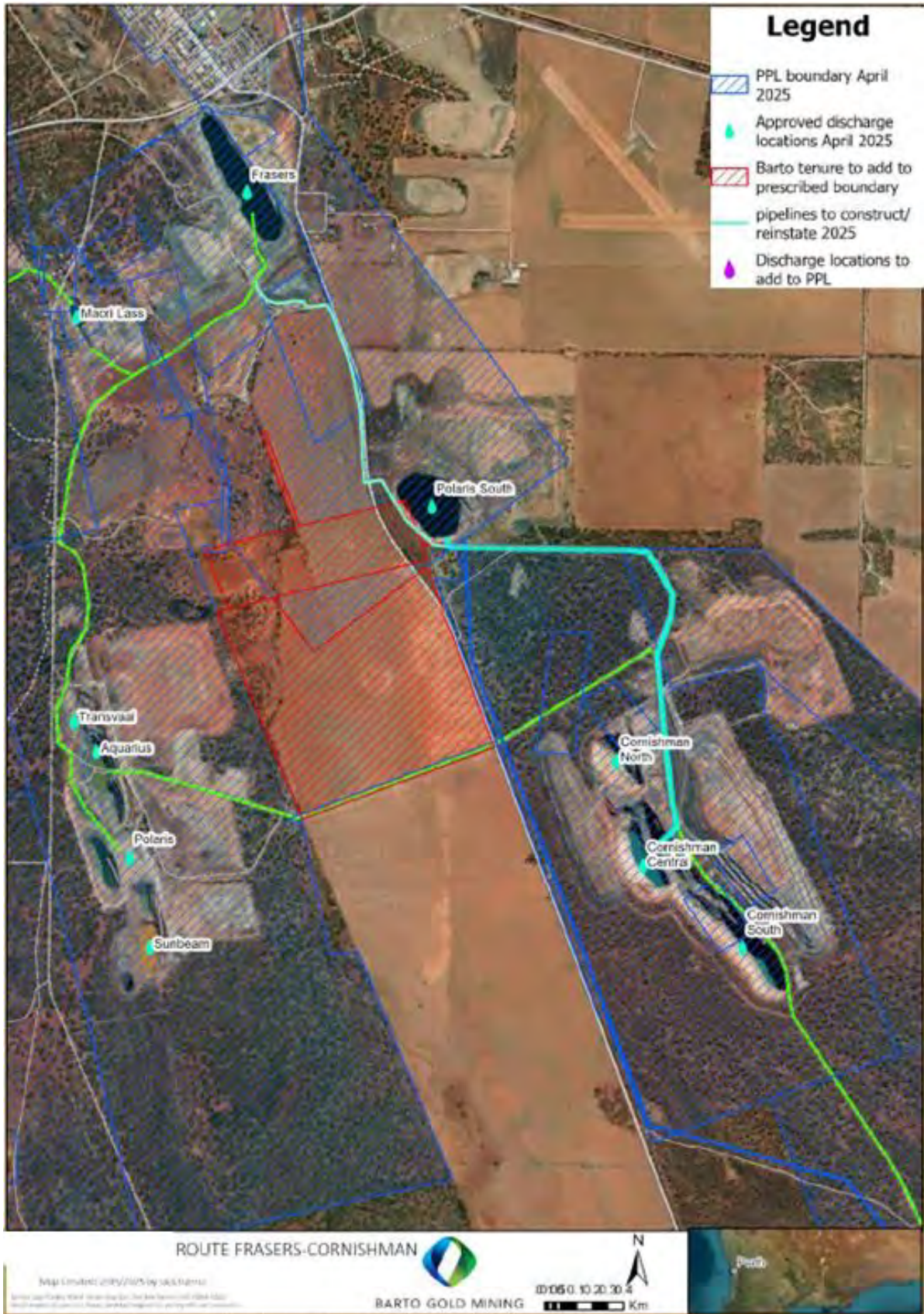


Figure 24: Frasers to Polaris South to Cornishman pipeline route

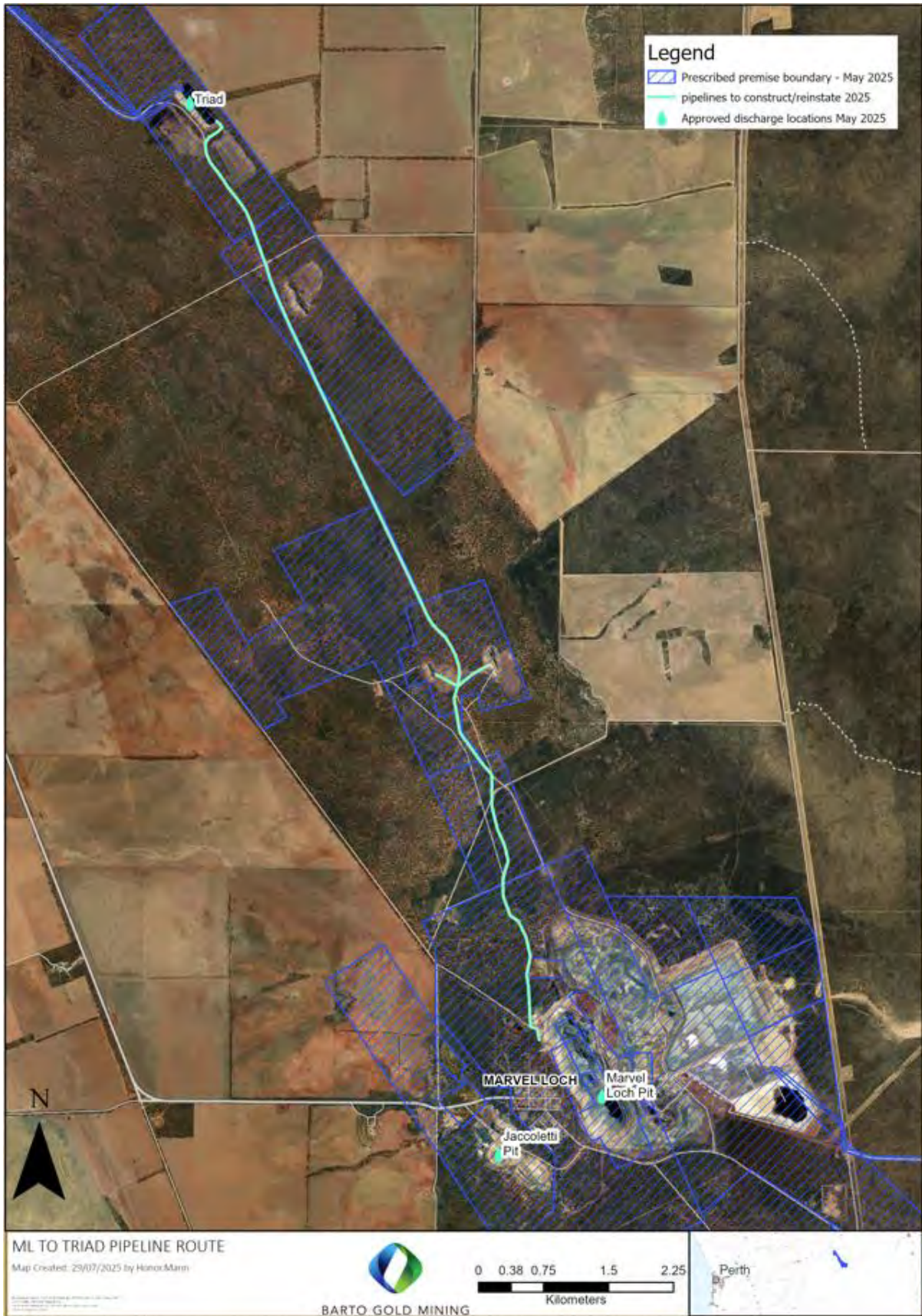


Figure 25: Marvel Loch to Triad pipeline route

Maps of infrastructure to be constructed

Schedule 2: design drawings

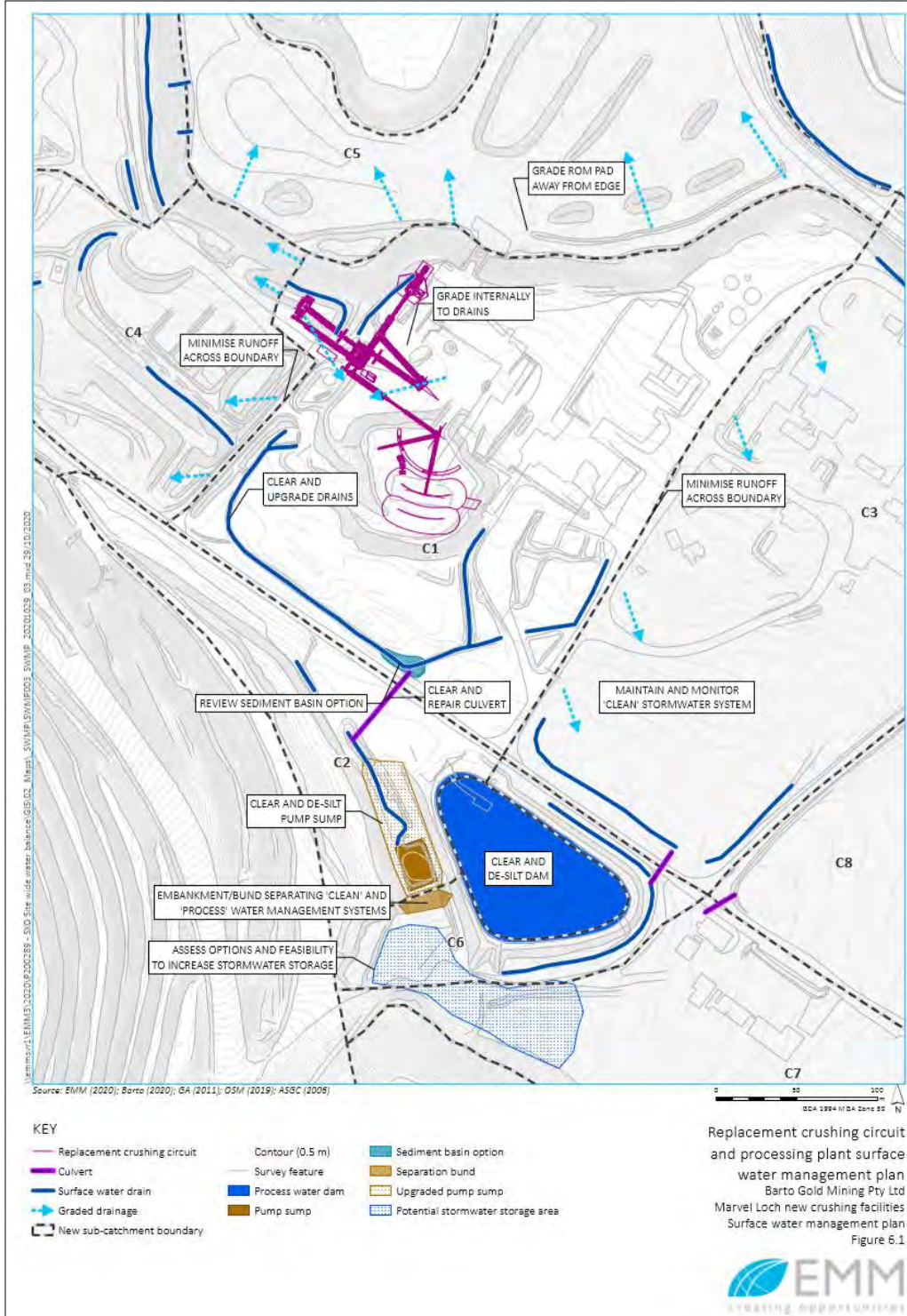
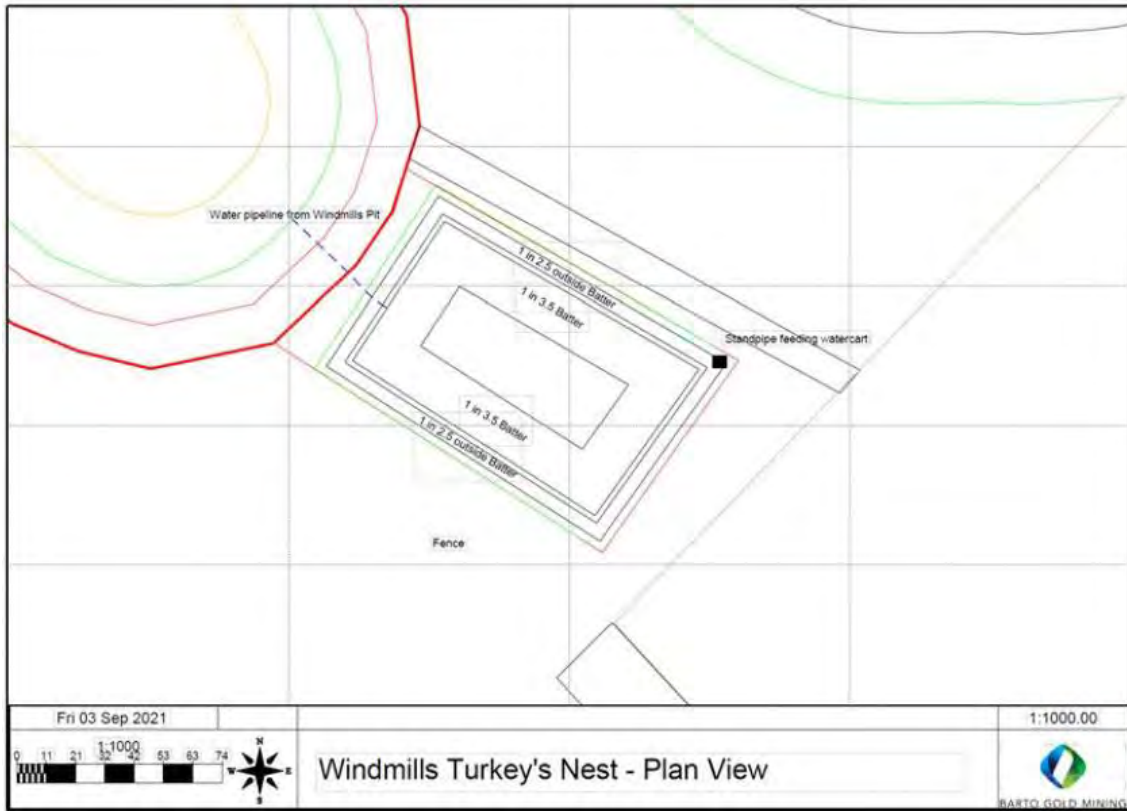


Figure 26: Map of stormwater infrastructure to be constructed in accordance with Condition 24, Table 6.



**Figure 27: Layout map of the Windmills Turkey's Nest and dewatering pipeline from Windmills Pit**

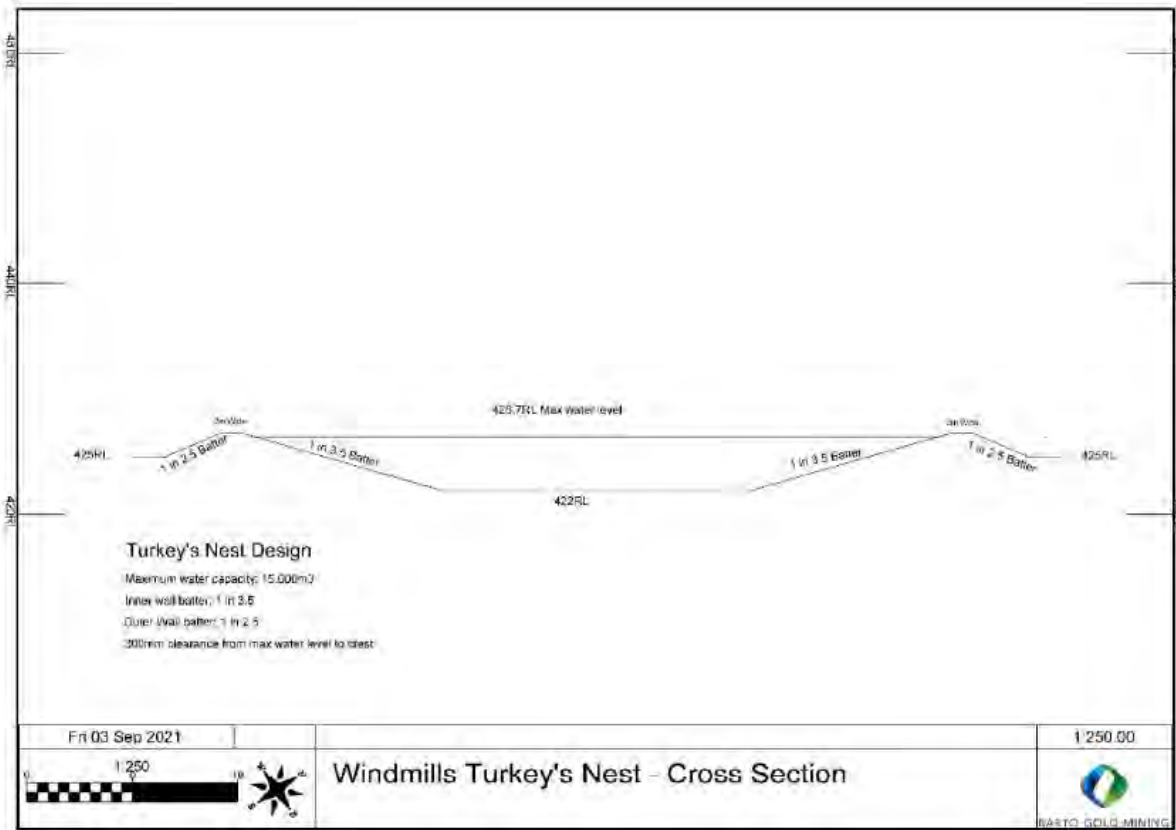


Figure 28: Cross section of Windmills Turkey's Nest

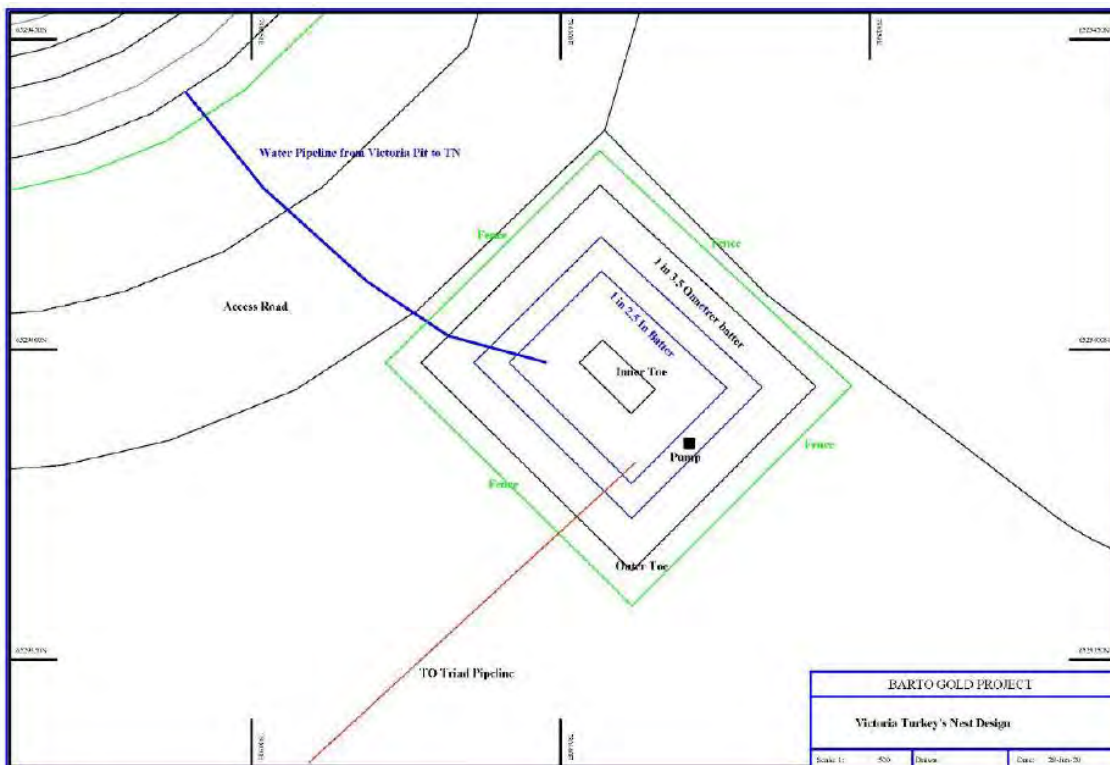


Figure 29: Layout map of the Victoria's Turkey's Nest and dewatering pipeline from Victoria's Pit

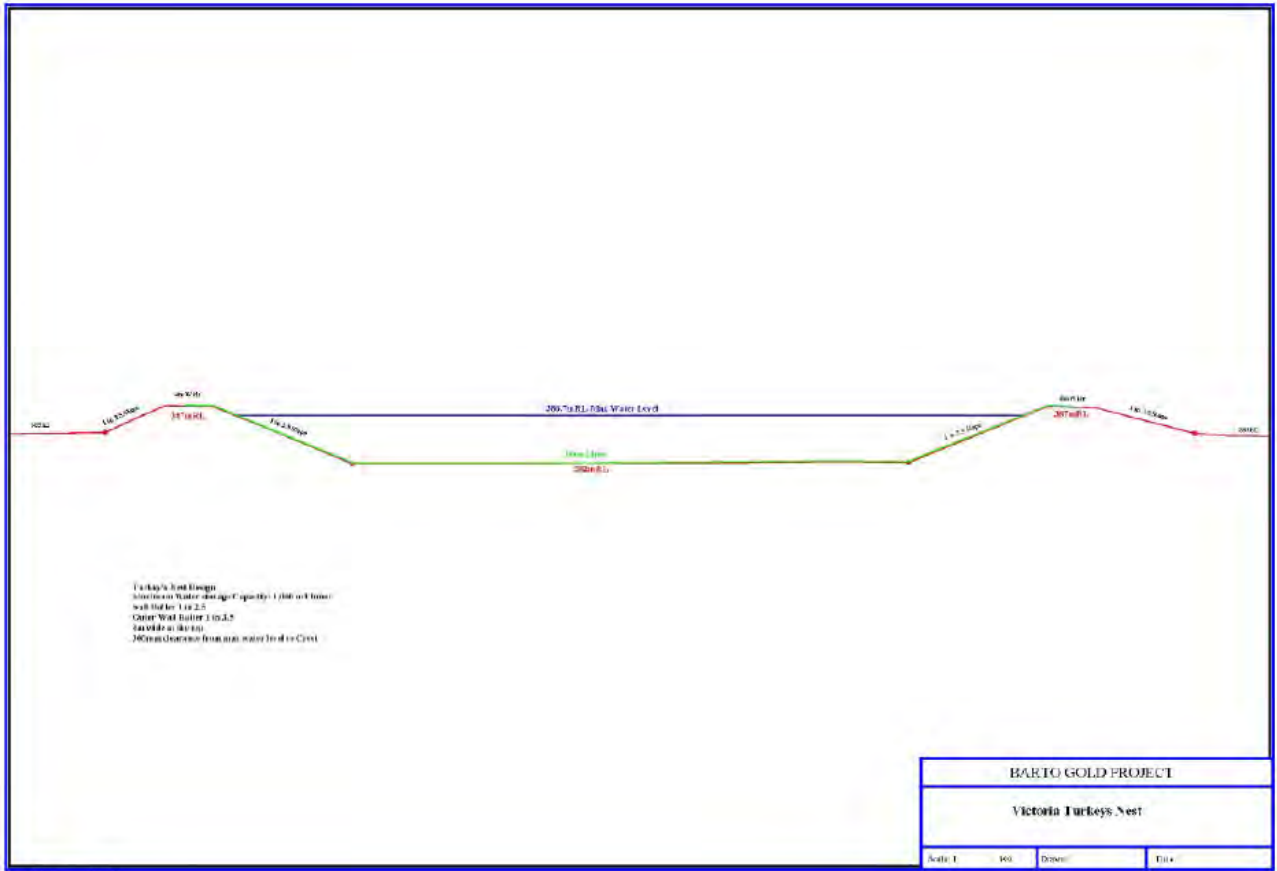


Figure 30: Cross section of Victoria's Turkey's Nest

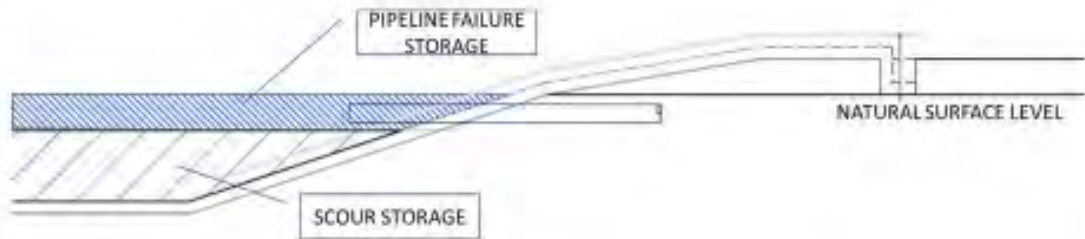


Figure 31: Diagrammatic representation of scour sump to be created for the section of the Axehandle Pipeline that will sit above the ground

Design drawings for TSF3 Embankment lifts (stage 3-7) (sourced from: Coffey, 2017)

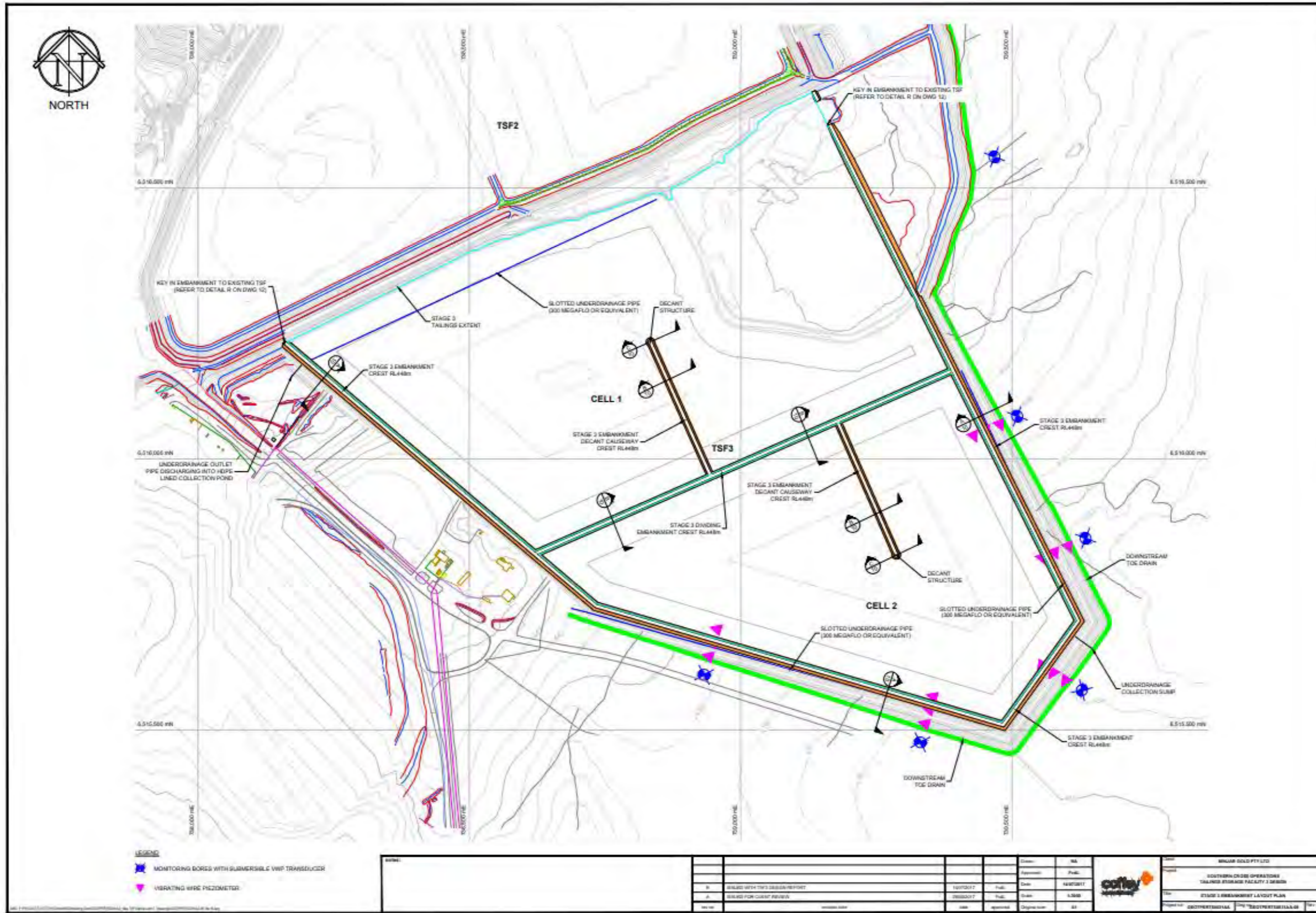


Figure 32:TSF 3 Stage 3 Embankment Layout plan

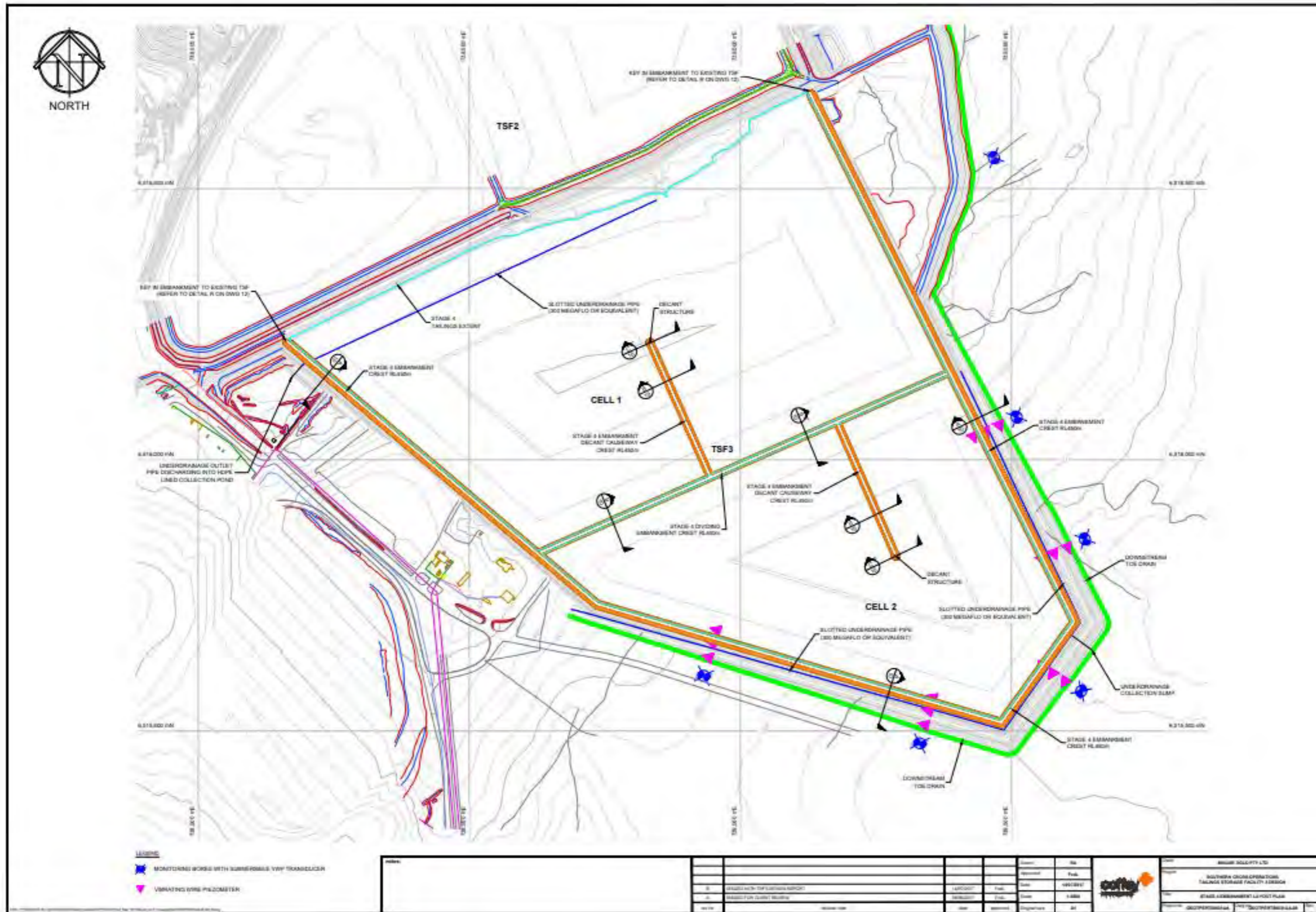


Figure 33: TSF3 Stage 4 Embankment Layout plan

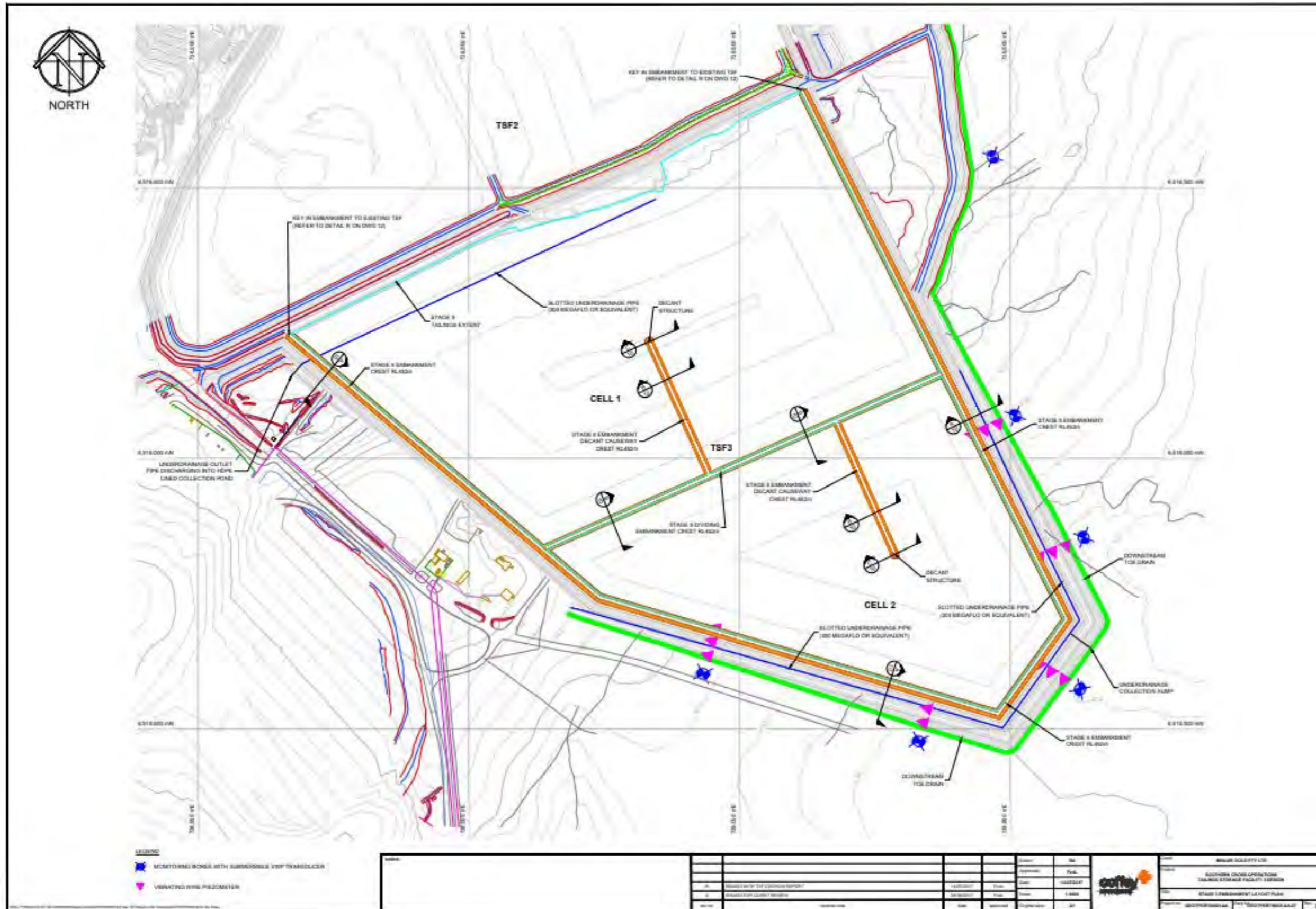


Figure 34: TSF3 Stage 5 Embankment Layout plan

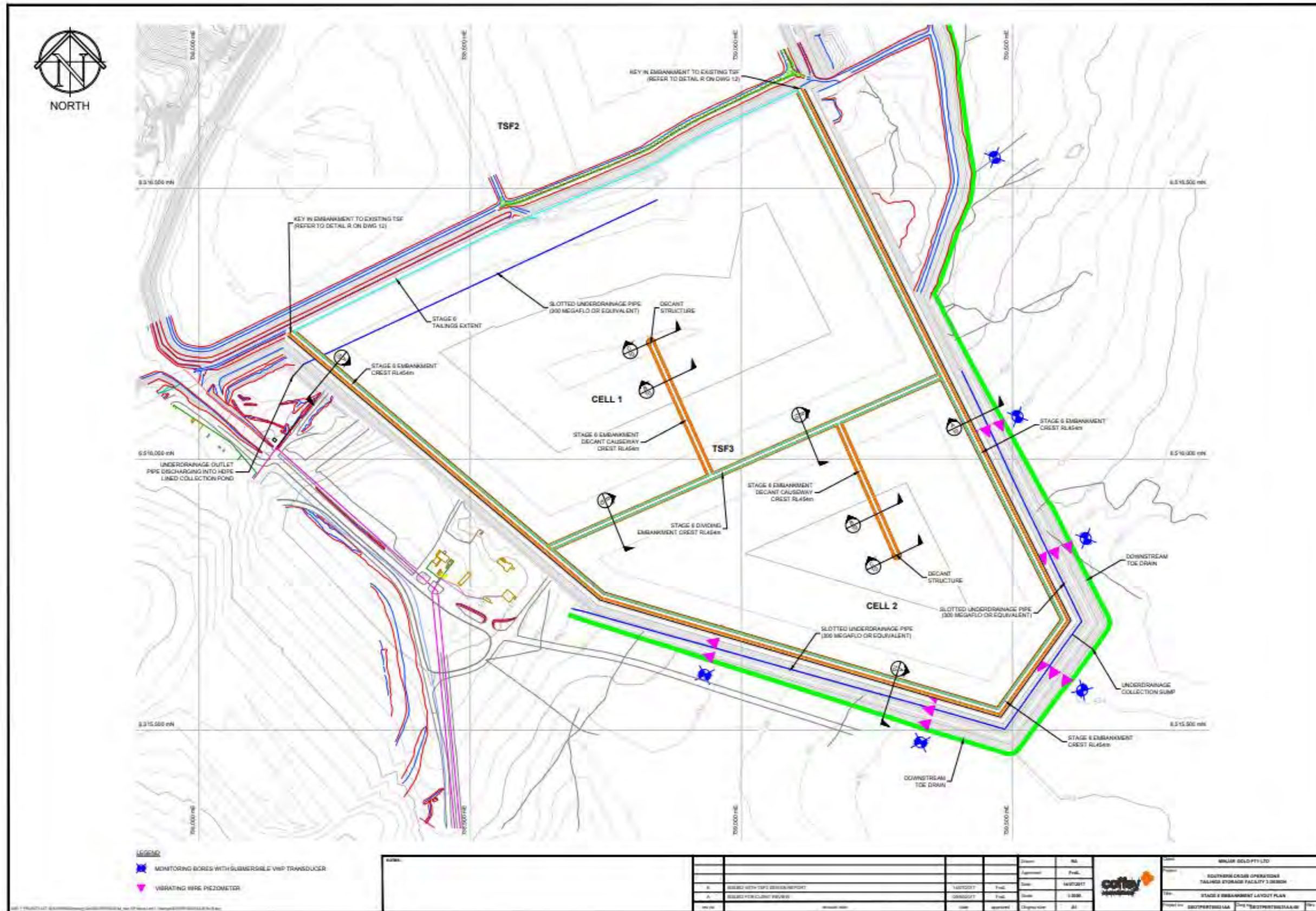


Figure 35: TSF3 Stage 6 Embankment Layout plan

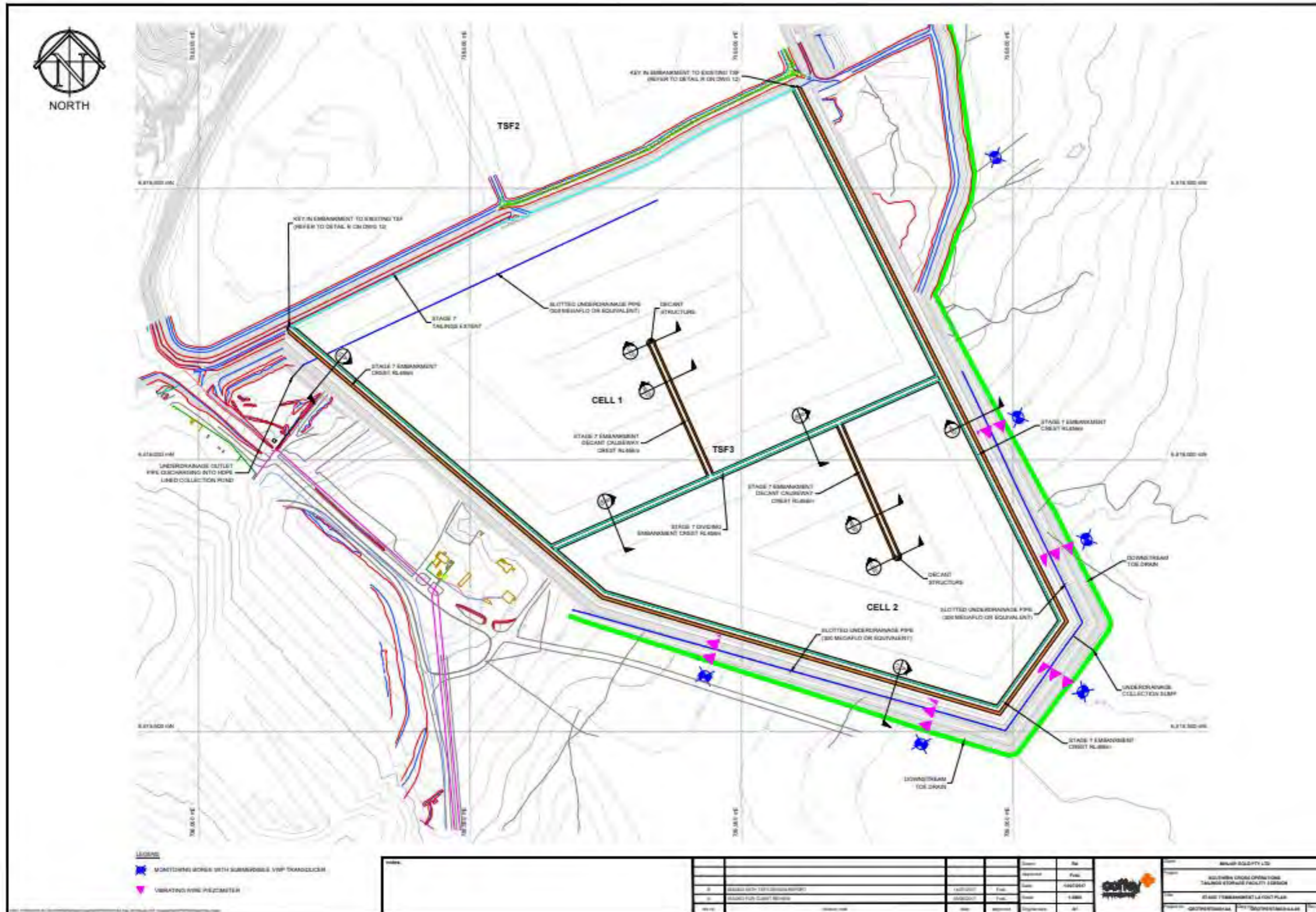


Figure 36: TSF3 Stage 7 Embankment Layout plan

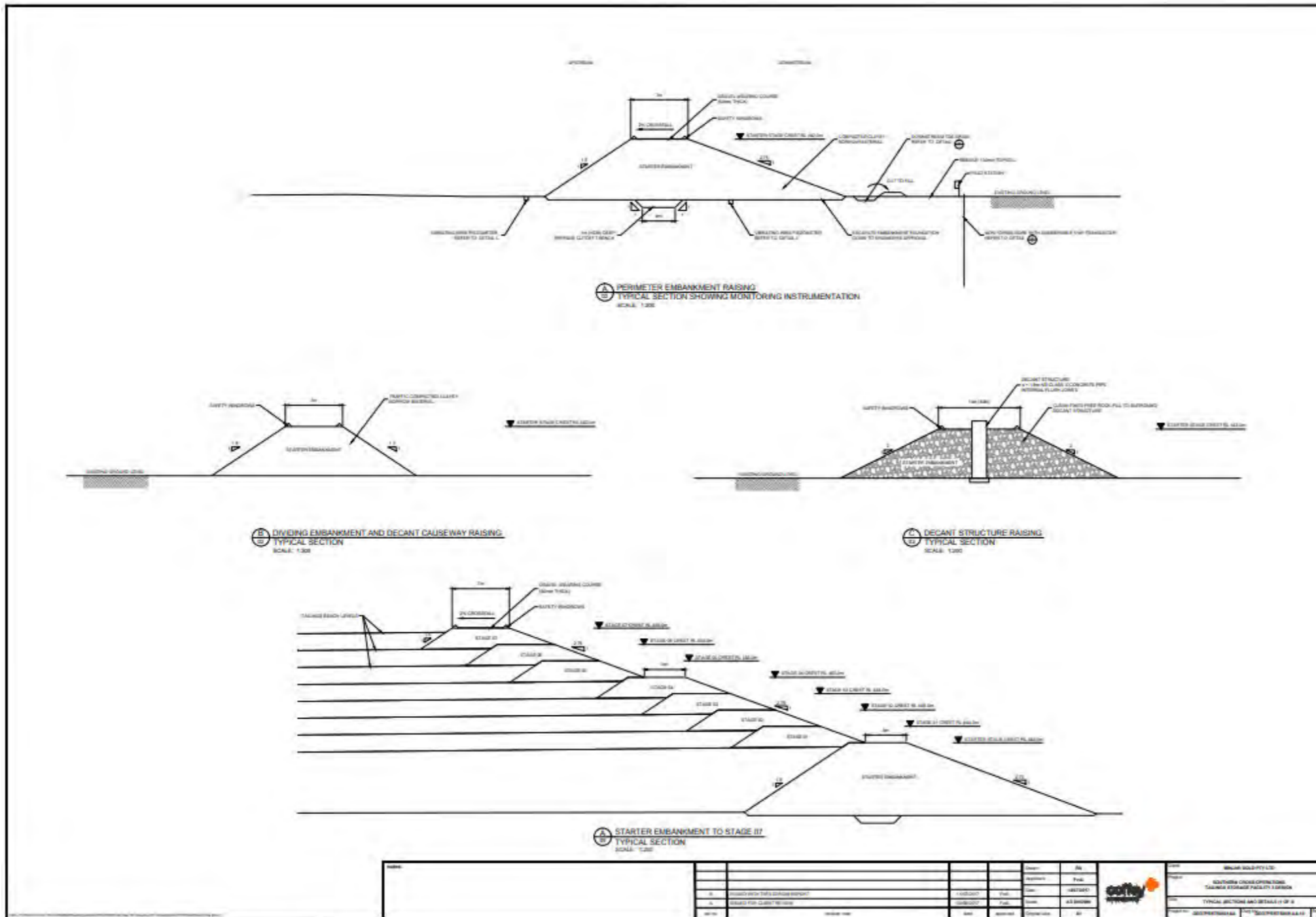


Figure 37: TSF3 Section details

## APPENDIX 2: ANNUAL AUDIT COMPLIANCE REPORT



## Annual Audit Compliance Report Form

Environmental Protection Act 1986, Part V Division 3

Once completed, please submit this form either via email to [info@dwer.wa.gov.au](mailto:info@dwer.wa.gov.au), or to the below postal address:

Department of Water and Environmental Regulation  
Locked Bag 10  
Joondalup DC WA 6919

Section A – Licence details			
Licence number:	L4597/1988/14	Licence file number:	DER2014/000887-1-8
Licence holder name:	Barto Gold Mining Pty Ltd		
Trading as:			
ACN:	161 566 490		
Registered business address:	Level 3, 66 Kings Park Road WEST PERTH WA 6005		
Reporting period:	01/ 10 / 2024 to 30 / 09 / 2025		


Section B – Statement of compliance with licence conditions
Did you comply with all of your licence conditions during the reporting period? (please tick the appropriate box)
<input type="checkbox"/> Yes – please complete: <ul style="list-style-type: none"><li>section C;</li><li>section D (if required); and</li><li>sign the declaration in Section F.</li></ul>
<input checked="" type="checkbox"/> No – please complete: <ul style="list-style-type: none"><li>section C;</li><li>section D (if required);</li><li>section E; and</li><li>sign the declaration in Section F.</li></ul>

Section C – Statement of actual production	
Provide the actual production quantity for this reporting period. Supporting documentation is to be attached.	
Prescribed premises category	Actual production quantity
05: Processing or beneficiation of metallic or non-metallic ore	1,423,531 dry tonnes of ore milled

Section D – Statement of actual Part 2 waste discharge quantity	
Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.	
Prescribed premises category	Actual Part 2 waste discharge quantity
05: Processing or beneficiation of metallic or non-metallic ore	2,206,473 of tailings slurry discharge to TSF 3

<b>Section D – Statement of actual Part 2 waste discharge quantity</b>	
Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.	
<b>Prescribed premises category</b>	<b>Actual Part 2 waste discharge quantity</b>
06: Mine dewatering	1,890,065 kl discharged
64: Class II or III putrescible landfill	342 tonnes

Section E – Details of non-compliance with licence condition			
Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.			
Condition no:	1.0	Date(s) of non-compliance:	October 2024-August 2025
Details of non-compliance:			
The Nevoria pipeline swale between the turkey nest and the pit complex was identified to have deteriorated during the reporting year.			
What was the actual (or suspected) environmental impact of the non-compliance?			
<b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
No actual environmental impact has occurred to date from this non-compliance.			
Cause (or suspected cause) of non-compliance:			
The pipelines from the pit complex to the Turkey Nest have sat within the swale since their installation in the early 1990s. Over this time, some sediment has been deposited in the swale therefore reducing the capacity of it.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
The removal of the redundant pipeline from within the swale and improvement to the swales capacity by removing sediment occurred during the later parts of the reporting period.			
Was this non-compliance previously reported to DWER?			
<input type="checkbox"/> Yes, and			
<input type="checkbox"/> Reported to DWER verbally		Date: / /	
<input type="checkbox"/> Reported to DWER in writing		Date: / /	

Section E – Details of non-compliance with licence condition			
Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.			
Condition no:	4.0	Date(s) of non-compliance:	13/12/2024
Details of non-compliance:			
<p>After a large flood event of some 30mm in the day, stormwater flowed into the area where the TSF north seepage collection sump is located, resulting in the two seepage ponds being inundated by a significant volume of rainwater flowing into the low point. Much of the area is previously disturbed comprising access tracks and seepage pond infrastructure.</p>			
<p>What was the actual (or suspected) environmental impact of the non-compliance?</p> <p><b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
<p>A localized area of impact was observed in surrounding vegetation located in the immediate vicinity. The overflow is predominantly clean rainwater. However, it is acknowledged that this freshwater has mixed with a relatively small volume of tailings seepage water located in the smaller of the two seepage ponds and residual sediment build up in the larger one. The environmental impact was minor contamination of soil and some vegetation deaths.</p>			
			
Cause (or suspected cause) of non-compliance:			

Section E – Details of non-compliance with licence condition	
<p>The infrastructure was not engineered nor maintained to avoid inundation from a large rainfall event. Pump mechanism relied on manual intervention to turn pumps on and off, no automated water level switch available at time of the incident.</p>	
<p>Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:</p>	
<p>Barto reported a similar event in the previous reporting period of 2023/2024. This was also reported to the Department of Mines, Petroleum and Energy. The Seepage collection area and surface drainage management was agreed to be overhauled and improved. Barto engaged REC consultants to re-design the seepage and drainage control activities of the area to ensure no such incidents can occur in the future. Some minor earthworks occurred in winter 2025 as per RECs scope of works, with most of the works occurring later in 2025 once the area is safe for construction.</p>	
<p>Was this non-compliance previously reported to DWER?</p>	
<p><input checked="" type="checkbox"/> Yes, and</p>	
<p><input type="checkbox"/> Reported to DWER verbally</p>	<p>Date: / /</p>
<p><input checked="" type="checkbox"/> Reported to DWER in writing</p>	<p>Date: 13 / 12 / 2024</p>

**Section E – Details of non-compliance with licence condition**

Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.

Condition no:	5.0	Date(s) of non-compliance:	01/05/2025- 30 September 2025
---------------	-----	----------------------------	-------------------------------

Details of non-compliance:

The minimum 10-meter freeboard at the Maori Lass Pit was breached by 1.5 meters to 8.5 meters below the pit crest in May 2025.



What was the actual (or suspected) environmental impact of the non-compliance?

**NOTE** – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.

Section E – Details of non-compliance with licence condition	
<p>No impact on the surrounding environment was or has been observed since. The water level of Maori Lass as of 12<sup>th</sup> October 2025 is approximately 335.65m AHD or 9.717m AHD and still shallower than the 10-meter limit.</p>	
Cause (or suspected cause) of non-compliance:	
<p>A communication breakdown between cross shifts regarding the management of the dewatering discharge was the cause of the 10-meter free board breach.</p>	
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:	
<p>The discharge to the Maori Lass Pit ceased once the breach was known. Dewatering from Frasers to Transvaal re-commenced. The pipeline from Frasers to Polaris South &amp; Cornishman was under construction at time of preparing this AACR.</p>	
Was this non-compliance previously reported to DWER?	
<input type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input type="checkbox"/> Reported to DWER in writing	Date: / /

Section E – Details of non-compliance with licence condition			
Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.			
Condition no:	12.0	Date(s) of non-compliance:	01/05/2025
Details of non-compliance:			
As part of the annual Department of Mines and Energy inspection in April, it was noted that some waste oil containers at Bartos Nevoria site were not bunded. Barto had begun a work program for the cleanup of the Nevoria operations earlier in February and works had been ongoing at the time of the DMPE inspection.			
What was the actual (or suspected) environmental impact of the non-compliance?			
<b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
No impact on the surrounding environment was or has been observed since, however the potential for harm is noted. Barto has since removed these IBCs for recycling offsite.			
Cause (or suspected cause) of non-compliance:			
The Nevoria underground operation was put into care & maintenance in late 2022. Since then, the workshop area has been utilized by several of Barto’s contractors. It is believed the IBCs belonged to a contractor who has since departed the SXO.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Barto has since removed these IBCs for recycling offsite.			
Was this non-compliance previously reported to DWER?			
<input type="checkbox"/> Yes, and			
<input type="checkbox"/> Reported to DWER verbally		Date: / /	
<input type="checkbox"/> Reported to DWER in writing		Date: / /	

Section E – Details of non-compliance with licence condition	
Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.	

Section E – Details of non-compliance with licence condition			
Condition no:	16.0	Date(s) of non-compliance:	The reporting period
Details of non-compliance:			
With regards to inert waste type 2, Barto is partially non-compliant. Tyres are typically removed offsite for recycling through the tyre suppliers (both LVs and HVs). Barto is permitted to landfill tyres but the process limits set out in table 4 were not met and therefore non-compliant.			
What was the actual (or suspected) environmental impact of the non-compliance? <b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
No impact suspected.			
Cause (or suspected cause) of non-compliance:			
Lack of education to staff and their contractors along with the lack of additional appropriate signage may be the cause of the non-compliance.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Designated areas at landfills to be identified for tyres. Burial of the tyres to be managed by the Barto site environment team and its contractors.			
Was this non-compliance previously reported to DWER?			
<input type="checkbox"/> Yes, and			
<input type="checkbox"/> Reported to DWER verbally		Date: / /	
<input type="checkbox"/> Reported to DWER in writing		Date: / /	

Section E – Details of non-compliance with licence condition			
Condition no:	25 & 27	Date(s) of non-compliance:	December 24-February 25
Details of non-compliance:			
<p>Condition 25 states when construction authorized under the licence is to occur between the 1<sup>st</sup> of September and the 31<sup>st</sup> of January,</p> <p>(a) Within two weeks prior to undertaking any construction activity, engage a fauna specialist to conduct a survey of the area 100m surrounding where construction activities to be undertaken, to identify and record active (in use) Malleefowl (<i>Leipoa ocellata</i>) mounds: and</p> <p>(b) Where an active (in use) Malleefowl mound is identified under condition 26 (a) of this licence, the licence holder must:</p> <p>(i) record the location;</p> <p>(ii) initiate management actions (s) to reduce the disturbance/impact to the Malleefowl mound as far as reasonably practical; and</p> <p>(iii) record all management actions taken.</p> <p>Barto’s TSF 3 Cell 1 stage 2 lift occurred within this period without a fauna specialist engaged. DWER noted a ‘compliance not demonstrated’ in their assessment of Barto’s TSF lift completion report. Barto’s Frasers to Cornishman pipeline upgrades were constructed in September 2025 also</p>			
What was the actual (or suspected) environmental impact of the non-compliance?			
<p><b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
Nil.			
Cause (or suspected cause) of non-compliance:			
<p>Barto believed that as the TSF footprint remains within current disturbance area of 2019 during the subsequent lifts, this condition didn’t apply. This is the same for the Frasers to Cornishman pipeline as there was no new disturbance. Most of the pipeline is withing freehold farmland that is cleared.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>Barto will seek to remove this condition with regards to TSF 3 lifts and some other items when it completes its next licence amendment application to DWER. This was agreed to by DWER in a letter received on the 9<sup>th</sup> of September 2025.</p>			
Was this non-compliance previously reported to DWER?			
<input type="checkbox"/> Yes,			
<input type="checkbox"/> Reported to DWER verbally		Date: / /	
<input type="checkbox"/> Reported to DWER in writing		Date: / /	

Section E – Details of non-compliance with licence condition			
Condition no:	29.0 (a)	Date(s) of non-compliance:	During the reporting period
Details of non-compliance:			
Condition 29a specifies that water samples comply specifically to AS/NZS 5667:1. Barto cannot state 100% compliance with the standards but partial compliance. Field Blanks and Transport blanks were not collected			
What was the actual (or suspected) environmental impact of the non-compliance? <b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
No impact			
Cause (or suspected cause) of non-compliance:			
Adherence to the standard QA/QC requirements wasn't upheld due to a lack of the standards knowledge.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
As part of Barto's revised sampling procedure, the standards will be followed more closely in 2025/2026			
Was this non-compliance previously reported to DWER?			
<input type="checkbox"/> Yes,			
<input type="checkbox"/> Reported to DWER verbally		Date: / /	
<input type="checkbox"/> Reported to DWER in writing		Date: / /	

Section E – Details of non-compliance with licence condition			
Condition no:	34, 35 & 36	Date(s) of non-compliance:	01/05/2025
Details of non-compliance:			
<p>Per table 10, the only pit that were discharged to during the reporting period was Maori Lass. This was sampled in June 2025 with discharge to the pit occurring in April 2025 over a 1-week period. Therefore, non-compliant. It should be noted that the Maori Lass was sampled in May 2024 and that only 16,295kl was discharge to the pit. As condition 34 was non-compliant, Barto didn't ensure condition 35 and 36 were met either.</p>			
<p>What was the actual (or suspected) environmental impact of the non-compliance?</p> <p><b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.</p>			
<p>Nil</p>			
Cause (or suspected cause) of non-compliance:			
<p>Barto didn't completely comprehend the recently imposed conditions regarding point source emissions to land and the frequency of such sampling.</p>			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
<p>Updates to the sampling schedule have occurred in the later parts of the reporting period.</p>			
Was this non-compliance previously reported to DWER?			
<input type="checkbox"/> Yes, and			
<input type="checkbox"/> Reported to DWER verbally		Date: / /	
<input type="checkbox"/> Reported to DWER in writing		Date: / /	

Section E – Details of non-compliance with licence condition			
Condition no:	38	Date(s) of non-compliance:	Reporting Period
Details of non-compliance:			
Some SWLs were not recorded on 12 occasions during the reporting year, specifically the Axehandle production bores.			
What was the actual (or suspected) environmental impact of the non-compliance? <b>NOTE</b> – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
Nil			
Cause (or suspected cause) of non-compliance:			
Non-compliance was a combination of staff turnover within the environmental team and access issues to the monitoring bore locations.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance:			
Barto will request the removal of the destroyed or inaccessible bores at Axehandle and Marvel Loch.			
Was this non-compliance previously reported to DWER?			
<input type="checkbox"/> Yes,			
<input type="checkbox"/> Reported to DWER verbally		Date: / /	
<input type="checkbox"/> Reported to DWER in writing		Date: / /	

**Section F – Declaration**

I / We declare that the information in this Annual Audit Compliance Report is true and correct and is not false or misleading in a material particular<sup>1</sup>.  
 I / We consent to the Annual Audit Compliance Report being published on the Department of Water and Environmental Regulation's (DWER) website.



Date:	28/10/2025	Date:	
Seal (if signing under seal):			

<sup>1</sup> It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular.

<sup>2</sup> AACRs can only be signed by the licence holder or an authorised person with the legal authority to sign on behalf of the licence holder.

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## APPENDIX 3: LICENCE CONDITION COMPLIANCE AUDIT

Ref.	Audit Element	Table	Compliant / Non-Compliant / Non-Applicable (C / NC)	Findings	Evidence See Photo and document tab.	Recommendation /Preventative and Corrective Action / Opportunity for Improvement / Positive Observation															
	<b>PRESCRIBED PREMISES CATEGORY DESCRIPTION (Schedule 1, Environmental Protection Regulations 1987)</b>																				
Cat 5	Processing or beneficiation of metallic or non-metallic ore. Assessed production capacity of 2,600,000 tonnes per annual period		Compliant	A total of 1,423,531 tonnes of ore was processed through the SXO processing plant at Marvel Loch between October 1 st 2024 and September 30th 2025	Sighted emails from the alternate processing manager and senior metallurgist (RE: Mill production data required)																
Cat 6	Mine dewatering. Assessed production capacity of 6,000,000 tonnes per annual period		Compliant	A total of 1,890,065 kl of mine water was discharged between October 1 st 2024 and September 30th 2025.	Sighted meter readings and spreadsheets located P:\Data\1.7 Environment\14_Monitoring & Reporting\2_Monitoring\2.4_Water\4_Pit and UG Abstraction Data\Dewatering																
Cat 64	Class II or III putrescible landfill. Assessed production capacity of 2,000 tonnes per annual period		Compliant	Barto Gold Mining have incorporated a conversion value of 0.3 t/m3 for Class II putrescible waste, based on the Government of Western Australia 'Waste Authority Guidance Note 6 - Converting Volumes to Tonnes'. Using this conversion rate, Barto have disposed a total of approximately 342 tonnes of putrescible waste into its active landfills during the reporting period.	Sighted Government of Western Australia 'Waste Authority Guidance Note 6 - Converting Volumes to Tonnes' on 03/10/2025.																
Cat 57	Used tyre storage. Assessed production capacity of 200 tyres per annual period		Compliant	All landfills onsite are permitted to accept Class 3 waste which includes tyres. However, in general, the landfills rarely receive tyres. All LV tyres are changed and recycled by the local tyre service, or for contractors, their suppliers. All HVs typically belong to the site contractors and are removed by them as directed. LV tyres are typically changed at the local tyre dealer in Southern Cross for which they are then recycled (with a charge back fee).																	
	<b>PREMISES OPERATION</b>																				
1.00	The Licence Holder must ensure that all pipelines containing saline water, tails, or process water are either: a) equipped with telemetry and pressure sensors along pipeline routes to allow the detection of leaks and failures; b) equipped with automatic cut-offs in the event of a failure; or c) provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections.		Partial non-compliance	. It was observed during the reporting period that the Nevoria pit complex to Turkey Nest swale was inadequate and required some maintenance work to improve the bunding. This occurred in September 2025	Sighted in the approved documentation P:\Data\1.7 Environment\05_Legal & Other_Reqs\06_Project Areas and P:\Data\1.7 Environment\05_Legal & Other_Reqs\07_Licenses\Prescribed Premise Licence\Current PPL licence																
	The licence Holder must ensure that tailings, decant water and effluent are only discharged into containment cells, dams or ponds, which are provided with the infrastructure detailed in Table 1.	<table border="1"> <thead> <tr> <th>Containment cell or dam number(s)</th> <th>Material</th> <th>Infrastructure requirements</th> </tr> </thead> <tbody> <tr> <td>TSF 1, 2 and 3</td> <td>Tailings</td> <td>Lined with in-situ clay to limit seepage to groundwater.</td> </tr> <tr> <td>TSF1, 2 and 3 decant water ponds</td> <td>Decant Water</td> <td>Lined with 1 mm High-density Polyethylene (HDPE) to achieve a permeability of at least &lt;math&gt;10^{-9}&lt;/math&gt; m/s or equivalent.</td> </tr> <tr> <td>Dewater discharge pits: Marvel Loch Pit, Glendower Pit, Jaccoletti Pit, Nevoria Pit, Fraser's Pit, Triad Pit, Polaris South Pit, Yilgarn Star pit, Axehandle Pit, Transvaal complex (Transvaal Pit, Aquarius Pit, Polaris Pit and Sunbeam Pit), Achilles West/East Pit, Achilles South Pit, Achilles North Pit, Rhapsody Pit, Windmills Pit, Redox Pit, Cornishman Complex Pits, GVG Pit, Hercules Pit, Grand National Pit, Southern Star Pit, Harris Find Pit, Ruapehu Pit, Maori Lass Pit, Lenneberg Pit, Mary Lena Pit and Treasury Pit.</td> <td>Mine dewater</td> <td>Bedrock.</td> </tr> <tr> <td>Bioremediation pad</td> <td>Hydrocarbon contaminated</td> <td>Ensure soil is bioremediated by:</td> </tr> </tbody> </table>	Containment cell or dam number(s)	Material	Infrastructure requirements	TSF 1, 2 and 3	Tailings	Lined with in-situ clay to limit seepage to groundwater.	TSF1, 2 and 3 decant water ponds	Decant Water	Lined with 1 mm High-density Polyethylene (HDPE) to achieve a permeability of at least <math>10^{-9}</math> m/s or equivalent.	Dewater discharge pits: Marvel Loch Pit, Glendower Pit, Jaccoletti Pit, Nevoria Pit, Fraser's Pit, Triad Pit, Polaris South Pit, Yilgarn Star pit, Axehandle Pit, Transvaal complex (Transvaal Pit, Aquarius Pit, Polaris Pit and Sunbeam Pit), Achilles West/East Pit, Achilles South Pit, Achilles North Pit, Rhapsody Pit, Windmills Pit, Redox Pit, Cornishman Complex Pits, GVG Pit, Hercules Pit, Grand National Pit, Southern Star Pit, Harris Find Pit, Ruapehu Pit, Maori Lass Pit, Lenneberg Pit, Mary Lena Pit and Treasury Pit.	Mine dewater	Bedrock.	Bioremediation pad	Hydrocarbon contaminated	Ensure soil is bioremediated by:	Compliant	TSF 3, built between June and November of 2019 was constructed with a clay liner as per the TSF design report prepared by Coffey and approved by DMIRS in January of 2018 and DWER as part of a licence amendment in December 2017. TSF 1 and 2 were constructed in late 1993. The foundation materials comprise lateritic gravels and silty sand over granite and dont represent a clay liner. All operational decant and process water ponds within Barto's tenement package are lined with HDPE liners as per the approval documents and tenement conditions. All mine dewater discharge to pits is within fresh rock or transitional material. Barto's Biopad construction and operating guideline outlines the management of its Biopad. All Turkey's Nest's on Bartos leases are lined with HDPE to ensure appropriate permeability.	Sighted is the TSF 3 supporting documentation for the DMIRS and DWER approval, P:\Data\1.7 Environment\05_Legal & Other_Reqs\06_Project Areas\Marvel Loch\3_DWER Approvals. P:\Data\1.7 Environment\05_Legal & Other_Reqs\06_Project Areas\Marvel Loch\2_Mining Proposals\TSF1 & Plant - 1993. The TSF 1 and 2 foundation layer is mentioned in the most recent annual TSF audit complete by Tetratech in 2021 and was sighted here P:\Data\1.7 Environment\15_Inspections & Audits\2_External\Annual TSF Audits\ML TSF - 2021 The Biopad construction and operating guideline was sighted and located here P:\Data\1.7 Environment\09_Document_Control\Finalised\1_Authorised	Barto to seek the removal of the reference to TSF 1 and TSF 2 from the infrastructure requirements regarding lining .
Containment cell or dam number(s)	Material	Infrastructure requirements																			
TSF 1, 2 and 3	Tailings	Lined with in-situ clay to limit seepage to groundwater.																			
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3.00	The licence holder must: a)Undertake inspections as detailed in table 2 b)Where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; c)Maintain a record of all inspections undertaken.	<p><b>Table 2: Inspection of infrastructure</b></p> <table border="1"> <thead> <tr> <th>Scope of inspection</th> <th>Type of inspection</th> <th>Frequency of inspection</th> </tr> </thead> <tbody> <tr> <td>Tailings pipelines</td> <td>Visual condition and leak assessment</td> <td>Daily</td> </tr> <tr> <td>Return water lines</td> <td>Visual condition, leak assessment and spills</td> <td>Daily</td> </tr> <tr> <td>Fuel storage areas, ore treatment plant and workshop</td> <td>Visual integrity</td> <td>Daily</td> </tr> <tr> <td>Borefields and pump stations</td> <td>Visual integrity</td> <td>Daily</td> </tr> <tr> <td>Mine de-water pipelines</td> <td>Visual condition and leak assessment</td> <td>Twice daily during operation</td> </tr> <tr> <td>Dewater discharge pits: Marvel Loch Pit, Glenbawn Pit, Jarcocott Pit, Nevoria Pit, Fraser's Pit, Triad Pit, Pokarie South Pit, Yilgam Star pit, Avenhale Pit, Transvaal complex (Transvaal Pit, Aquarius Pit, Pokarie Pit and Sunbeam Pit), Achilles West/East Pit, Achilles South Pit, Achilles North Pit, Rhapody Pit, Windmills Pit, Redox Pit, Cornishman Complex Pits, GVG Pit, Hercules Pit, Grand National Pit, Southern Star Pit, Harris Find Pit, Ruapehu Pit, Maori Lass Pit, Lemberg Pit, Mary Lena Pit and Treasury Pit</td> <td>Visual to confirm required freeboard is available</td> <td>Twice daily during operations</td> </tr> <tr> <td>TSF Embankment freeboard</td> <td>Visual to confirm required freeboard is available</td> <td>Daily and after a rain event</td> </tr> <tr> <td>Native vegetation health around infrastructure</td> <td>Visual health assessment</td> <td>Weekly</td> </tr> <tr> <td>TSF Embankment</td> <td>Structural integrity assessment</td> <td>Annual</td> </tr> <tr> <td>Dewater transfer turkeys nests at Nevoria, Yilgam Star, Avenhale, Victoria, Cornishman, Windmills, and Achilles</td> <td>Visual to confirm required freeboard is available</td> <td>Daily</td> </tr> </tbody> </table>	Scope of inspection	Type of inspection	Frequency of inspection	Tailings pipelines	Visual condition and leak assessment	Daily	Return water lines	Visual condition, leak assessment and spills	Daily	Fuel storage areas, ore treatment plant and workshop	Visual integrity	Daily	Borefields and pump stations	Visual integrity	Daily	Mine de-water pipelines	Visual condition and leak assessment	Twice daily during operation	Dewater discharge pits: Marvel Loch Pit, Glenbawn Pit, Jarcocott Pit, Nevoria Pit, Fraser's Pit, Triad Pit, Pokarie South Pit, Yilgam Star pit, Avenhale Pit, Transvaal complex (Transvaal Pit, Aquarius Pit, Pokarie Pit and Sunbeam Pit), Achilles West/East Pit, Achilles South Pit, Achilles North Pit, Rhapody Pit, Windmills Pit, Redox Pit, Cornishman Complex Pits, GVG Pit, Hercules Pit, Grand National Pit, Southern Star Pit, Harris Find Pit, Ruapehu Pit, Maori Lass Pit, Lemberg Pit, Mary Lena Pit and Treasury Pit	Visual to confirm required freeboard is available	Twice daily during operations	TSF Embankment freeboard	Visual to confirm required freeboard is available	Daily and after a rain event	Native vegetation health around infrastructure	Visual health assessment	Weekly	TSF Embankment	Structural integrity assessment	Annual	Dewater transfer turkeys nests at Nevoria, Yilgam Star, Avenhale, Victoria, Cornishman, Windmills, and Achilles	Visual to confirm required freeboard is available	Daily	Compliant	All active pipelines, return water lines, TSF's, discharge lines to pits etc are inspected twice daily. Inspection records are completed and saved on the interval server.	Inspection records sighted and located here P:\Data\1.7 Environment\14_Monitoring_&_Reporting\2_Monitoring\2.4_Water\5_Pipeline Inspections	
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4.00	The licence holder must maintain a minimum 300mm embankment freeboard on the settling ponds or storage facilities, including tailings storage facilities and turkeys nests, and ensure that the facility is designed to hold any inflow received as a result of a 1:100 year, 72 hour duration storm event, for at least 72 hours.		Non-compliance	The North Seepage dam adjacent to TSF 1 breached the 300mm freeboard during the reporting period. This was reported as an N1.	N1 report located here P:\Data\1.7 Environment\13_Incidents\2024\TSF Nth Seepage flooding overflow	Barco engaged REC consultants to re-design the seepage and drainage control activities of the area to ensure no such incidents can occur in the future. Some minor earthworks occurred in winter 2025 as per RECs scope of works, with most of the works occurring later in 2025 once the area is safe for construction.																																	
5.00	The Licence Holder must maintain a minimum 10m embankment freeboard on the dewater discharge pits and ensure that the facility is designed to hold any inflow received as a result of a 1:100 year, 72-hour duration storm event, for at least 72 hours.		Non-compliance	During the reporting year, the Maori Lass Pit was filled marginally above the 10 meter freeboard limit.	Water levels sighted here P:\Cornishman\02_Survey\Environmental\Waterlevels																																		
6.00	The licence Holder must install and maintain protective bunding, skimmers, silt traps, neutralisation pits, fuel and oil traps, drain and/or sealed collection sumps around the process plant, maintenance workshops and laboratory to enable recovery of spillages and protection of surrounding soils and groundwater.		Compliant	Suitable containment infrastructure and bunding is present throughout the majority of Barto's Southern Cross Operations from the processing plant to the workshops and fuelbays. Concrete bunding is located throughout from the reagent area to the haulage contractors fuelbay.	Internal inspection schedule and photos sighted here P:\Data\1.7 Environment\15_Inspections_&_Audits\1_Internal																																		
7.00	The Licence Holder must ensure that collected material from the sumps detailed in condition 6 are disposed off-site in accordance with the Environmental Protection (Controlled Waste) regulations 2004.		Compliant	Waste hydrocarbon products such as oil lubricants, hydraulic fluid, used grease, and contaminated greasy rags are collected onsite for removal. Minesite Recycling Pty Ltd have been assigned to managing this at SXO. This also includes waste oily water from workshops, washbays, fuel bays etc	Controlled waste forms and spreadsheets were sighted from Minesite Recycling and locate here P:\Data\1.7 Environment\10_Operational_Control\Waste\Controlled_Waste\Controlled waste 2025																																		

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8.00	The Licence Holder must manage TSFs such that: A) A minimum top of embankment freeboard of 300mm is maintained across the full surface of the TSF B) A seepage collection and recovery system is provided and used to capture seepage from the TSF; and C) Seepage is returned to the TSF of the process.		Compliant	Barto's TSF 3 was managed throughout the reporting year to ensure the freeboard height didn't breach the 300mm limit. Seepage from TSF 3 is collected through seepage collection sumps, toe drains and inbuilt trenches	TSF inspections occur at minimum twice daily. Hardcopy inspection records are completed and then transferred to a spreadsheet and are located here P:\Data\4.0 Processing\02 Processing\14 Goldroom\10 TSF\Tails Dam 24-25. This included the TSF seepage recovery volumes.																
9.00	The Licence Holder must, upon becoming aware that the depth to groundwater level in monitoring bores around the TSF, listed in condition 38 (except for MB 94F1 and MB94E1) are less than 6.0mbgl, within 6 months, design and implement a groundwater recovery plan.		Compliant	Upon becoming aware that a particular water level around TSF 1 and 2 was shallower than 6mbgl, Barto notified DWER. It then designed, submitted then implemented a groundwater recovery plan to DWER in November 2019. Since then TSF 1 and 2 have ceased operation and have not received tailings for over 5 years.	The Groundwater Recovery Plan that was submitted to DWER pertaining to TSF 1 and 2 is sighted here P:\Data\1.7 Environment\01_Environmental Management System\02_Plans Procedures\Superseded\Groundwater Recovery Plan																
10.00	The licence Holder must ensure that the Groundwater Recovery Plan includes but is not limited to: i) Notification to the CEO of when and in how many bores the groundwater level could not be met; ii) Any environmental impacts observed; iii) Strategies to achieve the groundwater level, including; iv) Any additional recovery bores or trenches required; v) Maximising the performance of existing recovery bores vi) Frequency of groundwater level monitoring vii) Minimising the normal operating supernatant pool area on the TSF; viii) Frequency and scope of groundwater quality monitoring ix) Predicted increases in groundwater recovery x) Predicted timeframes to achieve the groundwater level; xi) Strategies to ensure the level will be met in the future; and xii) Establishing and implementing appropriate vegetation monitoring.		Compliant	As above in condition 9	The Groundwater Recovery Plan that was submitted to DWER pertaining to TSF 1 and 2 is sighted here P:\Data\1.7 Environment\01_Environmental Management System\02_Plans Procedures\Superseded\Groundwater Recovery Plan																
11.00	The licence Holder must undertake an annual water balance for the TSF. The water balance shall as a minimum consider the following: a) Site rainfall b) Evaporation c) Decant water recovery volumes d) Seepage recovery volumes; and e) Volumes of tails deposited.		Compliant	Each year, as per tenement conditions and DWER prescribed premise licence conditions, an annual TSF audit is completed by a consultant in September. In 2025, TetraTech completed the audit and Barto is awaiting the report. Contained within is all the requirements listed under this condition 11.	The 2023 TSF audit was sighted and located here P:\Data\1.7 Environment\15_Inspections_& Audits\2_External\Annual TSF Audits\ML TSF - 2024. Barto is awaiting the final 2025 audit from TetraTech Coffey																
12.00	The licence Holder must collect waste lubricants, hydraulic fluids and spent radiator coolant / inhibitors in holding tanks in banded area for subsequent disposal off-site or recycling.		Partial non-compliance	In conjunction with condition 7, waste hydrocarbon products such as oil lubricants, hydraulic fluid, used grease, and contaminated greasy rags are collected onsite for removal for the majority. Minesite Recycling Pty Ltd and Wren Oil have been assigned to managing this at SXO. This also includes waste oily water from workshops, washbays, fuel bays etc. During the reporting year, some waste oil IBCs were not banded at Barto's Nevada complex and therefore the non-compliance.	Controlled waste forms and spreadsheets were sighted from Minesite Recycling and locate here P:\Data\1.7 Environment\10_Operational_Control\Waste\Controlled_Waste\Controlled waste 2025																
13.00	The licensee shall ensure that vehicle wash down areas are equipped with fuel/oil traps and provisions to ensure detergent, fuel, and solvent containing waters are contained and disposed of via an oil separator and a licensed Controlled Waste Carrier.		Compliant	As above, waste hydrocarbon products such as oil lubricants, hydraulic fluid, used grease, and contaminated greasy rags are collected onsite for removal. Minesite Recycling Pty Ltd have been assigned to managing this at SXO. This also includes waste oily water from workshops, washbays, fuel bays etc	Controlled waste forms and spreadsheets were sighted from Minesite Recycling and locate here P:\Data\1.7 Environment\10_Operational_Control\Waste\Controlled_Waste\Controlled waste 2025																
14.00	The licence Holder must only accept waste on to the landfill for burial if: a) It is of a type listed in Table 3 b) The quality accepted is below any quality limit listed in Table 3; and c) It meets any specification listed in Table 3	<p><b>Table 3: Waste acceptance</b></p> <table border="1"> <thead> <tr> <th>Waste type</th> <th>Quantity limit tonnes/ annual period</th> <th>Specification<sup>1</sup></th> </tr> </thead> <tbody> <tr> <td>Clean fill</td> <td></td> <td>None Specified</td> </tr> <tr> <td>Putrescible Waste</td> <td>2,000 tonnes for all waste types</td> <td>None Specified</td> </tr> <tr> <td>Inert Waste Type 1</td> <td></td> <td>None Specified</td> </tr> <tr> <td>Inert Waste Type 2</td> <td></td> <td>Tyres and plastic only</td> </tr> </tbody> </table> <p>Note 1: Additional requirements for the acceptance of controlled waste (including asbestos and tyres) are set out in the <i>Environmental Protection (Controlled Waste) Regulations 2004</i>.</p>	Waste type	Quantity limit tonnes/ annual period	Specification <sup>1</sup>	Clean fill		None Specified	Putrescible Waste	2,000 tonnes for all waste types	None Specified	Inert Waste Type 1		None Specified	Inert Waste Type 2		Tyres and plastic only	Compliant	Barto is approved for Class II or III putrescible landfills. The waste type categories listed in Table 3 are described in detail in the Landfill Waste Classification and Waste Definitions of 1996. Volumes have been discussed above in the Category 64 section. Most of the waste that was received in the 3 active site landfills was Inert waste Type 1 and 2. Some putrescible waste is received at the landfills but most of this type of waste is generated offsite at the camps. This is subsequently transferred to the Shire of Yilgarn's managed Marvel Loch public landfill site.	Landfill Waste Classification and Waste Definitions of 1996 were sighted here P:\Data\1.7 Environment\10_Operational_Control\Waste\Landfill\Archive_Landfill Sighting Government of Western Australia "Waste Authority Guidance Note 6 - Converting Volumes to Tonnes" on 03/10/2022. Sighted email chain from mine surveyor (RE: Landfills - waste volume estimation*) Sighted Waste volume records - P:\Data\1.7 Environment\10_Operational_Control\Waste\Landfill\Archive_Landfill	
Waste type	Quantity limit tonnes/ annual period	Specification <sup>1</sup>																			
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Putrescible Waste	2,000 tonnes for all waste types	None Specified																			
Inert Waste Type 1		None Specified																			
Inert Waste Type 2		Tyres and plastic only																			
15.00	The licence Holder must ensure waste that does not comply with condition 14 is removed from the premises to an appropriate authorised facility as soon as practicable		Compliant	All waste that does not form part of table 3 and therefore not permitted in the approved site landfills is removed from site when practicable. This includes controlled and hazardous type waste.																	

Ref.	Audit Element	Table	Compliant / Non-Compliant / Non-Applicable (C / NC)	Findings	Evidence See Photo and document tab.	Recommendation /Preventative and Corrective Action / Opportunity for Improvement / Positive Observation																					
16.00	The licence Holder must ensure that wastes accepted onto the premises are only subjected to the processes set out in Table 4 and an accordance with any process limits described in that table.	<p><b>Table 4: Waste processing</b></p> <table border="1"> <thead> <tr> <th>Waste type</th> <th>Process(es)</th> <th>Process limits<sup>1</sup></th> </tr> </thead> <tbody> <tr> <td>All Waste</td> <td>Handling and disposal of waste by land filling</td> <td>           (i) Disposal of waste by land filling shall only take place within the Nevoria landfill, Axehandle mine landfill, Windmills landfill, Transvaal landfill, Marvel Loch landfill or Frasers landfill shown in Figure 6, Figure 7, Figure 8, Figure 9, Figure 10, Figure 11 respectively;            (ii) The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2 m.            (iii) waste is disposed of in a defined trench or within an area enclosed by earthen bunds;            (iv) the tipping area is restricted to a maximum linear length of 30 meters;            (v) the tipping area is no greater than 2 meters in height;            (vi) the active tipping area is wetted down as required to minimise fugitive dust emission; and            (vii) there is a fire break of at least 3 meters around the boundary of the site.         </td> </tr> <tr> <td>Inert Waste Type 1</td> <td>Handling and disposal of waste by land filling</td> <td>None specified</td> </tr> <tr> <th>Waste type</th> <th>Process(es)</th> <th>Process limits<sup>1</sup></th> </tr> <tr> <td>Inert Waste Type 2</td> <td>Handling and disposal of waste by land filling</td> <td>           To be stored in piles of up to 100 units with a 6m separation distance between piles. Tyres shall only be landfilled:            (i) in a designated disposal area in the landfill;            (ii) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 40 cubic meters of tyres reduced to pieces; or            (iii) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 1000 whole tyres.         </td> </tr> <tr> <td>Putrescible Waste</td> <td></td> <td>None specified</td> </tr> <tr> <td>Clean Fill</td> <td></td> <td>None specified</td> </tr> </tbody> </table> <p>Note 1: Requirements for land filling tyres are set out in Part 6 of the <i>Environmental Protection Regulations 1987</i>.</p>	Waste type	Process(es)	Process limits <sup>1</sup>	All Waste	Handling and disposal of waste by land filling	(i) Disposal of waste by land filling shall only take place within the Nevoria landfill, Axehandle mine landfill, Windmills landfill, Transvaal landfill, Marvel Loch landfill or Frasers landfill shown in Figure 6, Figure 7, Figure 8, Figure 9, Figure 10, Figure 11 respectively; (ii) The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2 m. (iii) waste is disposed of in a defined trench or within an area enclosed by earthen bunds; (iv) the tipping area is restricted to a maximum linear length of 30 meters; (v) the tipping area is no greater than 2 meters in height; (vi) the active tipping area is wetted down as required to minimise fugitive dust emission; and (vii) there is a fire break of at least 3 meters around the boundary of the site.	Inert Waste Type 1	Handling and disposal of waste by land filling	None specified	Waste type	Process(es)	Process limits <sup>1</sup>	Inert Waste Type 2	Handling and disposal of waste by land filling	To be stored in piles of up to 100 units with a 6m separation distance between piles. Tyres shall only be landfilled: (i) in a designated disposal area in the landfill; (ii) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 40 cubic meters of tyres reduced to pieces; or (iii) in batches separated from each other by at least 100 mm of soil and each consisting of not more than 1000 whole tyres.	Putrescible Waste		None specified	Clean Fill		None specified	Partial non-compliance	With regards to inert waste type 2, Barto is partially non-compliant. Tyres are typically removed offsite for recycling through the tyre suppliers. Barto is permitted to landfill tyres but the process limits set out in table 4 were not met.	non-compliant image located P:\Data\1.7 Environment\15_Inspections_& Audits\2_External\DMIRS\2025 April Inspection	Barto to set out a designated area at the landfills for tyres which are only buried under management from the site environmental team.
Waste type	Process(es)	Process limits <sup>1</sup>																									
All Waste	Handling and disposal of waste by land filling	(i) Disposal of waste by land filling shall only take place within the Nevoria landfill, Axehandle mine landfill, Windmills landfill, Transvaal landfill, Marvel Loch landfill or Frasers landfill shown in Figure 6, Figure 7, Figure 8, Figure 9, Figure 10, Figure 11 respectively; (ii) The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2 m. (iii) waste is disposed of in a defined trench or within an area enclosed by earthen bunds; (iv) the tipping area is restricted to a maximum linear length of 30 meters; (v) the tipping area is no greater than 2 meters in height; (vi) the active tipping area is wetted down as required to minimise fugitive dust emission; and (vii) there is a fire break of at least 3 meters around the boundary of the site.																									
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Putrescible Waste		None specified																									
Clean Fill		None specified																									
17.00	The licence Holder must manage the land filling activities to ensure: a)waste is levelled and compacted as soon as practicable after it is discharged; b)waste is placed and compacted to ensure all faces are stable and capable of retaining restoration material; c)rehabilitation of a cell or phase takes place over 6 months after disposal in that cell are phase has been completed.		Compliant	These activities are ongoing throughout the reporting period.		Barto engaged site contractor MSM to conduct regular levelling and compacting activities at the Marvel Loch andfill to ensure compliance with this condition																					
18.00	The licence Holder to ensure that cover is applied and maintained on landfilled wastes in accordance with Table 5 and that sufficient stockpiles of cover are maintained in site at all times.	<p><b>Table 5: Cover requirements</b></p> <table border="1"> <thead> <tr> <th>Waste Type</th> <th>Material</th> <th>Depth</th> <th>Timescales</th> </tr> </thead> <tbody> <tr> <td>Inert Waste Type 1</td> <td>No cover required</td> <td></td> <td>N/A</td> </tr> <tr> <td>Inert Waste Type 2</td> <td>Type 1 Inert waste, clean fill or soil Clean fill, subsoil</td> <td>100mm  Final cover must be &gt; 500 mm</td> <td>By the end of the working week in which the waste was deposited.  Plastic waste with the potential to become windblown shall be covered as soon as practicable after deposit.</td> </tr> <tr> <td>All other wastes</td> <td></td> <td>150mm</td> <td>Continuous cover techniques, or a minimum of weekly</td> </tr> </tbody> </table> <p>Note 1: Additional requirements for the covering of tyres are set out in Part 6 of the <i>Environmental Protection Regulations 1987</i>.</p>	Waste Type	Material	Depth	Timescales	Inert Waste Type 1	No cover required		N/A	Inert Waste Type 2	Type 1 Inert waste, clean fill or soil Clean fill, subsoil	100mm  Final cover must be > 500 mm	By the end of the working week in which the waste was deposited.  Plastic waste with the potential to become windblown shall be covered as soon as practicable after deposit.	All other wastes		150mm	Continuous cover techniques, or a minimum of weekly	Compliant	As mentioned below for condition 20. The ROM loader, which loads ore into the crusher visits the Marvel Loch landfill regularly to clean up the tip face and compact the waste in the trench where possible. As part of this activity, waste rock material is deposited over the waste to reduce windblown waste.	Barto engaged site contractor MSM to conduct regular levelling and compacting activities at the Marvel Loch landfill to ensure compliance with this condition. Between MSM and the ROM loader, this condition is being met with compliance. Invoices and Pos for MSM are located here P:\Data\1.7 Environment\02_Administration and Finance\Finance & Expenditure						
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19.00	The licence Holder must: a)implement security measures at the site to prevent unauthorised access to the site; b)undertake regular inspections of all security measures and repair damage; and c)ensure the gates are closed and locked when the site is closed.		Compliant	All the landfills on Bartos premises, being at Marvel Loch, Nevoria, Transvaal, Frasers and Axehandle are on Mining Leases off private internal haul roads. All are situated either within or adjacent to waste rock landforms. Inspections of the landfills occur regularly for windblown waste, appropriate waste types and volumes.	Landfill maps located on the DWER licence can be found here P:\Data\1.7 Environment\05_Legal_& Other_Reqs\07_Licenses\Prescribed Premise Licence\Current PPL licence																						
20.00	The licence Holder must ensure that windblown waste is collected at least on a weekly basis and returned to the active tipping area.		Compliant	As part of the regular inspections, the windblown waste is picked up when needed. The ROM loader, which loads ore into the crusher visits the Marvel Loch landfill regularly to clean up the tip face and compact the waste in the trench where possible. Barto has also engaged a site contractor, MSM to manage the earthworks at the Marvel Loch landfill.	Invoices and Pos for MSM are located here P:\Data\1.7 Environment\02_Administration and Finance\Finance & Expenditure																						
21.00	The licence Holder must not burn or allow burning of any waste on the landfill.		Compliant	No burning of waste occurred at either of the landfills during the reporting period	N/A																						
22.00	The licence Holder must ensure that any unauthorised fire on site is extinguished as soon as possible.		Compliant	As above, not relevant in the 2024/2025 reporting period	N/A																						
23.00	The licence holder must ensure that there are adequate water supplies and procedures in place at the premises so that any unauthorised fire is promptly extinguished.		Compliant	Barto's Southern Cross Operations has schemed water connections available onsite along with groundwater from standpipes should an unauthorised fire occur onsite. Barto also has an Emergency Response Team that has a 4000lt fire tender which can be utilized should a fire occur along with BA equipment should the atmosphere become non-respirable.	N/A																						

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	<p>The licence holder must construct and/or install the infrastructure listed in Table 6, in accordance with;</p> <p>a) the corresponding design and construction requirement; and</p> <p>b) at the corresponding infrastructure location as set out in table 6</p>	<p><b>Table 6: Design and construction requirements</b></p> <table border="1"> <thead> <tr> <th data-bbox="647 279 854 310">Item of Infrastructure</th> <th data-bbox="854 279 1160 310">Design and construction requirement / installation requirement</th> <th data-bbox="1160 279 1279 310">Infrastructure location</th> </tr> </thead> <tbody> <tr> <td data-bbox="647 310 854 478">Crushing precinct stormwater management infrastructure</td> <td data-bbox="854 310 1160 478"> <ul style="list-style-type: none"> <li>Perimeter surface water drains to be cleared of silt;</li> <li>Access road culverts to be refurbished or repaired;</li> <li>Diversion drain from access road culvert to the pump sump (duck pond) to be cleared of silt; and</li> <li>Pump sump (duck pond) to be cleared of silt or increased in size to ensure a 1% AEP 24-hour duration storm event can be stored.</li> </ul> </td> <td data-bbox="1160 310 1279 478">As shown in Figure 26, Schedule 2.</td> </tr> <tr> <td data-bbox="647 478 854 667">Victoria's pipeline</td> <td data-bbox="854 478 1160 667"> <ul style="list-style-type: none"> <li>350 mm pipeline with 350 mm diameter Y piece to be laid within bunds; and</li> <li>Fitted with valves and telemetry systems.</li> </ul> <p>Required to meet the following standards:</p> <ul style="list-style-type: none"> <li>AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </td> <td data-bbox="1160 478 1279 667">As shown in Figure 15, Schedule 1.</td> </tr> <tr> <td data-bbox="647 667 854 783">Victoria's turkey's nest</td> <td data-bbox="854 667 1160 783"> <ul style="list-style-type: none"> <li>Total storage volume 10,000 m<sup>3</sup>;</li> <li>Constructed to a depth of 5m inclusive of 300 mm freeboard;</li> <li>Constructed with 1.5 mm HDPE liner to achieve a permeability of at least &lt;10<sup>-9</sup> m/s or equivalent; and</li> <li>Fitted with fauna egress batters on inside walls.</li> </ul> </td> <td data-bbox="1160 667 1279 783">As shown in Figure 15 Schedule 1 and Figure 29, Figure 30, Schedule 2.</td> </tr> <tr> <td data-bbox="647 783 854 846">Windmills dewatering pipeline</td> <td data-bbox="854 783 1160 846"> <ul style="list-style-type: none"> <li>350 mm pipeline with 350 mm diameter Y piece to be laid within bunds;</li> <li>Fitted with valves and telemetry systems; 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and</li> <li>Fugitive dust emissions controlled using water trucks for dust suppression during construction.</li> </ul> </td> <td data-bbox="1160 1056 1279 1224">As shown in Figure 28 and Figure 27, Schedule 2.</td> </tr> <tr> <td data-bbox="647 1224 854 1402">Windmills landfill</td> <td data-bbox="854 1224 1160 1402"> <ul style="list-style-type: none"> <li>Placement of landfill has taken into consideration the predominant wind direction and topography to minimise odour impacts;</li> <li>Constructed on Windmills Waste Rock Dump, with base of landfill cell being equal or no less than 2 m from the base of the Waste Rock Dump;</li> <li>Constructed with 0.5 m safety bund around the edge of excavation;</li> <li>Fugitive dust emissions controlled using water trucks for dust suppression; and</li> <li>Depth to groundwater must be at least two meters from the base of each new cell.</li> </ul> </td> <td data-bbox="1160 1224 1279 1402">As shown in Figure 8, Schedule 1.</td> </tr> <tr> <td data-bbox="647 1402 854 1547">Transvaal-Sunbeam/Comishman/Axehandle dewatering pipeline</td> <td data-bbox="854 1402 1160 1547"> <ul style="list-style-type: none"> <li>Fitted with valves and telemetry system with 3 flow monitoring stations;</li> <li>Leak detection to trigger automatic shut-off of transfer pumps;</li> <li>Laid within a swale with bunding in section above ground;</li> <li>Minimum cover of 600 mm when buried;</li> <li>Minimum 1100 mm cover and minimum PN12.5 pressure rating when buried under heavy vehicle crossings;</li> </ul> </td> <td data-bbox="1160 1402 1279 1547">As shown in Figure 17, Schedule 1.</td> </tr> </tbody> </table>	Item of Infrastructure	Design and construction requirement / installation requirement	Infrastructure location	Crushing precinct stormwater management infrastructure	<ul style="list-style-type: none"> <li>Perimeter surface water drains to be cleared of silt;</li> <li>Access road culverts to be refurbished or repaired;</li> <li>Diversion drain from access road culvert to the pump sump (duck pond) to be cleared of silt; and</li> <li>Pump sump (duck pond) to be cleared of silt or increased in size to ensure a 1% AEP 24-hour duration storm event can be stored.</li> </ul>	As shown in Figure 26, Schedule 2.	Victoria's pipeline	<ul style="list-style-type: none"> <li>350 mm pipeline with 350 mm diameter Y piece to be laid within bunds; and</li> <li>Fitted with valves and telemetry systems.</li> </ul> <p>Required to meet the following standards:</p> <ul style="list-style-type: none"> <li>AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul>	As shown in Figure 15, Schedule 1.	Victoria's turkey's nest	<ul style="list-style-type: none"> <li>Total storage volume 10,000 m<sup>3</sup>;</li> <li>Constructed to a depth of 5m inclusive of 300 mm freeboard;</li> <li>Constructed with 1.5 mm HDPE liner to achieve a permeability of at least &lt;10<sup>-9</sup> m/s or equivalent; and</li> <li>Fitted with fauna egress batters on inside walls.</li> </ul>	As shown in Figure 15 Schedule 1 and Figure 29, Figure 30, Schedule 2.	Windmills dewatering pipeline	<ul style="list-style-type: none"> <li>350 mm pipeline with 350 mm diameter Y piece to be laid within bunds;</li> <li>Fitted with valves and telemetry systems; and</li> </ul>	As shown in Figure 27, Schedule 2.					<ul style="list-style-type: none"> <li>Required to meet the following standards:               <ul style="list-style-type: none"> <li>AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul> </li> </ul>		Windmills turkey's nest	<ul style="list-style-type: none"> <li>Total storage volume no less than 45,120 m<sup>3</sup>;</li> <li>Constructed to a depth of 5 m, inclusive of 300 mm freeboard;</li> <li>Constructed with 1.5 mm HDPE liner to achieve a permeability of at least &lt;10<sup>-9</sup> m/s or equivalent;</li> <li>Fitted with fauna egress batters on inside walls; and</li> <li>Fugitive dust emissions controlled using water trucks for dust suppression during construction.</li> </ul>	As shown in Figure 28 and Figure 27, Schedule 2.	Windmills landfill	<ul style="list-style-type: none"> <li>Placement of landfill has taken into consideration the predominant wind direction and topography to minimise odour impacts;</li> <li>Constructed on Windmills Waste Rock Dump, with base of landfill cell being equal or no less than 2 m from the base of the Waste Rock Dump;</li> <li>Constructed with 0.5 m safety bund around the edge of excavation;</li> <li>Fugitive dust emissions controlled using water trucks for dust suppression; and</li> <li>Depth to groundwater must be at least two meters from the base of each new cell.</li> </ul>	As shown in Figure 8, Schedule 1.	Transvaal-Sunbeam/Comishman/Axehandle dewatering pipeline	<ul style="list-style-type: none"> <li>Fitted with valves and telemetry system with 3 flow monitoring stations;</li> <li>Leak detection to trigger automatic shut-off of transfer pumps;</li> <li>Laid within a swale with bunding in section above ground;</li> <li>Minimum cover of 600 mm when buried;</li> <li>Minimum 1100 mm cover and minimum PN12.5 pressure rating when buried under heavy vehicle crossings;</li> </ul>	As shown in Figure 17, Schedule 1.	Compliant	<p>Table 6 of condition 24 relates to infrastructure to be installed on Bartos leases. The crusher and circuit infrastructure was designed per specifications listed. The Victoria and Windmills infrastructure wasn't required during the reporting period and therefore yet to be constructed. The Transvaal/Sunbeam/Axehandle, Ylgam Star, Achilles, Marvel Loch to Triad and historic pipeline projects have been deferred, as well as the Transvaal landfill is yet to be constructed.</p>		
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Crushing precinct stormwater management infrastructure	<ul style="list-style-type: none"> <li>Perimeter surface water drains to be cleared of silt;</li> <li>Access road culverts to be refurbished or repaired;</li> <li>Diversion drain from access road culvert to the pump sump (duck pond) to be cleared of silt; and</li> <li>Pump sump (duck pond) to be cleared of silt or increased in size to ensure a 1% AEP 24-hour duration storm event can be stored.</li> </ul>	As shown in Figure 26, Schedule 2.																																		
Victoria's pipeline	<ul style="list-style-type: none"> <li>350 mm pipeline with 350 mm diameter Y piece to be laid within bunds; and</li> <li>Fitted with valves and telemetry systems.</li> </ul> <p>Required to meet the following standards:</p> <ul style="list-style-type: none"> <li>AS/NZS 2033:3008: Installation of polyethylene pipe systems;</li> <li>AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications;</li> <li>AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and</li> <li>AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings.</li> </ul>	As shown in Figure 15, Schedule 1.																																		
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TSF3 (Cell 1 and Cell 2) embankment lifts stages 3 to 7	<ul style="list-style-type: none"> <li>Stages 3 to 7 embankment lifts for Cell 1 and Cell 2 are to be constructed to the embankment heights specified in condition 26.</li> <li>Embankments to be constructed using upstream construction methods.</li> <li>Embankments to have design slopes of 1:2.75 (V:H) downstream and 1:1.5 (V:H) upstream.</li> <li>The dividing embankment access way to have design slopes of 1:1.5 (V: H) downstream and 1:1.5 (V:H) upstream.</li> <li>Embankment lifts to be constructed in accordance with design drawings shown in Figure 32 to Figure 37, Schedule 2.</li> <li>Dust suppression measures with water carts to be undertaken where necessary to manage dust emissions during construction</li> </ul>	TSF3 as shown in Figure 4, Schedule 1	Fraser's Landfill	<ul style="list-style-type: none"> <li>Landfill to be located within the Fraser's Waste Rock landform as shown within Figure 21, Schedule 1.</li> <li>Trenches size to be 40 m (length) x 4 (width) x 2 m (depth).</li> <li>0.5 m earthen bund to be constructed around the perimeter of each trench.</li> <li>Depth to groundwater must be at least two meters from the base of each new cell.</li> <li>Dust suppression measures with water carts to be undertaken where necessary to manage dust emissions during construction of the landfill trenches.</li> </ul>	Located within M77/109 as shown in Figure 11, Schedule 1.	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25.00	When construction authorised under this licence is to occur between 1 September and January 31, the licence holdere must: (a) Within two weeks prior to undertaking any construction activity, engage a fauna specialist to conduct a survey of the area 100m surrounding where construction activities to be undertaken, to identify and record active (in use) Malleefowl ( <i>Leipoa ocellata</i> ) mounds; and (b) Where an active (in use) Malleefowl mound is identified under condition 26 (a) of this licence, the licence holder must: (i) record the location; (ii) initiate management actions (s) to reduce the disturbance/impact to the Malleefowl mound as far as reasonably practical; and (iii) record all management actions taken.		Non Applicable	TSF 3 Cell 1 stage 2 lift was completed in Between December 2024 and February 2025. Frasers to Cornishman pipeline was constructed in September 2025.	Refer to letters from DWER in August of 2025 and September of 2025 located here P:\Data\1.7 Environment\05_Legal & Other_Reqs\07_Licenses\Prescribed Premise Licence\PP_L_WA_DL\Compliance	Barto will seek to remove this condition with regards to TSF 3 lifts when it completes its next licence amendment application to DWER. This was agreed to by DWER in a letter received on the 9 <sup>th</sup> of September 2025																
26.00	The Licence Holder is authorised to: a)construct embankment raises for TSF3 to the construction height; and b)operate TSF3 until the end of Stage 2 to the operating height, as specified in Table 7	<b>Table 7: Tailings storage facility operating heights</b> <table border="1"> <thead> <tr> <th>Stage</th> <th>Infrastructure</th> <th>Embankment elevation (mRL)</th> <th>Maximum operating height (mRL) – with freeboard</th> </tr> </thead> <tbody> <tr> <td>Starter embankment</td> <td>TSF3</td> <td>442</td> <td>441.7</td> </tr> <tr> <td>Stage 1 Lift</td> <td>TSF3</td> <td>444</td> <td>443.7</td> </tr> <tr> <td>Stage 2 Lift</td> <td>TSF3</td> <td>446</td> <td>445.7</td> </tr> </tbody> </table>	Stage	Infrastructure	Embankment elevation (mRL)	Maximum operating height (mRL) – with freeboard	Starter embankment	TSF3	442	441.7	Stage 1 Lift	TSF3	444	443.7	Stage 2 Lift	TSF3	446	445.7	Compliant	TSF 3 was constructed as per the TSF 3 design report prepared by Coffey in September 2017. Section 4.3 of this report covers the embankment design and storage characteristics. It states " Due to the sloping nature of the ground the starter embankment height will vary. The height of the embankment will vary from 1m to 9m and have a crest at RL442. The Stage 2 lift of Cell 1 was completed in February 2025. Compliance certification was sent to DWER in March 2025	TSF 3 design report completed by Coffey sighted as an appendix to the Mining Proposal prepared by MBS Environmental located here P:\Data\1.7 Environment\05_Legal & Other_Reqs\06_Project Areas\Marvel_Loch\2_Mining Proposals\Marvel Loch TSF 3 - 2017\01_Mining_Proposal\2_toSubmitted Documents\Revised Submission - Dec 17. The Cell 1 Stage 2 lift compliance certification can be found here P:\Data\1.7 Environment\05_Legal & Other_Reqs\07_Licenses\Prescribed Premise Licence\PP_L_WA_DL\Amendments\TSF 3 conctruction 2017 LA	
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Stage 2 Lift	TSF3	446	445.7																			
27.00	The licence holder must within 30 days of each item of infrastructure required by condition 24 and staged lift of condition 26 being constructed: a)undertake an audit of their compliance with the requirements of condition 24 and 26 and b)prepare and submit to the CEO an audit report on that compliance		Non Applicable	As condition 25 and the DWER correspondence from August and September 2025	Refer to letters from DWER in August of 2025 and September of 2025 located here P:\Data\1.7 Environment\05_Legal & Other_Reqs\07_Licenses\Prescribed Premise Licence\PP_L_WA_DL\Compliance																	
28.00	The environmental compliance report required by condition 27 must: a)be certified by a qualified and experienced engineer (eligible for membership in the Institute of Engineers, Australia) that the item of infrastructure or component(s) thereof, as specified in condition 24 and 26, have been constructed in accordance with the relevant requirements specified in condition 24 and 26; and b)as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 24 and 26; and c)be signed by a person authorised to represent the licence holder and contain the printed name and position of that person within the company.		Compliant	As above, the certification report for the TSF lift was submitted to DWER in March 2025 with sign off by Tetrattech Coffey. No other items in Table 6 were constructed in the reporting period.	TSF 3 design report completed by Coffey sighted as an appendix to the Mining Proposal prepared by MBS Environmental located here P:\Data\1.7 Environment\05_Legal & Other_Reqs\06_Project Areas\Marvel_Loch\2_Mining Proposals\Marvel Loch TSF 3 - 2017\01_Mining_Proposal\2_toSubmitted Documents\Revised Submission - Dec 17. The Cell 1 lift compliance certification can be found here P:\Data\1.7 Environment\05_Legal & Other_Reqs\07_Licenses\Prescribed Premise Licence\PP_L_WA_DL\Amendments\TSF 3 conctruction 2017 LA																	
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29.00	The licence Holder must ensure that: a)all water samples are collected and preserved in accordance with AS/NZS 5667.1; b)all groundwater sampling is conducted in accordance with AS/NZS 5667.11; c)all samples are submitted to a laboratory with current NATA accreditation for the parameters to be measures unless indicated otherwise in relevant table.		Non-compliance	Compliance monitoring is conducted in accordance with the Australian and New Zealand Standards 5667.11. Samples in the 2024/2025 reporting period were sent to MPL laboratories for analysis. MPL has current NATA accreditation with the accreditation number being 2901. During the reporting year, field and transport blanks were not collected as required under AS/NZS 5667.1 and therefore non-compliant with this part of the condition.	Australian Standards 5667.1 & 5667.11 were sighted with the monitoring schedule here P:\Data\1.7 Environment\14_Monitoring & Reporting\2_Monitoring\Water\Regs and Guidelines	An update to the monitoring procedure is required to specifically include the AS with regards to Field and Transport blanks/ QA/QC																
30.00	The licence Holder must ensure that: a)monthly monitoring is undertaken at least 15 days apart; b)quarterly monitoring is undertaken at least 45 days apart; c)six monthly monitoring is taken at least 5 months apart; d)annual monitoring is undertaken at least 9 months apart.		Compliant	Barto conducts its monitoring as per condition 30. A monitoring schedule has been prepared outlining monthly, quarterly, biannual and annual monitoring requirements. Monthly monitoring is generally completed towards the end of every month. On occasion due to weather events, monitoring is brought forward 1 week or pushed out 1 week but is always within the periods set out in condition 30.	Bartos monitoring schedule was sighted and located here P:\Data\1.7 Environment\14_Monitoring & Reporting\3_Procedures																	
31.00	The licence Holder must ensure that all monitoring equipment used on the Premises to comply with the conditions of this license is calibrated in accordance with the manufacture's specifications.		Compliant	Bartos's WP81 TPS pH/Conductivity meter is calibrated regularly onsite and was repaired by the supplier during the reporting period too. Calibrations occur as per the instructions in the manual. The AP2 long bore hole pump is operated in alignment with the QED Operations Manual.	A hard copy of the TPS manual was sighted in the monitoring office at Barto's Southern Cross Operations. A calibration report from the supplier was also sighted and located here P:\Data\1.7 Environment\14_Monitoring & Reporting\3_Procedures\Equipment. The AP2 operation manual is located here P:\Data\1.7 Environment\14_Monitoring & Reporting\3_Procedures\Equipment																	
32.00	The licence Holder must, where the requirements for calibration cannot be practically met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.		Compliant	Not applicable in the reporting period of October 2024 to September 2025																		
<b>MONITORING OF POINT SOURCES EMISSIONS TO LAND</b>																						
33.00	The licence holder must undertake the monitoring in Table 8 according to the specifications in that table.	<b>Table 8: Monitoring of point source emissions to land</b> <table border="1"> <thead> <tr> <th>Emission point reference</th> <th>Parameter</th> <th>Units</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Mine dewatering discharge points: Marvel Loch, Frasers, Gendrawer, Jaccuzetti, Nervonia, Triad, Polaris, South, Yagarn Star, Axehandle, Transvaal, Aquarius, Polaris, Sunbeam, Achilles West/East, Achilles South, Achilles North, Rhapsody, Windmills, Redox, Cornishman North, Cornishman Central, Cornishman South, GVG, Hercules, Southern Star, Grand National, Harris Find.</td> <td>Volumetric flow rate S, Ar, Cr, Co, Zn, Cu, Na, Cl, Al, Fe, Mg, Ca, K, Mn, Ni, Se, SO<sub>4</sub><sup>2-</sup>, HCO<sub>3</sub><sup>-</sup> and Cd TSS (Total suspended solids) and TDS (Total dissolved solids) pH</td> <td>L/s mg/L mg/L N/A</td> <td>Monthly Annually Six monthly Six monthly Monthly for discharge to Axehandle pit Monthly for pits receiving from Grand National</td> </tr> </tbody> </table>	Emission point reference	Parameter	Units	Frequency	Mine dewatering discharge points: Marvel Loch, Frasers, Gendrawer, Jaccuzetti, Nervonia, Triad, Polaris, South, Yagarn Star, Axehandle, Transvaal, Aquarius, Polaris, Sunbeam, Achilles West/East, Achilles South, Achilles North, Rhapsody, Windmills, Redox, Cornishman North, Cornishman Central, Cornishman South, GVG, Hercules, Southern Star, Grand National, Harris Find.	Volumetric flow rate S, Ar, Cr, Co, Zn, Cu, Na, Cl, Al, Fe, Mg, Ca, K, Mn, Ni, Se, SO <sub>4</sub> <sup>2-</sup> , HCO <sub>3</sub> <sup>-</sup> and Cd TSS (Total suspended solids) and TDS (Total dissolved solids) pH	L/s mg/L mg/L N/A	Monthly Annually Six monthly Six monthly Monthly for discharge to Axehandle pit Monthly for pits receiving from Grand National	Compliant	Flow rates are measured monthly through flow meters to all discharge points. These are recorded in the field and transferred to an internal spreadsheet for tracking. All water chemistry results for the emission points from the NATA accredited laboratory, MPL, are uploaded to Bartos monitoring database, MP5 for later manipulation. PDFs are also saved for reference along with excel and CSV format.	Abstraction and discharge spreadsheet was sighted and located here P:\Data\1.7 Environment\14_Monitoring & Reporting\2_Monitoring\2.4_Water\4_Pit and UG Abstraction Data\Dewatering\Marvel Loch Dewatering Laboratory reports were sighted and locate here P:\Data\1.7 Environment\14_Monitoring & Reporting\2_Monitoring\2.4_Water\Lab Reports\2025									
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34.00	The Licence Holder must conduct Pit water sampling program in accordance with the requirements specified in Table 9 and Table 10 and record the results of all activity conducted under the program.	<p><b>Table 9: Sampling of pit water</b></p> <table border="1"> <thead> <tr> <th>Pit water source</th> <th>Parameter</th> <th>Units</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Yilgarn Star, Nevona Pit.</td> <td>S; As; Cr; Co; Zn; Cu; Na; Cl; Al; Fe; Mg; Ca; K; Mn; Ni; Se; SO<sub>4</sub><sup>2-</sup>; HCO<sub>3</sub><sup>-</sup> and Cd.</td> <td>mg/L</td> <td>Within 60 days of dewatering commencing</td> </tr> <tr> <td></td> <td>TSS and TDS</td> <td>mg/L</td> <td>Within 60 days of dewatering commencing</td> </tr> <tr> <td></td> <td>pH</td> <td>N/A</td> <td>Within 60 days of dewatering commencing</td> </tr> </tbody> </table> <p><b>Table 10: Sampling of pit water</b></p> <table border="1"> <thead> <tr> <th>Pit water source</th> <th>Parameter</th> <th>Units</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Achilles West/East, Achilles South, Rhapsody, Windmills, Redox, Cornishman North, Cornishman Central, Cornishman South, GVS, Hercules, Southern Star, Grand National, Harris Find, Ruapehu Maori Lass.</td> <td>S; As; Cr; Co; Zn; Cu; Na; Cl; Al; Fe; Mg; Ca; K; Mn; Ni; Se; SO<sub>4</sub><sup>2-</sup>, HCO<sub>3</sub><sup>-</sup> and Cd. TSS and TDS pH</td> <td>mg/L -</td> <td>Within the 30 days prior to dewatering discharge to the pit commencing</td> </tr> </tbody> </table>	Pit water source	Parameter	Units	Frequency	Yilgarn Star, Nevona Pit.	S; As; Cr; Co; Zn; Cu; Na; Cl; Al; Fe; Mg; Ca; K; Mn; Ni; Se; SO <sub>4</sub> <sup>2-</sup> ; HCO <sub>3</sub> <sup>-</sup> and Cd.	mg/L	Within 60 days of dewatering commencing		TSS and TDS	mg/L	Within 60 days of dewatering commencing		pH	N/A	Within 60 days of dewatering commencing	Pit water source	Parameter	Units	Frequency	Achilles West/East, Achilles South, Rhapsody, Windmills, Redox, Cornishman North, Cornishman Central, Cornishman South, GVS, Hercules, Southern Star, Grand National, Harris Find, Ruapehu Maori Lass.	S; As; Cr; Co; Zn; Cu; Na; Cl; Al; Fe; Mg; Ca; K; Mn; Ni; Se; SO <sub>4</sub> <sup>2-</sup> , HCO <sub>3</sub> <sup>-</sup> and Cd. TSS and TDS pH	mg/L -	Within the 30 days prior to dewatering discharge to the pit commencing	Partial non-compliance	The new Yilgarn Star to Nevoria pipeline was not constructed during the reporting period. Per table 10, the only pit that were discharged to during the reporting period was Maori Lass. This was sampled in June 2025 with discharge to the pit occurring in April 2025 over a 1 week period. Therefore non-compliant. It should be noted that the Maori Lass was sampled in May 2024 and that only 16,295kl was discharge to the pit.		Barto needs to ensure all pits to be discharged to in the 2025/2026 season are sampled within the 30 days prior to discharge.																								
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35.00	The Licence Holder must adhere to the field quality assurance and quality control procedures specified in Table 9 and Table 10 for the monitoring required by condition 36		Non-compliance	As per condition 34.																																																		
36.00	The Licence Holder must, within 60 days of the pit water sampling specified in condition 35 being completed, submit to the CEO a report demonstrating compliance with condition 35-37, and must include: (a) a clear statement of the scope of work carried out; (b) a description of the field methodologies; (c) a summary of the field and laboratory quality assurance/quality control (QA/QC) program; (d) copies of the field monitoring records and field QA/QC documentation; (e) an assessment of reliability of field procedures and laboratory results (f) a tabulated summary of results, as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file), with all results being clearly referenced to laboratory certificates of analysis; (g) trend graphs to provide graphical representation of historical results and to support the interpretive summary.		Non-compliance	As per condition 34.																																																		
37.00	The licence Holder must undertake the monitoring specified in Table 11 according to the specifications in that table	<p><b>Table 11: Process monitoring</b></p> <table border="1"> <thead> <tr> <th>Monitoring point reference</th> <th>Process description</th> <th>Parameter</th> <th>Units</th> <th>Frequency</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td>-</td> <td>-</td> <td>Volumes of tailings deposited into the</td> <td>m<sup>3</sup></td> <td>Continuous</td> <td>None specified</td> </tr> <tr> <td></td> <td></td> <td>TSF</td> <td></td> <td></td> <td></td> </tr> <tr> <td>-</td> <td>-</td> <td>Volumes of water recovered from the TSF</td> <td>m<sup>3</sup></td> <td>Continuous</td> <td>None specified</td> </tr> <tr> <td>-</td> <td>-</td> <td>Phreatic surface levels within TSF embankments</td> <td>mAHD</td> <td>Monthly</td> <td>None specified</td> </tr> <tr> <td>-</td> <td>-</td> <td>Volumes of seepage recovered</td> <td>m<sup>3</sup></td> <td>Continuous</td> <td>None specified</td> </tr> <tr> <td>-</td> <td>-</td> <td>Volumes of ore processed</td> <td>m<sup>3</sup></td> <td>Annual period</td> <td>None specified</td> </tr> <tr> <td>Mine dewatering discharge points Marvel Loch, Frasers, Gledower, Jaccoletti.</td> <td>Mine dewatering</td> <td>Cumulative volumes of mine dewater discharged to each pit (including the</td> <td>m<sup>3</sup></td> <td>Monthly</td> <td>None specified</td> </tr> </tbody> </table>	Monitoring point reference	Process description	Parameter	Units	Frequency	Method	-	-	Volumes of tailings deposited into the	m <sup>3</sup>	Continuous	None specified			TSF				-	-	Volumes of water recovered from the TSF	m <sup>3</sup>	Continuous	None specified	-	-	Phreatic surface levels within TSF embankments	mAHD	Monthly	None specified	-	-	Volumes of seepage recovered	m <sup>3</sup>	Continuous	None specified	-	-	Volumes of ore processed	m <sup>3</sup>	Annual period	None specified	Mine dewatering discharge points Marvel Loch, Frasers, Gledower, Jaccoletti.	Mine dewatering	Cumulative volumes of mine dewater discharged to each pit (including the	m <sup>3</sup>	Monthly	None specified	Compliant	Table 10 comprises process monitoring at the TSF, dewatering discharge and landfills. With regards to volume of tailings deposited in the TSF, Volume of water recovered from the TSF, Phreatic surface levels within the TSF, Volume of seepage recovered and volume of ore processed, this data is reported on in the annual TSF audit. The data is collected internally as per the frequencies specified. TSF inspections are completed twice daily by the processing team. Seepage recovered is measured through flow meters and recorded daily by the team. TSF return water is also measured by the process team through flow meters daily. Phreatic surface levels are measured monthly by the site environmental team. Volumes of ore processed and tailings deposited is tracked by the process team also. Mine dewatering discharge volumes have been addressed in condition 33 above. Differing units can be back calculated. Volumes of waste deposited in each landfill has been partially covered in previous findings. During the reporting period, of the 6 approved landfills, Marvel Loch, Nevoria and Axehandle were the only landfills used. Volumes are estimated on a percentage full of the trench size. Then a calculation is applied for density per m3.	The 2024 TSF audit was sighted and located here P:\Data\1.7 Environment\15_Inspections_& Audits\2_External\Annual TSF Audits\ML TSF - 2024. This includes the data from first 5 rows of Table 10. As above the abstraction and discharge spreadsheet was sighted an located here P:\Data\1.7 Environment\14_Monitoring_& Reporting\2_Monitoring\2.4_Water\4_Pit and UG Abstraction Data\DeWatering\Marvel Loch Dewatering_Landfill volumes can be located in two spots being sighted here P:\Data\1.7 Environment\10_Operational_Control\Waste\Landfill and here P:\Data\1.7 Environment\14_Monitoring_& Reporting\1_Reporting\NGERS_NPI\2024-2025	
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39.00	<p>The licence Holder must undertake the monitoring in Table 12 according to the specifications in that Table.</p>	<p><b>Table 12: Monitoring of ambient air quality</b></p> <table border="1"> <thead> <tr> <th>Monitoring point reference &amp; location</th> <th>Parameter</th> <th>Unit<sup>1</sup></th> <th>Averaging period</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Dust monitor as shown on map in Figure 3, Schedule 1.</td> <td>Particulates as PM<sup>10</sup></td> <td>µg/m<sup>3</sup></td> <td>24 hours</td> <td>Continuous from day of installation.</td> </tr> </tbody> </table> <p>Note 1: All units are referenced to STP dry.</p>	Monitoring point reference & location	Parameter	Unit <sup>1</sup>	Averaging period	Frequency	Dust monitor as shown on map in Figure 3, Schedule 1.	Particulates as PM <sup>10</sup>	µg/m <sup>3</sup>	24 hours	Continuous from day of installation.	Compliant	<p>The dust monitor has been operational since December 2020, with no significant issues present during this year's reporting period.</p>	<p>The dust data is recorded continuously as per the requirements of Table 11. Data is downloaded from the Airodis web module and downloaded as required. Data was sighted P:\Data\1.7 Environment\14_Monitoring_&amp; Reporting\2_Monitoring\Dust\ML Dust Monitor_Monthly Dust Reports\2025_Appendix 10 of the AER also contains ambient air quality data.</p>																																																																									
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40.00	All information and records required by the licence shall: a) be legible b) if amended, be amended in such a way that the original and subsequent amendments remain legible or acceptable for retrieval; c) except for reports listed in 40(d) be retained for at least 6 years from the date the records were made or until the expiry of the licence or any subsequent licence; and d) for those following records, be retained until the expiry of the Licence and any subsequent licence: (i) off-site environmental effects; or (ii) matters which affect the condition of the land or waters.		Compliant	All information and records kept meet condition 40 a, b, c and d. Barto has a detailed folder structure for the storage and retrieval of documents. Given its 2025, almost all is stored electronically. Field data is obtained on hardcopy but transferred electronically once back in the office. Hardcopies have been kept since 2013 under previous tenement owners. Barto has electronic and hard copy records going back to the mid 1980s for the Southern Cross Operations and has endeavoured to scan the hard copies to electronic form.	Barto's detailed folder structure is located here P:\Data\1.7 Environment																																					
41.00	The licence Holder must ensure that: a) any person left in charge of the premises is aware of the conditions of the licence and has access at all times to the Licence or copies thereof; and b) any person who performs tasks on the Premises is informed of all of the conditions of the licence that relate to the tasks which that person is performing.		Compliant	Every new employee must complete a site induction which covers our responsibilities as a company under the EPA Act and our subsequent licence. Site departmental managers are acutely aware of the licence and the compliance activities that are required to be adhered to.	the current prescribed premise licence for SXO is located on the P drive here P:\Data\1.7 Environment\05_Legal_&_Other_Reqs\07_Licenses\Prescribed Premise Licence																																					
42.00	The licence Holder must complete an Annual Audit Compliance Report indicating the extent to which the licensee has complied with the conditions of the licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.		Compliant	Herewith the AER and Appendix 3 to the AER.	AER working folder located here P:\Data\1.7 Environment\14_Monitoring_&_Reporting\1_Reporting\AER\2024-25\DWER																																					
43.00	The licence Holder must implement a complaints management system that as a minimum record the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.		Compliant	Barto manages a communication and stakeholder consultation register. This register, on occasion includes all types of complaints received by the company which includes environmental impact. Four complaints were received in the reporting period.	The register was sighted and located here P:\Data\1.7 Environment\08_Communications\1_Comms_Register																																					
<b>REPORTING</b>																																										
44.00	The licensee shall submit to the CEO an Annual Environmental Report within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 13 in the format or form specified in that table.	<table border="1"> <thead> <tr> <th colspan="3">Table 13: Annual Environmental Report</th> </tr> <tr> <th>Condition or table (if relevant)</th> <th>Parameter</th> <th>Format or form<sup>1</sup></th> </tr> </thead> <tbody> <tr> <td>-</td> <td>Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the year and any action taken</td> <td>None specified</td> </tr> <tr> <td>Condition 42</td> <td>Compliance</td> <td>Annual Audit Compliance Report (AACR)</td> </tr> <tr> <td>Condition 43</td> <td>Complaints summary</td> <td>None specified</td> </tr> <tr> <td>Table 2</td> <td>Embankment structural integrity assessment</td> <td>None specified</td> </tr> <tr> <td>Condition 11</td> <td>TSF water balance</td> <td>None specified</td> </tr> <tr> <td>Table 8</td> <td>Monitoring of point source emissions to land</td> <td>None specified</td> </tr> <tr> <td>Tables 9a and 9b</td> <td>Any pit water sampling data conducted during the annual period.</td> <td>None specified</td> </tr> <tr> <td>Table 10</td> <td>Process Monitoring</td> <td>None specified</td> </tr> <tr> <td>Table 11</td> <td>Monitoring of ambient groundwater quality</td> <td>None specified</td> </tr> <tr> <td>Table 12</td> <td>Monitoring of ambient air quality</td> <td>None specified</td> </tr> </tbody> </table> <p>Note 1: Forms are available at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a></p>	Table 13: Annual Environmental Report			Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>	-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the year and any action taken	None specified	Condition 42	Compliance	Annual Audit Compliance Report (AACR)	Condition 43	Complaints summary	None specified	Table 2	Embankment structural integrity assessment	None specified	Condition 11	TSF water balance	None specified	Table 8	Monitoring of point source emissions to land	None specified	Tables 9a and 9b	Any pit water sampling data conducted during the annual period.	None specified	Table 10	Process Monitoring	None specified	Table 11	Monitoring of ambient groundwater quality	None specified	Table 12	Monitoring of ambient air quality	None specified	Compliant	Herewith this report	All AERs dating back a minimum of 25 years were sighted here P:\Data\1.7 Environment\14_Monitoring_&_Reporting\1_Reporting\AER	
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45.00	The licence Holder must ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and licence limits.		Compliant	Herewith this report	All AERs dating back a minimum of 25 years were sighted here P:\Data\1.7 Environment\14_Monitoring_&_Reporting\1_Reporting\AER	Nil																																				
<b>NOTIFICATION</b>																																										

Ref.	Audit Element	Table	Compliant / Non-Compliant / Non-Applicable (C / NC)	Findings	Evidence See Photo and document tab.	Recommendation /Preventative and Corrective Action / Opportunity for Improvement / Positive Observation																				
46.00	The licence Holder must ensure the parameters listed in Table 15 are notified to the CEO in accordance with the notification requirements of the table.	<p><b>Table 15: Notification requirements</b></p> <table border="1"> <thead> <tr> <th>Condition or table</th> <th>Parameter</th> <th>Notification requirement<sup>1</sup></th> <th>Format or form<sup>2</sup></th> </tr> </thead> <tbody> <tr> <td>Condition 32</td> <td>Calibration report</td> <td>As soon as practicable.</td> <td>None specified</td> </tr> <tr> <td>Condition 10</td> <td>Groundwater Recovery Plan</td> <td>Within 30 calendar days of completion.</td> <td>None specified</td> </tr> <tr> <td>Condition 22</td> <td>Unauthorised fire at landfill</td> <td>Within 14 calendar days.</td> <td>None specified</td> </tr> <tr> <td>Table 3 &amp; Table 12, Condition 4</td> <td>Breach of any limit specified in the Licence</td> <td>Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable.</td> <td>N1</td> </tr> </tbody> </table> <p>Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act Note 2: Forms are available at <a href="http://www.dwer.wa.gov.au">www.dwer.wa.gov.au</a></p>	Condition or table	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>	Condition 32	Calibration report	As soon as practicable.	None specified	Condition 10	Groundwater Recovery Plan	Within 30 calendar days of completion.	None specified	Condition 22	Unauthorised fire at landfill	Within 14 calendar days.	None specified	Table 3 & Table 12, Condition 4	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable.	N1	Compliant	The notification requirements of Table 15 were partially met during the reporting period. Condition 32 and 22 were not breached and therefore no notification was required. Condition 10, A Groundwater Recovery Plan was submitted in 2019 and is still being adhered to. One N1 was reported during the reporting period.	P:\Data\1.7 Environment\13_Incidents\2024\North Seepage Flooding Dec 24	
Condition or table	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>																							
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47.00	The Licence Holder must provide a report to the CEO on each item specified in Table 16, addressing the corresponding requirements within the timeframe specified	<table border="1"> <thead> <tr> <th>Item</th> <th>Requirements</th> <th>Timeframe</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td> <p><b>Groundwater monitoring bore investigation</b></p> <p>The Licence Holder is to undertake an assessment of the existing groundwater monitoring bore network surrounding TSF3 to determine whether it is adequate to monitor groundwater mounding and seepage impacts within the zone of influence of TSF3. The assessment must include but not limited to:</p> <ul style="list-style-type: none"> <li>(a) An investigation identifying any zones of higher permeability and preferential flow pathways for seepage and the extend of any existing groundwater mounding;</li> <li>(b) An assessment of both the spatial and lateral (i.e. aquifer being screened) distribution of the groundwater monitoring bores; and</li> <li>(c) if the monitoring bore network is found to be inadequate, additional groundwater monitoring locations (with bore depths, screen interval details) with relevant justification and timeframe for installation.</li> </ul> </td> <td>Report to be submitted to the CEO by 6 August 2025</td> </tr> </tbody> </table>	Item	Requirements	Timeframe	1.	<p><b>Groundwater monitoring bore investigation</b></p> <p>The Licence Holder is to undertake an assessment of the existing groundwater monitoring bore network surrounding TSF3 to determine whether it is adequate to monitor groundwater mounding and seepage impacts within the zone of influence of TSF3. The assessment must include but not limited to:</p> <ul style="list-style-type: none"> <li>(a) An investigation identifying any zones of higher permeability and preferential flow pathways for seepage and the extend of any existing groundwater mounding;</li> <li>(b) An assessment of both the spatial and lateral (i.e. aquifer being screened) distribution of the groundwater monitoring bores; and</li> <li>(c) if the monitoring bore network is found to be inadequate, additional groundwater monitoring locations (with bore depths, screen interval details) with relevant justification and timeframe for installation.</li> </ul>	Report to be submitted to the CEO by 6 August 2025	Compliant	A report was submitted to the CEO of DWER through the Environment Online portal.	The submission is located here within Bartos P drive. P:\Data\1.7 Environment\05 Legal & Other_Reqs\07_Licenses\Prescribed Premise Licence\PPL_WA_DL\Compliance															
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## APPENDIX 4: GR1 FORM - WATER QUALITY MONITORING



Licence: L4597/1988/14  
Form: GR1  
Name: Monitoring of Point Source Groundwater Quality

Licensee: Barto Gold Mining Pty Ltd  
Period : 01/10/2024 to 30/09/2025

Emission point	Parameter	Limit	Result	Averaging Period	Method	Sample date & times
<b>Transvaal Complex</b>  (mine dewater is discharged to the Transvaal complex from the Frasers pit)	Aluminium (Al)	-	<0.1 mg/L	Oct 24 – Sep 25	Refer to MPL Methodology Summary (Appendix 8)	01/10/2024, 25/03/2025 & 08/06/2025
	Arsenic (As)	-	0.053 mg/L			
	Bicarbonate Alkalinity (HCO <sub>3</sub> <sup>-</sup> )	-	170 mg/L			
	Calcium (Ca)	-	933 mg/L			
	Chloride (Cl)	-	90,666 mg/L			
	Chromium (Cr)	-	<0.01 mg/L			
	Cobalt (Co)	-	0.087 mg/L			
	Copper (Cu)	-	0.039 mg/L			
	Iron (Fe)	-	<0.1 mg/L			
	Magnesium (Mg)	-	6550 mg/L			
	Manganese (Mn)	-	3.66 mg/L			
	Nickel (Ni)	-	0.53 mg/L			
	Potassium (K)	-	580 mg/L			
	pH	-	7.53 pH units			
	Selenium (Se)	-	<0.01 mg/L			
	Sodium (Na)	-	50,666 mg/L			
	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	-	9,833 mg/L			
	Sulphur (S)	-	Parameter not measured			
Total Dissolved Solids (TDS)	-	150,000 mg/L				
Total Suspended Solids (TSS)	-	210 mg/L				
Zinc (Zn)	-	0.046 mg/L				

Signed on behalf of Barto Gold Mining Pty Ltd: ...

[Redacted Signature]

Date: 03/10/2025.....



Licence: L4597/1988/14  
Form: GR1  
Name: Monitoring of Point Source Groundwater Quality

Licensee: Barto Gold Mining Pty Ltd  
Period : 01/10/2024 to 30/09/2025

Emission point	Parameter	Limit	Result	Averaging Period	Method	Sample date & times
<b>Nevoria Turkey Nest Dam</b>  (mine dewater is discharged to the Marvel Loch Process Water Dam)	Aluminium (Al)	-	0.076 mg/L	Oct 24 – Sep 25	Refer to MPL Methodology Summary (Appendix 8)	16/12/2024, 25/03/2025, 06/06/2025 & 17/09/2025
	Arsenic (As)	-	0.04 mg/L			
	Bicarbonate Alkalinity (HCO <sub>3</sub> <sup>-</sup> )	-	96.66 mg/L			
	Calcium (Ca)	-	1123 mg/L			
	Chloride (Cl)	-	94,666 mg/L			
	Chromium (Cr)	-	<0.005 mg/L			
	Cobalt (Co)	-	<0.047 mg/L			
	Copper (Cu)	-	0.011 mg/L			
	Iron (Fe)	-	0.366 mg/L			
	Magnesium (Mg)	-	5,500 mg/L			
	Manganese (Mn)	-	3.20 mg/L			
	Nickel (Ni)	-	0.159 mg/L			
	Potassium (K)	-	553.3 mg/L			
	pH	-	7.15 pH units			
	Selenium (Se)	-	<0.005 mg/L			
	Sodium (Na)	-	50,333 mg/L			
	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	-	8466.66 mg/L			
	Sulphur (S)	-	Parameter not measured			
Total Dissolved Solids (TDS)	-	142,666 mg/L				
Total Suspended Solids (TSS)	-	146.4 mg/L				
Zinc (Zn)	-	1.047 mg/L				

Signed on behalf of Barto Gold Mining Pty Ltd:



Date: 03/10/2025.....

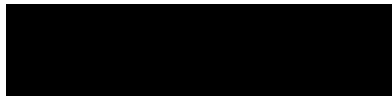


Licence: L4597/1988/14  
Form: GR1  
Name: Monitoring of Point Source Groundwater Quality

Licensee: Barto Gold Mining Pty Ltd  
Period : 01/10/2024 to 30/09/2025

Emission point	Parameter	Limit	Result	Averaging Period	Method	Sample date & times
Polaris South Pit (mine dewater discharged to the Polaris South Pit from Cornishman Pits)	Aluminium (Al)	-	<0.10 mg/L	October 24-March 2025	Refer to MPL Methodology Summary (Appendix 8)	1/10/2024, 25/03/2025
	Arsenic (As)	-	0.062 mg/L			
	Bicarbonate Alkalinity (HCO <sub>3</sub> <sup>-</sup> )	-	116.66 mg/L			
	Calcium (Ca)	-	2,100 mg/L			
	Chloride (Cl)	-	79,333 mg/L			
	Chromium (Cr)	-	<0.010 mg/L			
	Cobalt (Co)	-	0.051 mg/L			
	Copper (Cu)	-	0.0115 mg/L			
	Iron (Fe)	-	<0.010 mg/L			
	Magnesium (Mg)	-	5500 mg/L			
	Manganese (Mn)	-	1.18 mg/L			
	Nickel (Ni)	-	0.87 mg/L			
	Potassium (K)	-	400 mg/L			
	pH	-	7.60 pH units			
	Selenium (Se)	-	0.012 mg/L			
	Sodium (Na)	-	41,333 mg/L			
	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	-	5,900 mg/L			
	Sulphur (S)	-	Parameter not measured			
	Total Dissolved Solids (TDS)	-	113,000 mg/L			
Total Suspended Solids (TSS)	-	126 mg/L				
Zinc (Zn)	-	0.029 mg/L				

Signed on behalf of Barto Gold Mining Pty Lt



Date: 03/10/2025

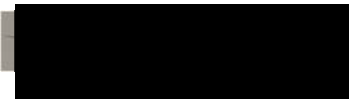


Licence: L4597/1988/14  
Form: GR1  
Name: Monitoring of Point Source Groundwater Quality

Licensee: Barto Gold Mining Pty Ltd  
Period : 01/10/2024 to 30/09/2025

Emission point	Parameter	Limit	Result	Averaging Period	Method	Sample date & times
Maori Lass Pit (mine dewater discharged to the Maori Lass Pit from Frasers Pit)	Aluminium (Al)	-	<0.10 mg/L	October 24-June 2025	Refer to MPL Methodology Summary (Appendix 8)	1/10/2024, 08/06/2025
	Arsenic (As)	-	0.037 mg/L			
	Bicarbonate Alkalinity (HCO <sub>3</sub> <sup>-</sup> )	-	150 mg/L			
	Calcium (Ca)	-	765 mg/L			
	Chloride (Cl)	-	70,633 mg/L			
	Chromium (Cr)	-	<0.010 mg/L			
	Cobalt (Co)	-	0.039 mg/L			
	Copper (Cu)	-	0.0115 mg/L			
	Iron (Fe)	-	<0.010 mg/L			
	Magnesium (Mg)	-	5000 mg/L			
	Manganese (Mn)	-	3.55 mg/L			
	Nickel (Ni)	-	0.245 mg/L			
	Potassium (K)	-	460 mg/L			
	pH	-	7.60 pH units			
	Selenium (Se)	-	<0.01 mg/L			
	Sodium (Na)	-	42,500 mg/L			
	Sulphate (SO <sub>4</sub> <sup>2-</sup> )	-	7,313 mg/L			
	Sulphur (S)	-	Parameter not measured			
	Total Dissolved Solids (TDS)	-	105,000 mg/L			
Total Suspended Solids (TSS)	-	180 mg/L				
Zinc (Zn)	-	0.037 mg/L				

Signed on behalf of Barto Gold Mining Pty Ltd:



Date: 03/10/2025.....

Environmental Protection Act 1986

Licence: L4597/1988/17

File Number: DER2014/000887



Licence: L4597/1988/14  
Form: GR1  
Name: Monitoring of Point Source Groundwater Quality

Licensee: Barto Gold Mining Pty Ltd

Period : 01/10/2024 to 30/09/2025

Emission point	Parameter	Limit	Result	Averaging Period	Method	Sample date & times
Frasers to Maori Lass	Volumetric flow rate	-	0.516 L/s	Oct 2024– Sep 2025	Water meter – measured in kL Conversion from kL/year to L/s	Monthly Oct 2024 – Sep 2025
Nevoria to Marvel Loch			9.06 L/s			
Cornishman to Polaris South			0.468 L/s			
Frasers to Transvaal			49.88 L/s			

Signed on behalf of Barto Gold Mining Pty Ltd



Date: 03/10/2025.....



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## APPENDIX 5: WATER QUALITY MONITORING - METHODOLOGY SUMMARY

# Certificate of Analysis PGI1374

## Method Summary

Method ID	Methodology Summary
INORG-001	pH - Measured using pH meter and electrode. Please note that the results for water analyses are indicative only, as analysis can be completed outside of the recommended holding times. Solids are reported from a 1:5 water extract unless otherwise specified. Alternatively, pH is determined in a 1:5 extract using 0.01M calcium chloride or a solid is extracted at a ratio of 1:2.5 ( AS1289.4.3.1), pH is measured in the extract.
INORG-002	Conductivity and Salinity - measured using a conductivity cell at 25°C. Soil results reported from a 1:5 Soil:Water extract unless otherwise specified. Please note Resistivity is estimated by calculation and may not correlate with results otherwise obtained using the Resistivity current method (based on AS 1289.4.4.1), depending on the nature of the soil being analysed. Blanks may yield EC readings >1µS/cm, this is likely due to adsorption of Carbon Dioxide while the blank sample is sat on the instrument autosampler prior to analysis. The values are generally insignificant (<5µS/cm) compared to most actual sample conductivities.
INORG-006	Alkalinity - determined titrimetrically based on APHA latest edition 2320-B. Solids reported from a 1:5 water extract unless otherwise specified. Total Carbon Dioxide - determined by calculation in accordance with APHA latest edition,4500-CO2 D.
INORG-014	Cyanide - free, total, weak acid dissociable by segmented flow analyser (in line dialysis with colourimetric finish). Solids/Filters and sorbents are extracted in a caustic media prior to analysis. Impingers are pH adjusted as required prior to analysis. Cyanides amenable to Chlorination - samples are analysed untreated and treated with hypochlorite to assess the potential for chlorination of cyanide forms.
INORG-018	Total Dissolved Solids - determined gravimetrically. The solids are dried at 180±10°C. NOTE: Where the EC of the sample is <100µS/cm, the TDS will typically be below 70mg/L (as the sample is very likely to be at least drinking water quality). Therefore to ensure data quality for TDS, the TDS is typically calculated as per the equation: $TDS = EC \times 0.6$
INORG-019	Suspended Solids - determined gravimetrically by filtration of the sample. The solids are dried at 104±5°C
INORG-026	Fluoride determined by ion selective electrode (ISE) based on APHA latest edition, 4500-F-C. Solids are reported from a 1:5 water extract unless otherwise specified.
INORG-040	The concentrations of the major ions (mg/L) are converted to milliequivalents and summed. The ionic balance should be within +/- 15% i.e. total anions = total cations +/-15%.
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-081	Anions determined by Ion Chromatography. Waters samples are filtered on receipt prior to analysis. Solids are analysed from a water extract. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
METALS-020	Determination of various metals by ICP-OES. Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS. Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements. Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.

# Certificate of Analysis PGI1374

## Result Definitions

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Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)
##	Indicates a laboratory acceptance criteria outlier, for further details, see Result Comments and/or QC Comments

## Quality Control Definitions

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### Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

### Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

### LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

### Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

### Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

## APPENDIX 6: MONITORING BORE SWLS



## **Appendix 6: Monitoring Bore SWLs**

**Monitoring Bores: TSF Series (1 - 9)**

ID	Date	SWL (mtoc)	SWL (mbgl) <sup>1</sup>
ML TSF 1	5/11/2024	10.91	10.89
ML TSF 1	20/11/2024	10.91	10.89
ML TSF 1	16/12/2024	11.04	11.02
ML TSF 1	27/01/2025	11.09	11.07
ML TSF 1	13/02/2025	11.15	11.13
ML TSF 1	25/03/2025	11.20	11.18
ML TSF 1	23/04/2025	11.27	11.25
ML TSF 1	10/05/2025	11.31	11.29
ML TSF 1	09/06/2025	11.27	11.25
ML TSF 1	23/07/2025	11.23	11.21
ML TSF 1	22/08/2025	11.49	11.47
ML TSF 1	18/09/2025	11.52	11.50

ID	Date	SWL (mtoc)	SWL (mbgl)
ML TSF 2	5/11/2024	11.51	11.49
ML TSF 2	20/11/2024	11.51	11.49
ML TSF 2	16/12/2024	11.63	11.61
ML TSF 2	27/01/2025	11.69	11.67
ML TSF 2	13/02/2025	11.76	11.74
ML TSF 2	25/03/2025	11.78	11.76
ML TSF 2	23/04/2025	11.86	11.84
ML TSF 2	10/05/2025	11.85	11.83
ML TSF 2	09/06/2025	11.89	11.87
ML TSF 2	23/07/2025	11.95	11.93
ML TSF 2	22/08/2025	12.06	12.04
ML TSF 2	18/09/2025	12.07	12.05

ID	Date	SWL (mtoc)	SWL (mbgl)
ML TSF 3	5/11/2024	dry	dry
ML TSF 3	20/11/2024	dry	dry
ML TSF 3	16/12/2024	dry	dry
ML TSF 3	27/01/2025	dry	dry
ML TSF 3	13/02/2025	dry	dry
ML TSF 3	25/03/2025	dry	dry
ML TSF 3	23/04/2025	dry	dry
ML TSF 3	10/05/2025	dry	dry
ML TSF 3	09/06/2025	dry	dry
ML TSF 3	23/07/2025	dry	dry
ML TSF 3	22/08/2025	dry	dry
ML TSF 3	18/09/2025	dry	dry

ID	Date	SWL (mtoc)	SWL (mbgl)
ML TSF 4	5/11/2024	10.49	10.47
ML TSF 4	20/11/2024	10.54	10.52
ML TSF 4	16/12/2024	10.65	10.63
ML TSF 4	27/01/2025	10.68	10.66
ML TSF 4	13/02/2025	10.74	10.72
ML TSF 4	25/03/2025	10.76	10.74
ML TSF 4	23/04/2025	10.76	10.74
ML TSF 4	10/05/2025	10.81	10.79
ML TSF 4	09/06/2025	10.83	10.81
ML TSF 4	23/07/2025	10.84	10.82
ML TSF 4	22/08/2025	10.98	10.96
ML TSF 4	18/09/2025	10.98	10.96

<sup>1</sup>For TSF 1 – 9, mbgl is considered as the TSF embankment surface (ie. not natural ground level)



ID	Date	SWL (mtoc)	SWL (mbgl)
ML TSF 5	5/11/2024	10.17	9.52
ML TSF 5	20/11/2024	10.27	9.62
ML TSF 5	16/12/2024	10.37	9.72
ML TSF 5	27/01/2025	10.38	9.73
ML TSF 5	13/02/2025	10.40	9.75
ML TSF 5	25/03/2025	10.47	9.82
ML TSF 5	23/04/2025	10.42	9.77
ML TSF 5	10/05/2025	10.49	9.84
ML TSF 5	09/06/2025	10.49	9.84
ML TSF 5	23/07/2025	10.50	9.85
ML TSF 5	22/08/2025	10.68	10.03
ML TSF 5	18/09/2025	10.68	10.03

ID	Date	SWL (mtoc)	SWL (mbgl)
ML TSF 6	5/11/2024	6.82	6.57
ML TSF 6	20/11/2024	6.97	6.72
ML TSF 6	16/12/2024	7.06	6.81
ML TSF 6	27/01/2025	7.08	6.83
ML TSF 6	13/02/2025	7.11	6.86
ML TSF 6	25/03/2025	7.17	6.92
ML TSF 6	23/04/2025	7.14	6.89
ML TSF 6	10/05/2025	7.19	6.94
ML TSF 6	09/06/2025	7.14	6.89
ML TSF 6	23/07/2025	7.11	6.86
ML TSF 6	22/08/2025	7.28	7.03
ML TSF 6	18/09/2025	7.25	7.00

ID	Date	SWL (mtoc)	SWL (mbgl)
ML TSF 7	5/11/2024	dry	dry
ML TSF 7	20/11/2024	dry	dry
ML TSF 7	16/12/2024	dry	dry
ML TSF 7	27/01/2025	dry	dry
ML TSF 7	13/02/2025	dry	dry
ML TSF 7	25/03/2025	dry	dry
ML TSF 7	23/04/2025	dry	dry
ML TSF 7	10/05/2025	dry	dry
ML TSF 7	10/06/2025	dry	dry
ML TSF 7	23/07/2025	dry	dry
ML TSF 7	22/08/2025	dry	dry
ML TSF 7	18/09/2025	dry	dry

ID	Date	SWL (mtoc)	SWL (mbgl)
ML TSF 8	5/11/2024	dry	dry
ML TSF 8	20/11/2024	dry	dry
ML TSF 8	16/12/2024	dry	dry
ML TSF 8	27/01/2025	dry	dry
ML TSF 8	13/02/2025	dry	dry
ML TSF 8	25/03/2025	dry	dry
ML TSF 8	23/04/2025	dry	dry
ML TSF 8	10/05/2025	dry	dry
ML TSF 8	10/06/2025	dry	dry
ML TSF 8	23/07/2025	dry	dry
ML TSF 8	22/08/2025	dry	dry
ML TSF 8	18/09/2025	dry	dry



ID	Date	SWL (mtoc)	SWL (mbgl)
ML TSF 9	5/11/2024	10.84	10.03
ML TSF 9	20/11/2024	10.94	10.13
ML TSF 9	16/12/2024	11.10	10.29
ML TSF 9	27/01/2025	11.14	10.33
ML TSF 9	13/02/2025	11.18	10.37
ML TSF 9	25/03/2025	11.25	10.44
ML TSF 9	23/04/2025	11.28	10.47
ML TSF 9	10/05/2025	11.31	10.50
ML TSF 9	09/06/2025	11.33	10.52
ML TSF 9	23/07/2025	11.35	10.54
ML TSF 9	22/08/2025	11.57	11.16
ML TSF 9	18/09/2025	11.56	11.15

**Monitoring Bores: MB 94 Series (B1, D1, E1, F1, G1)**

ID	Date	SWL (mtoc)	SWL (mbgl)
MB94 B1	5/11/2024	Destroyed	
MB94 B1	20/11/2024	Destroyed	
MB94 B1	16/12/2024	Destroyed	
MB94 B1	27/01/2025	Destroyed	
MB94 B1	13/02/2025	Destroyed	
MB94 B1	25/03/2025	Destroyed	
MB94 B1	23/04/2025	Destroyed	
MB94 B1	10/05/2025	Destroyed	
MB94 B1	10/06/2025	Destroyed	
MB94 B1	23/07/2025	Destroyed	
MB94 B1	22/08/2025	Destroyed	
MB94 B1	18/09/2025	Destroyed	

ID	Date	SWL (mtoc)	SWL (mbgl)
MB94 D1	5/11/2024	6.81	5.95
MB94 D1	20/11/2024	6.78	5.92
MB94 D1	16/12/2024	6.72	5.86
MB94 D1	27/01/2025	6.76	5.90
MB94 D1	13/02/2025	No Access	
MB94 D1	25/03/2025	6.77	5.91
MB94 D1	23/04/2025	6.80	5.94
MB94 D1	10/05/2025	6.75	5.89
MB94 D1	10/06/2025	6.82	5.96
MB94 D1	23/07/2025	6.91	6.05
MB94 D1	22/08/2025	6.85	5.99
MB94 D1	18/09/2025	6.72	5.86



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ID	Date	SWL (mtoc)	SWL (mbgl)
MB94 E1	5/11/2024	0.89	0.39
MB94 E1	20/11/2024	0.90	0.40
MB94 E1	16/12/2024	0.80	0.30
MB94 E1	27/01/2025	0.83	0.33
MB94 E1	13/02/2025	0.91	0.41
MB94 E1	25/03/2025	0.93	0.43
MB94 E1	23/04/2025	0.65	0.15
MB94 E1	10/05/2025	0.88	0.38
MB94 E1	10/06/2025	0.94	0.44
MB94 E1	23/07/2025	destroyed	
MB94 E1	22/08/2025	destroyed	
MB94 E1	17/09/2025	destroyed	

ID		SWL (mtoc)	SWL (mbgl)
MB94 F1	5/11/2024	1.60	0.54
MB94 F1	20/11/2024	1.64	0.58
MB94 F1	16/12/2024	1.57	0.51
MB94 F1	27/01/2025	1.73	0.67
MB94 F1	13/02/2025	1.74	0.68
MB94 F1	25/03/2025	1.69	0.63
MB94 F1	23/04/2025	1.67	0.61
MB94 F1	10/05/2025	1.73	0.67
MB94 F1	10/06/2025	1.72	0.66
MB94 F1	23/07/2025	1.78	0.72
MB94 F1	22/08/2025	1.71	0.65
MB94 F1	17/09/2025	1.69	0.63

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ID	Date	SWL (mtoc)	SWL (mbgl)
MB94 G1	5/11/2024	3.14	2.50
MB94 G1	20/11/2024	3.13	2.49
MB94 G1	16/12/2024	2.90	2.26
MB94 G1	27/01/2025	3.10	2.46
MB94 G1	13/02/2025	3.23	2.59
MB94 G1	25/03/2025	3.31	2.67
MB94 G1	23/04/2025	3.31	2.67
MB94 G1	10/05/2025	3.39	2.75
MB94 G1	10/06/2025	3.51	2.87
MB94 G1	23/07/2025	3.65	3.01
MB94 G1	22/08/2025	3.59	2.95
MB94 G1	17/09/2025	3.49	2.85

**Monitoring Bores: PZ 99 Series (B1, D1, E1, F1, G1)**

ID	Date	SWL (mtoc)	SWL (mbgl)
PZ99 B1	5/11/2024	Destroyed under TSF	
PZ99 B1	20/11/2024	Destroyed under TSF	
PZ99 B1	16/12/2024	Destroyed under TSF	
PZ99 B1	27/01/2025	Destroyed under TSF	
PZ99 B1	13/02/2025	Destroyed under TSF	
PZ99 B1	25/03/2025	Destroyed under TSF	
PZ99 B1	23/04/2025	Destroyed under TSF	
PZ99 B1	10/05/2025	Destroyed under TSF	
PZ99 B1	10/06/2025	Destroyed under TSF	
PZ99 B1	23/07/2025	Destroyed under TSF	
PZ99 B1	22/08/2025	Destroyed under TSF	
PZ99 B1	18/09/2025	Destroyed under TSF	

ID	Date	SWL (mtoc)	SWL (mbgl)
PZ99 D1	5/11/2024	No access	
PZ99 D1	20/11/2024	No access	
PZ99 D1	16/12/2024	15.28	15.06
PZ99 D1	27/01/2025	dry	
PZ99 D1	13/02/2025	Blocked	
PZ99 D1	25/03/2025	dry	
PZ99 D1	23/04/2025	dry	
PZ99 D1	10/05/2025	dry	
PZ99 D1	10/06/2025	No access	
PZ99 D1	23/07/2025	No access	
PZ99 D1	22/08/2025	dry	
PZ99 D1	18/09/2025	dry	



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ID	Date	SWL (mtoc)	SWL (mbgl)
PZ99 E1	5/11/2024	17.74	17.24
PZ99 E1	20/11/2024	17.81	17.31
PZ99 E1	16/12/2024	17.68	17.18
PZ99 E1	27/01/2025	17.71	17.21
PZ99 E1	13/02/2025	17.71	17.21
PZ99 E1	25/03/2025	17.73	17.23
PZ99 E1	23/04/2025	17.67	17.17
PZ99 E1	10/05/2025	17.70	17.20
PZ99 E1	10/06/2025	17.70	17.20
PZ99 E1	23/07/2025	17.71	17.21
PZ99 E1	22/08/2025	17.70	17.70
PZ99 E1	18/09/2025	17.69	17.69
ID	Date	SWL (mtoc)	SWL (mbgl)
PZ99 F1	5/11/2024	9.73	8.97
PZ99 F1	20/11/2024	9.79	9.03
PZ99 F1	16/12/2024	9.78	9.02
PZ99 F1	27/01/2025	9.79	9.03
PZ99 F1	13/02/2025	9.78	9.02
PZ99 F1	25/03/2025	9.81	9.05
PZ99 F1	23/04/2025	9.80	9.04
PZ99 F1	10/05/2025	9.84	9.08
PZ99 F1	10/06/2025	9.83	9.07
PZ99 F1	23/07/2025	9.82	9.06
PZ99 F1	22/08/2025	9.87	9.11



PZ99 F1	18/09/2025	9.88	9.12
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ID	Date	SWL (mtoc)	SWL (mbgl)
PZ99 G1	5/11/2024	5.23	4.65
PZ99 G1	20/11/2024	5.24	4.66
PZ99 G1	16/12/2024	5.20	4.62
PZ99 G1	27/01/2025	5.27	4.69
PZ99 G1	13/02/2025	5.37	4.79
PZ99 G1	25/03/2025	5.52	4.94
PZ99 G1	23/04/2025	5.51	4.93
PZ99 G1	10/05/2025	5.58	5.00
PZ99 G1	10/06/2025	5.66	5.08
PZ99 G1	23/07/2025	5.80	5.22
PZ99 G1	22/08/2025	5.82	5.24
PZ99 G1	17/09/2025	5.78	5.20



ID	Date	SWL (mtoc)	SWL (mbgl)
21 A1	5/11/2024	dry	
21 A1	20/11/2024	dry	
21 A1	16/12/2024	65.11	
21 A1	27/01/2025	64.80	
21 A1	13/02/2025	64.69	
21 A1	25/03/2025	64.48	
21 A1	23/04/2025	64.29	
21 A1	10/05/2025	64.28	
21 A1	10/06/2025	64.23	
21 A1	23/07/2025	64.05	
21 A1	17/08/2025	Dry?	
21 A1	16/09/2025	63.70	

ID	Date	SWL (mtoc)	SWL (mbgl)
21 B1	5/11/2024	dry	dry
21 B1	20/11/2024	dry	dry
21 B1	16/12/2024	dry	dry
21 B1	27/01/2025	dry	dry
21 B1	13/02/2025	dry	dry
21 B1	25/03/2025	dry	dry
21 B1	23/04/2025	dry	dry
21 B1	10/05/2025	dry	dry
21 B1	10/06/2025	dry	dry
21 B1	23/07/2025	dry	dry
21 B1	22/08/2025	dry	dry
21 B1	17/09/2025	dry	dry



ID	Date	SWL (mtoc)	SWL (mbgl)
21 A2	5/11/2024	41.54	
21 A2	20/11/2024	41.29	
21 A2	16/12/2024	41.00	
21 A2	27/01/2025	40.48	
21 A2	13/02/2025	40.27	
21 A2	25/03/2025	39.80	
21 A2	23/04/2025	39.07	
21 A2	10/05/2025	38.91	
21 A2	10/06/2025	38.02	
21 A2	23/07/2025	38.02	
21 A2	17/08/2025	37.56	
21 A2	16/09/2025	37.3	

ID	Date	SWL (mtoc)	SWL (mbgl)
21 B2	5/11/2024	dry	dry
21 B2	20/11/2024	dry	dry
21 B2	16/12/2024	dry	dry
21 B2	27/01/2025	dry	dry
21 B2	13/02/2025	dry	dry
21 B2	25/03/2025	dry	dry
21 B2	23/04/2025	dry	dry
21 B2	10/05/2025	dry	dry
21 B2	10/06/2025	dry	dry
21 B2	23/07/2025	dry	dry
21 B2	17/08/2025	dry	dry
21 B2	16/09/2025	dry	dry



ID	Date	SWL (mtoc)	SWL (mbgl)
21 A3	5/11/2024	53.16	
21 A3	20/11/2024	53.09	
21 A3	16/12/2024	53.01	
21 A3	27/01/2025	52.99	
21 A3	13/02/2025	52.99	
21 A3	25/03/2025	52.92	
21 A3	23/04/2025	52.74	
21 A3	10/05/2025	52.73	
21 A3	10/06/2025	52.94	
21 A3	23/07/2025	52.43	
21 A3	17/08/2025	52.27	
21 A3	16/09/2025	52.73	

ID	Date	SWL (mtoc)	SWL (mbgl)
21 B3	5/11/2024	dry	dry
21 B3	20/11/2024	dry	dry
21 B3	16/12/2024	dry	dry
21 B3	27/01/2025	dry	dry
21 B3	13/02/2025	dry	dry
21 B3	25/03/2025	dry	dry
21 B3	23/04/2025	dry	dry
21 B3	10/05/2025	dry	dry
21 B3	10/06/2025	dry	dry
21 B3	23/07/2025	dry	dry
21 B3	17/08/2025	dry	dry
21 B3	16/09/2025	dry	dry



ID	Date	SWL (mtoc)	SWL (mbgl)
21 A4	5/11/2024	58.35	
21 A4	20/11/2024	58.32	
21 A4	16/12/2024	58.28	
21 A4	27/01/2025	58.37	
21 A4	13/02/2025	58.33	
21 A4	25/03/2025	58.29	
21 A4	23/04/2025	58.34	
21 A4	10/05/2025	58.25	
21 A4	10/06/2025	58.21	
21 A4	23/07/2025	58.22	
21 A4	17/08/2025	58.12	
21 A4	16/09/2025	58.10	

ID	Date	SWL (mtoc)	SWL (mbgl)
21 B4	5/11/2024	dry	dry
21 B4	20/11/2024	dry	dry
21 B4	16/12/2024	dry	dry
21 B4	27/01/2025	dry	dry
21 B4	13/02/2025	dry	dry
21 B4	25/03/2025	dry	dry
21 B4	23/04/2025	dry	dry
21 B4	10/05/2025	dry	dry
21 B4	10/06/2025	dry	dry
21 B4	23/07/2025	dry	dry
21 B4	17/08/2025	dry	dry
21 B4	16/09/2025	dry	dry



ID	Date	SWL (mtoc)	SWL (mbgl)
21 A5	5/11/2024	24.92	
21 A5	20/11/2024	24.83	
21 A5	16/12/2024	24.75	
21 A5	27/01/2025	24.73	
21 A5	13/02/2025	24.71	
21 A5	25/03/2025	24.59	
21 A5	23/04/2025	24.32	
21 A5	10/05/2025	24.32	
21 A5	10/06/2025	24.20	
21 A5	23/07/2025	24.32	
21 A5	17/08/2025	23.75	
21 A5	16/09/2025	23.67	

ID	Date	SWL (mtoc)	SWL (mbgl)
21 B5	5/11/2024	dry	dry
21 B5	20/11/2024	dry	dry
21 B5	16/12/2024	dry	dry
21 B5	27/01/2025	dry	dry
21 B5	13/02/2025	dry	dry
21 B5	25/03/2025	dry	dry
21 B5	23/04/2025	dry	dry
21 B5	10/05/2025	dry	dry
21 B5	10/06/2025	dry	dry
21 B5	23/07/2025	dry	dry
21 B5	17/08/2025	dry	dry
21 B5	16/09/2025	dry	dry



ID	Date	SWL (mtoc)	SWL (mbgl)
21 A6	5/11/2024	15.57	
21 A6	20/11/2024	15.64	
21 A6	16/12/2024	15.63	
21 A6	27/01/2025	15.71	
21 A6	13/02/2025	15.76	
21 A6	25/03/2025	15.73	
21 A6	23/04/2025	15.63	
21 A6	10/05/2025	15.72	
21 A6	10/06/2025	15.69	
21 A6	23/07/2025	15.61	
21 A6	17/08/2025	15.61	
21 A6	16/09/2025	15.59	

ID	Date	SWL (mtoc)	SWL (mbgl)
21 B6	5/11/2024	15.39	
21 B6	20/11/2024	15.36	
21 B6	16/12/2024	15.35	
21 B6	27/01/2025	15.41	
21 B6	13/02/2025	15.44	
21 B6	25/03/2025	15.42	
21 B6	23/04/2025	14.64	
21 B6	10/05/2025	15.38	
21 B6	10/06/2025	15.35	
21 B6	23/07/2025	15.31	
21 B6	17/08/2025	15.32	
21 B6	16/09/2025	15.30	



ID	Date	SWL (mtoc)	SWL (mbgl)
AXE- PB3	02/10/2024	51.43	50.93
AXE- PB3	05/11/2024	53.10	52.60
AXE- PB3	20/11/2024	52.23	51.73
AXE- PB3	25/01/2025	43.68	43.18
AXE- PB3	25/03/2025	blockage	

ID	Date	SWL (mtoc)	SWL (mbgl)
AXE- PB2	05/11/2024	64.78	64.28
AXE- PB2	25/03/2025	63.07	62.57
AXE- PB2			

ID	Date	SWL (mtoc)	SWL (mbgl)
AXE- PB1	02/10/2024	50.87	50.56
AXE- PB1	05/11/2024	destroyed	destroyed

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## APPENDIX 7: MONITORING BORE WATER QUALITY



## **Appendix 7: Monitoring Bore Water Quality**

**MB94 D1**

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO <sub>3</sub> as CaCO <sub>3</sub>	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO <sub>4</sub>	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
23/03/2017	0.01	0.016	16	0.0035	220	1,900	0.001	0.22	0.002	0.05	430	5	1.8	22	0.014	1,300	2,200	6,400	2000	0.033	<0.004	6.2
2018	Unable to sample due to bore going dry.																					
2019	Unable to sample as bore was dry up until September 2019 and sampling the small band of water wasn't possible.																					
2020	Unable to sample as bore as it was dry for large parts of the reporting period and sampling the small band of water wasn't possible when it wasn't dry.																					
2021	Unable to sample as bore as it was dry for large parts of the reporting period and sampling the small band of water wasn't possible when it wasn't dry.																					
2022	Unable to sample as bore as it was dry for large parts of the reporting period and sampling the small band of water wasn't possible when it wasn't dry.																					
2023	Unable to sample as bore as it was dry for large parts of the reporting period and sampling the small band of water wasn't possible when it wasn't dry.																					
2024	Unable to sample as bore as it was dry for large parts of the reporting period and sampling the small band of water wasn't possible when it wasn't dry.																					
2025	Unable to sample as bore as it was dry for large parts of the reporting period and sampling the small band of water wasn't possible when it wasn't dry.																					

**MB94 E1**

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO <sub>3</sub> as CaCO <sub>3</sub>	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO <sub>4</sub>	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
23/03/2017	200	0.011	<5	0.0007	1,100	25,000	0.1	1	0.026	9.1	1,800	7.3	1.1	260	0.021	15,000	2,800	47,000	120	0.044	0.052	4
2018	MB94 E1 was damaged in Q2 2017, and as such a sample is not able to be taken.																					
2019	MB94 E1 was damaged in Q2 2017, and as such a sample is not able to be taken.																					
2020/2021	MB94 E1 was damaged in Q2 2017, and as such a sample is not able to be taken.																					
2021/2022	MB94 E1 was damaged in Q2 2017, and as such a sample is not able to be taken.																					
2022/2023	MB94 E1 was damaged in Q2 2017, and as such a sample is not able to be taken.																					
2023/2024	MB94 E1 was damaged in Q2 2017, and as such a sample is not able to be taken.																					
2024/2025	MB94 E1 was damaged in Q2 2017, and as such a sample is not able to be taken.																					

**MB94 F1**

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH Units
06/01/2023	210	0.0094	<5.0	0.00068	2300	41000	0.011	1	0.049									78000	31		0.37	3.1
28/03/2023	210	0.0094	<5.0	0.00068	2300	41000	0.011	1	0.049	18	780	15	0.35	300	0.0067	23000	2900	76000	17	0.15	0.098	3
07/07/2023																		73000	12		0.13	2.8
05/09/2023	190	0.011	<5.0	0.00055	2700	41000	0.01	1.1	0.06	17	910	13	0.36	350	0.0053	25000	3000	81000	29	0.15	0.24	3.1
26/12/2023																		76000	8.5		0.24	3.1
03/04/2024	220	0.015	<5.0	0.0012	2300	48000	0.011	1.1	0.062	17	900	15	0.39	310	0.012	21000	2700	69000	36	0.21	0.35	3.1
05/10/2024	250	0.01	<5.0	0.0007	2200	40000	0.011	1	0.056	17		14	0.3	300	0.0062	20000	2400	46000	120	0.25	0.32	2.9
09/01/2025																		60000	470		0.073	3.7
11/03/2025	250	0.0099	<5.0	0.00066	2400	41000	0.012	1.1	0.063	18	890	16	0.36	310	0.0064	21000	2800	57000	69	0.27	0.17	3.1
10/06/2025																		69000	120		0.15	3.2
05/10/2024	250	0.01	<5.0	0.0007	2200	40000	0.011	1	0.056	17		14	0.3	300	0.0062	20000	2400	46000	120	0.25	0.32	2.9
09/01/2025																		60000	470		0.073	3.7
11/03/2025	250	0.0099	<5.0	0.00066	2400	41000	0.012	1.1	0.063	18	890	16	0.36	310	0.0064	21000	2800	57000	69	0.27	0.17	3.1
10/06/2025																		69000	120		0.15	3.2
17/09/2025	300	0.012	<5.0	0.00085	2100	36000	0.013	1.1	0.088	15	920	19	0.42	280	0.0065	21000	2800	65000	32	0.34	0.2	3

**MB94 G1**

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH Units
07/01/2023																		88000	95		0.047	4.5
28/03/2023	18	0.0098	<5.0	<0.00050	2200	47000	0.011	0.64	0.0063	68	1600	37	0.23	440	<0.0050	28000	3400	76000	42	0.016	0.049	4.4
07/07/2023																		91000	22		0.05	3.6
18/09/2023	<0.050	<0.0050	240	<0.00050	310	25000	0.006	0.16	<0.0050	100	1700	6.6	0.016	470	<0.0050	17000	5100	53000	110	0.014	<0.0040	6
26/12/2023																		55000	100		0.028	6
03/04/2024	7.8	0.0057	5.9	<0.00050	2400	59000	0.0085	0.62	<0.0050	48	1700	36	0.15	490	<0.0050	27000	3000	88000	20	0.013	0.21	4.6
04/10/2024	12	<0.010	7.6	<0.0010	2300	52000	<0.010	0.62	<0.010	60		34	0.17	480	<0.010	27000	2900	58000	210	<0.010	0.045	5
09/01/2025																		78000	48		0.034	6
11/03/2025	9.1	<0.0050	<5.0	<0.00050	2500	50000	0.008	0.67	0.012	53	1700	37	0.21	470	<0.0050	27000	3400	110000	110	0.058	0.047	4.6
10/06/2025																		93000	130		0.14	3.8
05/10/2024	12	<0.010	7.6	<0.0010	2300	52000	<0.010	0.62	<0.010	60		34	0.17	480	<0.010	27000	2900	58000	210	<0.010	0.045	5
09/01/2025																		78000	48		0.034	6
11/03/2025	9.1	<0.0050	<5.0	<0.00050	2500	50000	0.008	0.67	0.012	53	1700	37	0.21	470	<0.0050	27000	3400	110000	110	0.058	0.047	4.6
10/06/2025																		93000	130		0.14	3.8
17/09/2025	0.44	0.011	79	<0.00050	1500	37000	0.015	0.34	<0.0050	110	1600	20	0.017	470	<0.0050	22000	3400	72000	24	0.034	0.17	5.7

21 A1

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
15/12/2024																		22000	660		0.0052	7
10/03/2025	<0.010	0.0023	680	0.00021	290	13000	<0.0010	0.092	0.0098	0.013	1400	11	0.1	70	<0.0010	5700	1800	27000	440	0.028	<0.0040	7.3
09/06/2025																		20000	740		<0.0040	6.7
17/09/2025	<0.020	<0.0020	610	0.00028	290	14000	<0.0020	0.097	0.0028	2.3	1700	16	0.09	76	<0.0020	6200	1400	25000	300	0.025	<0.020	7.1

21-A2

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
06/01/2023																		21000	110		<0.0040	7.1
28/03/2023	0.17	0.0018	330	0.00074	280	13000	<0.0010	0.12	0.0047	0.26	1100	4.6	0.13	75	<0.0010	5800	1600	24000	54	0.13	<0.0040	6.8
06/07/2023																		22000	41		<0.0040	6.7
18/09/2023	0.011	<0.0010	260	0.0084	300	13000	<0.0010	0.16	0.002	0.28	1500	1.8	0.2	81	0.0094	6200	1600	26000	18	0.036	0.0053	6.4
22/12/2024																		23000	50		<0.0040	6.7
13/04/2024	<0.020	0.0045	360	0.0031	250	14000	<0.0020	0.12	0.0023	0.031	1200	3.4	0.15	71	0.0038	5900	1700	23000	98	0.13	<0.0040	7.3
08/07/2024																		24000	18		0.011	6.8
05/10/2024	0.087	<0.0020	230	0.0083	460	17000	<0.0020	0.18	0.0041	0.097		1.7	0.27	100	0.007	6200	1700	23000	130	0.022	0.0075	6.3
15/12/2024																		34000	24		0.044	6.6
10/03/2025	<0.020	<0.0020	220	0.0026	630	23000	<0.0020	0.6	0.0047	0.07	2700	11	0.93	120	0.0034	7300	2700	28000	28	0.042	0.024	6.6
09/06/2025																		39000	80		0.035	6.3
17/09/2025	<0.020	<0.0020	210	0.0027	590	19000	<0.0020	0.59	0.0054	0.12	2800	13	0.89	110	0.003	8300	2000	37000	20	0.079	<0.020	7.3

21-A3

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
06/01/2023																		3400	30		<0.0040	8
28/03/2023	0.025	0.0034	320	<0.00010	50	2100	0.0012	0.0017	<0.0010	0.029	75	0.4	0.0025	37	<0.0010	1100	240	3500	34	0.0022	<0.0040	8.2
06/07/2023																		3700	27		<0.0040	8.3

18/09/2023	0.028	0.0029	300	<0.00010	56	1800	<0.0010	0.0025	<0.0010	0.07	91	0.44	0.0039	41	0.0025	1200	180	3500	20	0.0056	<0.0040	7.9
22/12/2024																		3700	16		<0.0040	7.7
13/04/2024	0.019	0.0046	280	<0.00010	48	2000	0.0014	0.0024	<0.0010	0.022	88	0.54	0.0041	32	<0.0010	1100	250	3500	18	0.0048	<0.0040	7.9
08/07/2024																		3600	12		<0.0040	7.6
05/10/2024	0.047	0.0061	240	<0.00010	62	1800	0.0013	0.0034	<0.0010	0.05		0.62	0.0043	39	<0.0010	1100	260	3200	76	0.0038	<0.0040	7.8
15/12/2024																		3600	58		0.011	7.7
10/03/2025	0.011	0.0026	170	<0.00010	26	2000	<0.0010	0.0019	<0.0010	0.028	91	0.44	0.0026	39	<0.0010	1200	330	4300	37	0.0024	<0.0040	7.8
09/06/2025																		4300	39		<0.0040	7.9
17/09/2025	<0.020	<0.0020	150	<0.00020	28	1900	<0.0020	0.0024	<0.0020	0.19	98	0.42	0.0055	39	<0.0020	1200	240	3700	54	<0.0020	<0.020	8

21-A4

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH Units
18/09/2023	0.083	0.0035	400	<0.00010	21	370	<0.0010	<0.0010	<0.0010	<0.010	5.6	0.0071	0.0013	28	0.004	550	240			0.0013	<0.0040	8.4
22/12/2024	Not enough water column to either pump or bail																					
13/04/2024	0.058	0.0041	420	<0.00010	32	470	<0.0010	<0.0010	0.0014	<0.010	5.2	0.0094	0.0012	20	0.0023	460	310	1500	1000	0.0013	<0.0040	8.2
08/07/2024	Not enough water column to either pump or bail																					
05/10/2024	0.016	0.0029	280	<0.00010	96	1300	<0.0010	0.0091	<0.0010	<0.010		0.062	0.0037	27	0.018	870	340	4100	520	0.0026	0.02	7.8
15/12/2024																		1900	430		<0.0040	7.7
10/03/2025	0.034	0.0035	270	<0.00010	64	890	<0.0010	0.0075	0.0011	<0.010	31	0.23	0.0094	25	0.0011	660	390	2600	770	0.0059	<0.0040	8.1
09/06/2025	Not enough water column to either pump or bail																					
17/09/2025	Not enough water column to either pump or bail																					

21-A5

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH Units
06/01/2023																		30000	33		<0.0040	5.2
29/03/2023	2.2	0.0084	10	0.0034	180	17000	0.0026	0.56	0.0067	0.064	1400	21	0.51	250	0.0033	7800	2400	32000	15	0.13	0.0075	5.1
06/07/2023																		31000	110		<0.0040	5.6
18/09/2023	3	0.011	18	0.0028	200	17000	<0.0020	0.55	0.0066	0.062	1500	20	0.5	270	0.004	9900	2300	33000	74	0.098	0.0047	5.3
22/12/2024																		33000	12		<0.0040	5.1
13/04/2024	4.9	0.0089	10	0.0031	150	17000	0.002	0.57	0.0099	0.078	1300	20	0.51	210	0.0049	8700	2300	32000	22	0.11	0.0044	5.3
08/07/2024																		33000	6		0.022	5.1
05/10/2024	8.5	0.0085	5.2	0.0028	210	17000	0.0024	0.57	0.012	0.087		20	0.43	250	0.0041	8600	2000	22000	110	0.093	0.02	4.8
15/12/2024																		30000	150		0.025	5
10/03/2025	11	0.0094	5.6	0.003	210	19000	<0.0020	0.63	0.018	0.12	1300	22	0.56	240	0.0039	8000	2500	37000	68	0.17	0.011	4.9
09/06/2025																		22000	190		0.016	4.9
17/09/2025	13	0.0094	<5.0	0.0032	200	17000	<0.0050	0.66	0.034	0.11	1400	23	0.6	220	<0.0050	9400	2100	34000	400	0.29	<0.020	4.9

21-A6

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
06/01/2023																		77000	86		0.065	4.4
29/03/2023	26	0.014	<5.0	0.0032	2600	41000	0.01	1.4	0.3	3.5	1400	42	2.5	390	0.0087	21000	3300	84000	71	0.54	0.041	4.4
06/07/2023																		74000	91		0.036	4.3
18/09/2023	29	0.014	<5.0	0.003	2700	40000	0.0056	1.5	0.34	4.1	1400	47	2.7	410	0.0096	24000	3100	79000	52	0.56	0.043	4.4
22/12/2024																		83000	12		0.07	4.3
13/04/2024	Not sampled- no access																					
08/07/2024																		94000	8		0.042	4.1
05/10/2024	36	0.011	<5.0	0.0015	2900	48000	<0.010	1.5	0.37	6		40	1.5	430	<0.010	27000	2900	79000	110	0.076	0.093	3.9
15/12/2024																		90000	26		0.071	4
10/03/2025	19	0.011	<5.0	0.0012	3300	57000	<0.0050	1.5	0.25	4.4	1400	39	1.2	440	<0.0050	28000	3400	100000	74	0.17	0.14	3.8
09/06/2025																		91000	120		0.1	3.8
17/09/2025	18	0.011	<5.0	0.001	3500	55000	<0.010	1.5	0.24	4	1500	39	1.2	450	<0.010	31000	2800	110000	26	0.098	0.02	3.9

21-B6

Sampling Date	Aluminium	Arsenic	Bicarbonate Alkalinity	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Magnesium	Manganese	Nickel	Potassium	Selenium	Sodium	Sulphate	Total Dissolved Solids	Total Suspended Solids	Zinc	WADCN	pH
	Al	As	HCO3 as CaCO3	Cd	Cl	Cl	Cr	Co	Cu	Fe	mg/L	Mn	Ni	K	Se	Na	SO4	TDS	TSS	Zn		
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
06/01/2023																		35000	73		0.0052	5.7
29/03/2023	0.35	0.0021	37	0.0009	190	18000	<0.0020	0.26	0.0071	0.1	1300	1.1	0.47	400	0.0045	9100	2800	36000	5	0.035	0.01	5.8
06/07/2023																		35000	340		<0.0040	5.8
18/09/2023	0.024	0.0029	36	0.0015	240	18000	<0.0020	0.32	0.0048	0.2	1400	0.74	0.74	410	0.0053	11000	2800	36000	2400	0.035	0.014	5.8
22/12/2024																		37000	32		<0.0040	5.8
13/04/2024	Not sampled, no access																					
08/07/2024																		35000	130		0.005	5.9
05/10/2024	0.17	0.0032	26	0.0013	410	21000	<0.0020	0.42	0.0034	0.25		1	0.94	410	0.0057	10000	2400	23000	720	0.015	<0.0040	5.6
15/12/2024																		34000	310		0.0045	5.8
10/03/2025	0.18	0.0042	30	0.00096	250	21000	<0.0020	0.34	0.01	0.26	1300	1.1	0.69	390	0.0055	9600	2900	31000	260	0.042	0.0064	6.2
09/06/2025																		34000	96		0.015	5.5
17/09/2025	0.057	<0.0050	29	0.0011	280	19000	<0.0050	0.4	0.0096	0.15	1400	0.82	0.91	340	0.0054	11000	2400	36000	350	0.042	<0.020	5.7

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## APPENDIX 8: MONITORING AIR QUALITY

Date	PM <sub>10</sub> (µg/m <sup>3</sup> )	WS (m/s)	WD (°)	Sigma (°)
1/10/2024	2	2.5	23	33
2/10/2024	3	2.6	312	31
3/10/2024	4	3.2	278	29
4/10/2024	1	2.1	279	32
5/10/2024	2	1.2	251	32
6/10/2024	3	0.7	230	30
7/10/2024	4	0.8	92	39
8/10/2024	4	0.8	283	36
9/10/2024	4	2.3	153	33
10/10/2024	8	2.6	83	40
11/10/2024	5	2.0	35	34
12/10/2024	5	0.5	322	31
13/10/2024	8	1.0	122	41
14/10/2024	4	1.4	247	38
15/10/2024	3	1.2	232	35
16/10/2024	3	0.4	313	35
17/10/2024	3	2.0	236	30
18/10/2024	6	0.9	264	35
19/10/2024	6	0.4	245	32
20/10/2024	6	1.8	295	34
21/10/2024	2	1.8	217	32
22/10/2024	2	1.7	217	31
23/10/2024	5	1.5	125	40
24/10/2024	5	1.3	56	41
25/10/2024	4	0.3	204	29
26/10/2024	2	2.5	147	31
27/10/2024	3	2.0	105	48
28/10/2024	3	2.2	84	42
29/10/2024	4	1.1	98	38
30/10/2024	5	2.3	153	31
31/10/2024	3	1.3	114	45
1/11/2024	7	1.4	346	32
2/11/2024	2	2.1	231	27
3/11/2024	5	1.2	170	35
4/11/2024	7	0.7	250	37
5/11/2024	3	2.9	252	26
6/11/2024	3	2.2	228	28
7/11/2024	4	0.7	147	43
8/11/2024	4	2.1	106	39
9/11/2024	2	2.8	142	29
10/11/2024	2	1.5	134	41
11/11/2024	3	0.8	101	39
12/11/2024	3	1.1	191	39
13/11/2024	3	1.5	100	42
14/11/2024	4	0.4	127	35
15/11/2024	6	2.9	161	25
16/11/2024	5	2.5	156	33
17/11/2024	6	2.2	103	46
18/11/2024	5	2.5	76	42

19/11/2024	5	1.9	71	34
20/11/2024	1	2.0	28	32
21/11/2024	3	1.7	291	30
22/11/2024	2	1.6	196	35
23/11/2024	3	2.0	94	45
24/11/2024	3	1.5	42	39
25/11/2024	3	1.8	200	28
26/11/2024	4	2.7	153	30
27/11/2024	3	2.3	116	41
28/11/2024	2	2.6	87	42
29/11/2024	3	2.5	64	35
30/11/2024	3	1.8	359	34
1/12/2024	4	2.4	274	29
2/12/2024	4	2.7	256	27
3/12/2024	4	1.3	275	39
4/12/2024	3	1.7	224	32
5/12/2024	4	2.1	116	46
6/12/2024	5	2.7	128	41
7/12/2024	4	2.9	113	43
8/12/2024	4	2.3	100	46
9/12/2024	4	3.1	131	36
10/12/2024	4	2.6	110	46
11/12/2024	5	1.2	71	41
12/12/2024	4	0.5	31	38
13/12/2024	5	0.9	101	36
14/12/2024	3	1.2	261	34
15/12/2024	4	2.4	250	31
16/12/2024	7	1.9	186	33
17/12/2024	7	2.5	83	42
18/12/2024	5	1.3	41	39
19/12/2024	7	3.3	150	28
20/12/2024	5	2.6	100	44
21/12/2024	5	2.0	105	47
22/12/2024	4	2.5	92	45
23/12/2024	3	2.3	53	37
24/12/2024	4	0.3	232	28
25/12/2024	3	2.3	192	30
26/12/2024	4	2.5	174	30
27/12/2024	3	1.5	171	37
28/12/2024	3	0.9	141	45
29/12/2024	3	1.1	54	39
30/12/2024	3	2.0	128	42
31/12/2024	3	2.0	106	50
1/01/2025	4	1.4	56	39
2/01/2025	2	1.3	350	33
3/01/2025	7	1.5	183	35
4/01/2025	3	2.7	129	41
5/01/2025	5	2.4	113	47
6/01/2025	5	2.8	81	42
7/01/2025	3	1.8	59	35
8/01/2025	6	2.0	161	31

9/01/2025	5	0.8	128	45
10/01/2025	4	0.1	311	33
11/01/2025	3	1.2	155	38
12/01/2025	2	1.0	189	40
13/01/2025	2	0.7	198	39
14/01/2025	4	2.3	194	32
15/01/2025	5	1.7	107	50
16/01/2025	4	2.4	63	40
17/01/2025	4	1.6	357	32
18/01/2025	5	2.0	126	38
19/01/2025	5	2.5	92	47
20/01/2025	5	2.6	76	39
21/01/2025	4	2.7	58	33
22/01/2025	5	1.3	49	33
23/01/2025	5	1.9	109	38
24/01/2025	3	1.6	12	32
25/01/2025	3	2.0	251	31
26/01/2025	3	2.2	167	33
27/01/2025	1	2.3	126	41
28/01/2025	3	2.5	92	44
29/01/2025	4	2.2	76	40
30/01/2025	3	2.6	66	34
31/01/2025	2	2.2	16	36
1/02/2025	7	2.6	143	33
2/02/2025	5	0.7	112	44
3/02/2025	6	2.5	145	36
4/02/2025	4	2.6	106	46
5/02/2025	6	2.5	71	40
6/02/2025	7	0.5	108	31
7/02/2025	6	2.4	124	39
8/02/2025	6	2.5	85	45
9/02/2025	7	0.9	323	30
10/02/2025	4	1.5	250	37
11/02/2025	5	3.0	244	27
12/02/2025	3	2.3	204	29
13/02/2025	4	2.6	144	32
14/02/2025	2	2.2	113	44
15/02/2025	3	2.4	87	44
16/02/2025	4	2.3	62	34
17/02/2025	2	2.3	92	42
18/02/2025	4	2.1	118	43
19/02/2025	7	2.1	86	42
20/02/2025	4	1.5	40	34
21/02/2025	4	2.2	244	30
22/02/2025	4	2.3	164	33
23/02/2025	4	2.3	87	46
24/02/2025	6	1.2	357	30
25/02/2025	7	1.2	224	40
26/02/2025	4	0.7	130	42
27/02/2025	3	0.9	195	36
28/02/2025	3	0.8	150	42

1/03/2025	3	2.4	127	43
2/03/2025	3	1.9	67	42
3/03/2025	2	1.4	313	32
4/03/2025	3	2.4	153	35
5/03/2025	6	2.7	91	45
6/03/2025	6	2.6	64	35
7/03/2025	4	1.9	36	38
8/03/2025	18	2.1	252	31
9/03/2025	1	2.1	161	34
10/03/2025	2	2.2	110	45
11/03/2025	4	2.4	75	41
12/03/2025	3	2.2	52	34
13/03/2025	2	2.0	64	32
14/03/2025				
15/03/2025				
16/03/2025				
17/03/2025				
18/03/2025				
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28/03/2025				
29/03/2025				
30/03/2025				
31/03/2025				
1/04/2025				
2/04/2025				
3/04/2025				
4/04/2025				
5/04/2025				
6/04/2025				
7/04/2025				
8/04/2025				
9/04/2025	4	1.1	159	36
10/04/2025	2	1.7	90	43
11/04/2025	2	2.5	53	32
12/04/2025	2	1.4	20	32
13/04/2025	4	1.5	104	39
14/04/2025	2	0.4	27	31
15/04/2025	2	1.2	116	39
16/04/2025	2	2.1	98	44
17/04/2025	1	1.0	102	37
18/04/2025	2	2.2	170	25
19/04/2025	2	1.5	135	33
20/04/2025	1	2.2	78	36

21/04/2025	1	2.7	57	31
22/04/2025	1	2.6	44	32
23/04/2025	2	1.4	341	31
24/04/2025	4	2.4	208	25
25/04/2025	3	1.5	136	37
26/04/2025	4	1.3	96	42
27/04/2025	2	1.3	132	38
28/04/2025	1	1.7	121	37
29/04/2025	1	1.9	80	36
30/04/2025	1	2.1	59	29
1/05/2025	1	1.9	23	37
2/05/2025	1	2.0	349	31
3/05/2025	3	1.5	297	31
4/05/2025	6	1.2	259	30
5/05/2025	2	0.8	228	29
6/05/2025	3	1.1	167	26
7/05/2025	1	1.8	86	39
8/05/2025	1	1.9	46	34
9/05/2025	2	1.3	9	41
10/05/2025	2	0.5	333	33
11/05/2025	3	1.9	110	44
12/05/2025	3	1.3	73	42
13/05/2025	2	1.7	127	37
14/05/2025	3	1.8	108	48
15/05/2025	3	1.7	73	38
16/05/2025	2	1.4	70	40
17/05/2025	2	1.8	56	30
18/05/2025	1	2.2	35	30
19/05/2025	2	0.9	346	30
20/05/2025	7	1.8	118	37
21/05/2025	5	1.4	65	40
22/05/2025	4	1.6	343	31
23/05/2025	3	1.3	234	29
24/05/2025	3	1.0	270	32
25/05/2025	3	1.4	264	29
26/05/2025	3	1.2	131	35
27/05/2025	2	2.3	78	35
28/05/2025	2	2.5	60	29
29/05/2025	2	2.9	51	29
30/05/2025	1	2.4	19	30
31/05/2025	2	1.2	292	28
1/06/2025	4	0.2	56	28
2/06/2025	1	1.7	28	38
3/06/2025	1	1.6	358	31
4/06/2025	2	2.2	327	31
5/06/2025	3	2.0	253	27
6/06/2025	7	0.5	173	31
7/06/2025	8	0.4	175	30
8/06/2025	6	0.2	120	37
9/06/2025	3	0.5	341	45
10/06/2025	2	1.7	295	29

11/06/2025	4	1.3	216	28
12/06/2025	3	0.5	25	33
13/06/2025	3	1.0	277	27
14/06/2025	4	0.4	40	36
15/06/2025	3	0.8	270	31
16/06/2025	2	0.3	337	44
17/06/2025	1	1.4	13	33
18/06/2025	1	2.3	350	31
19/06/2025	2	1.5	323	30
20/06/2025	1	1.9	347	30
21/06/2025	1	2.8	284	29
22/06/2025	2	2.5	263	26
23/06/2025				
24/06/2025	6	1.3	214	27
25/06/2025	3	0.9	67	37
26/06/2025	2	0.8	5	31
27/06/2025	2	1.0	98	40
28/06/2025	3	1.6	78	35
29/06/2025	2	2.3	56	28
30/06/2025	1	2.1	29	31
1/07/2025	3	0.9	332	33
2/07/2025	2	1.2	355	33
3/07/2025	1	1.1	295	31
4/07/2025	3	2.0	208	28
5/07/2025	2	0.6	352	38
6/07/2025	2	3.0	329	30
7/07/2025	3	2.6	277	27
8/07/2025	4	1.5	264	30
9/07/2025	14	1.3	187	26
10/07/2025	12	0.5	283	28
11/07/2025	5	1.9	358	32
12/07/2025	3	1.7	326	33
13/07/2025	2	0.6	49	35
14/07/2025	2	1.5	237	28
15/07/2025	7	0.7	274	30
16/07/2025	3	0.8	257	27
17/07/2025	6	0.3	339	30
18/07/2025	5	1.2	275	28
19/07/2025	3	0.7	48	35
20/07/2025	2	2.5	317	33
21/07/2025	3	2.4	233	26
22/07/2025	1	1.1	294	30
23/07/2025	1	1.6	352	31
24/07/2025	2	2.1	226	29
25/07/2025	4	1.6	202	28
26/07/2025	2	0.6	56	34
27/07/2025	1	2.4	348	31
28/07/2025	3	3.2	246	22
29/07/2025				
30/07/2025				
31/07/2025	3	1.2	81	38

1/08/2025	1	2.8	26	29
2/08/2025	1	2.8	334	33
3/08/2025	3	3.0	286	27
4/08/2025	4	1.7	282	27
5/08/2025	2	0.9	278	32
6/08/2025	2	1.1	87	42
7/08/2025	1	2.3	57	28
8/08/2025	1	2.3	21	30
9/08/2025	1	1.9	333	32
10/08/2025	3	1.8	261	26
11/08/2025	4	0.3	237	26
12/08/2025	2	1.3	29	36
13/08/2025	1	2.6	4	31
14/08/2025	3	2.8	255	24
15/08/2025	2	0.8	166	29
16/08/2025	2	1.0	101	44
17/08/2025	2	2.6	70	30
18/08/2025	2	2.3	24	30
19/08/2025	2	1.3	308	31
20/08/2025	2	1.9	317	32
21/08/2025	4	1.3	285	31
22/08/2025	3	0.4	221	29
23/08/2025	1	2.1	48	33
24/08/2025	1	2.4	310	32
25/08/2025	1	2.5	293	28
26/08/2025	2	2.2	259	25
27/08/2025	6	1.1	250	27
28/08/2025	3	1.2	225	28
29/08/2025	6	1.8	140	32
30/08/2025	6	1.7	82	39
31/08/2025	3	0.6	53	35
1/09/2025	6	0.9	325	34
2/09/2025	5	0.7	211	31
3/09/2025	4	1.9	116	39
4/09/2025	5	1.4	190	27
5/09/2025	3	1.9	323	32
6/09/2025	2	3.0	283	26
7/09/2025	3	2.0	298	30
8/09/2025	2	2.3	247	24
9/09/2025	2	1.7	154	28
10/09/2025	3	1.6	101	37
11/09/2025	2	2.0	58	30
12/09/2025	1	2.2	15	31
13/09/2025	2	2.8	325	27
14/09/2025	3	4.4	299	21
15/09/2025	3	2.4	269	23
16/09/2025	4	0.7	243	33
17/09/2025	2	2.2	300	23
18/09/2025	3	2.1	250	27
19/09/2025	2	1.4	207	30
20/09/2025	1	0.8	165	34

21/09/2025	1	1.8	112	38
22/09/2025	2	2.1	97	38
23/09/2025	2	2.0	68	33
24/09/2025	3	0.9	7	30
25/09/2025	3	1.4	271	31
26/09/2025	5	0.8	179	38
27/09/2025	3	0.1	168	38
28/09/2025	3	2.5	259	25
29/09/2025	2	1.8	214	29