



Application for Works Approval Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Works Approval Number	W5399/2013/1
Works Approval Holder	Murrin Murrin Operations Pty Ltd
ACN	076 717 505
File Number	2013/000523-1
Premises	Murrin Murrin Nickel and Cobalt Project Mining tenements M39/420, M39/421, M39/423, M39/848 and M39/1066 LAVERTON WA 6438 As depicted in Schedule 1.
Date of Report	5 February 2024
Decision	Revised works approval granted

**A/Manager, Resource Industries
REGULATORY SERVICES**

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

Table of Contents

1. Decision summary	1
2. Scope of assessment	1
2.1 Regulatory framework	1
2.2 Amendment summary	1
2.2.1 Stages of construction	1
2.3 Works approval format update	1
3. Risk assessment	1
3.1 Source-pathways and receptors	1
3.1.1 Emissions and controls	1
3.1.2 Receptors	2
3.2 Risk ratings	5
3.3 Detailed risk assessment for seepage into groundwater from in-pit TSF	7
3.3.1 Tailings seepage characterisation	7
3.3.2 Potential impacts on groundwater and vegetation	7
3.3.3 Works Approval Holder Controls	8
3.3.4 Rating of risk event	8
3.3.5 Regulatory controls	9
4. Consultation	10
5. Conclusion	10
5.1 Summary of amendments	10
References	12
Appendix 1: Application validation summary	13

Table 2: Works Approval Holder controls	1
Table 3: Sensitive human and environmental receptors and distance from prescribed activity	2
Table 4. Risk assessment of potential emissions and discharges from the Premises during operation	6
Table 5: Consultation	10

Figure 1: Map of the boundary of the prescribed premises	2
Figure 2: 19Sth TSF Stage 1 spigot and decant locations	1
Figure 3: 19Sth TSF Stage 2 spigot and decant locations	2
Figure 4: Aboriginal sites and heritage places near proposed pipeline routes	4
Figure 5: Seepage analysis results from Saprolite Environmental 2012b	7
Figure 6: Standing water levels at the 2/3 in-pit TSF, sourced Minara 2023	9
Figure 7: Standing water levels at the 17 Series in-pit TSF, sourced from Minara 2023	9

1. Decision summary

Works Approval W5399/2013/1 is held by Murrin Murrin Operations Pty Ltd (Works Approval Holder) for the Murrin Murrin Nickel and Cobalt Project (the Premises), located at mining tenements M39/420, M39/421, M39/423, M39/848 and M39/1066.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the construction and operation of the Premises. As a result of this assessment, Revised Works Approval W5399/2012/1 has been granted.

The Revised Works Approval issued as a result of this amendment supersedes the existing Works Approval previously granted in relation to the Premises. The Revised Works Approval has been granted in a new format with existing conditions being transferred (wording may be updated but intent of conditions remain the same), but not reassessed, to the new format.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Amendment summary

On 25 August 2023, the Works Approval Holder submitted an application to the department to amend Works Approval W5399/2013/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The current Works Approval W5399/2013/1 provides the Works Approval Holder with general conditions and an out of date works approval template. In order to make the Works Approval conditions and requirements clearer, the following amendments are being sought:

- Incorporation of the operational monitoring requirements from “MM19Sth In-pit Tailings Storage Facility Mining Proposal and Works Approval Application” (Stratagem, 2013) into the Works Approval;
- The requirement of field quality assurance and quality control (QAQC) and the requirement of National Association of Testing Authorities (NATA) testing;
- Addition of Time-Limited-Operations conditions to allow the works approval holder to operate the 19Sth in-pit TSF for 180 calendar days after the compliance report is submitted to the department for infrastructure/equipment listed within condition 1 of W5399/2013/1.
- Extension of expiry date for an additional year from 26 May 2025 to 26 May 2026.

2.2.1 Stages of construction

Tailings and decant return will be transported to and from the 19Sth in-pit TSF via an extension to the existing tailings and decant return pipelines from the MM8/5-9/4 in-pit TSF (Figure 1). Deposition of tailings to the 19Sth in-pit TSF is proposed to be a performed in a staged manner to:

1. Potentially reduce up-front capital cost;
2. Enable the storage capacity of the void to be maximised, while increasing the potential for water recovery from the pit to the evaporations ponds; and

3. Provide adequate decant pond control and reduce decant water ponding adjacent to the backfill embankment area in the north-eastern section of the pit.

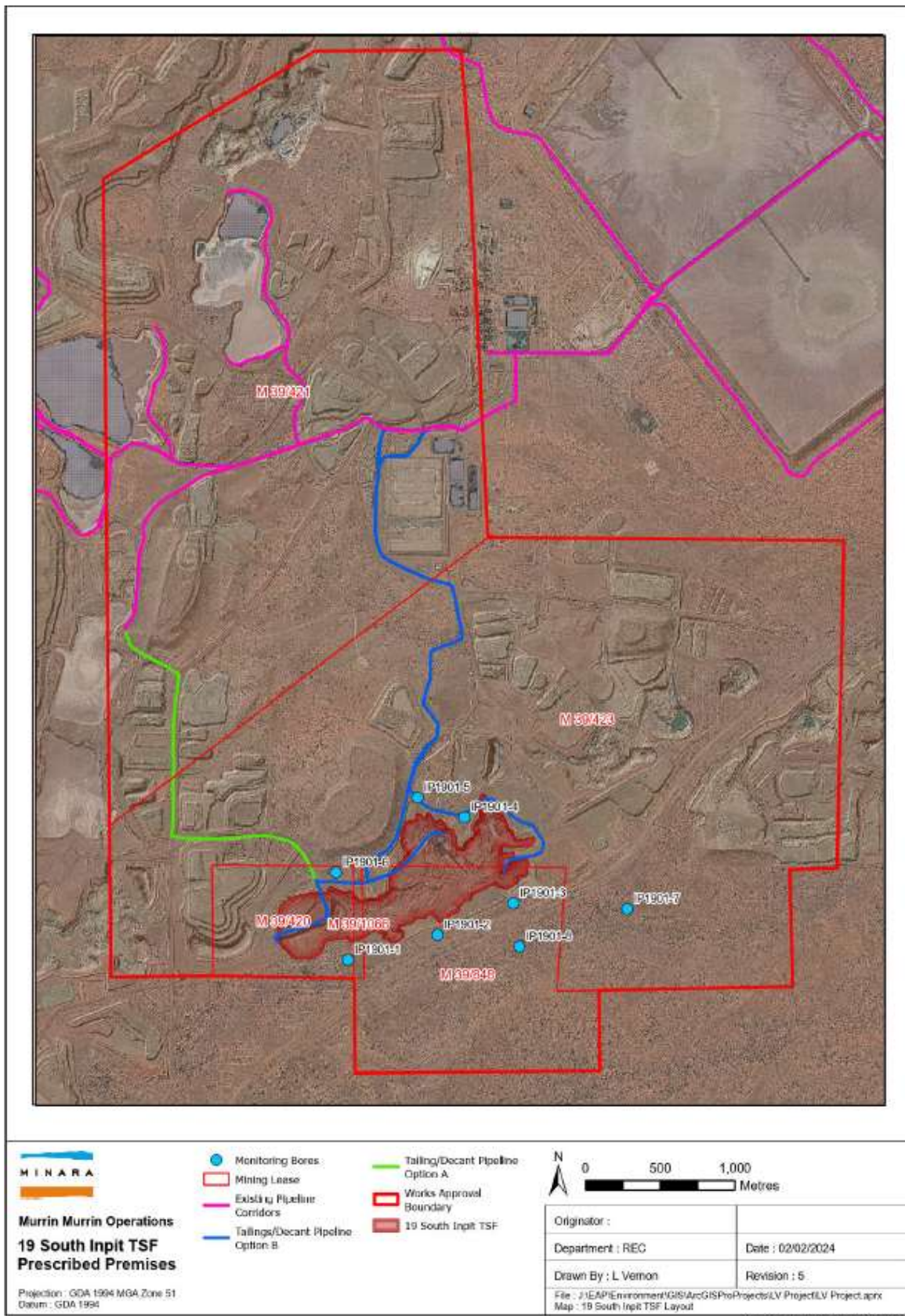


Figure 1: Map of the boundary of the prescribed premises

Stage 1

Tailings to be deposited via a single spigot in the western portion of 19Sth TSF (Figure 2) so that supernatant water is located near the access ramp in the northern end of the facility from where decant water can be recovered.

Stage 2

Stage 2 scope of works will occur at the end of stage 1 and deposition will be cycled between four discharge points(Figure 3) to enable and maintain a reasonable slope to aim to create a low point at the north. The recovery of decant water will occur from the northern end of the pit.

2.3 Works approval format update

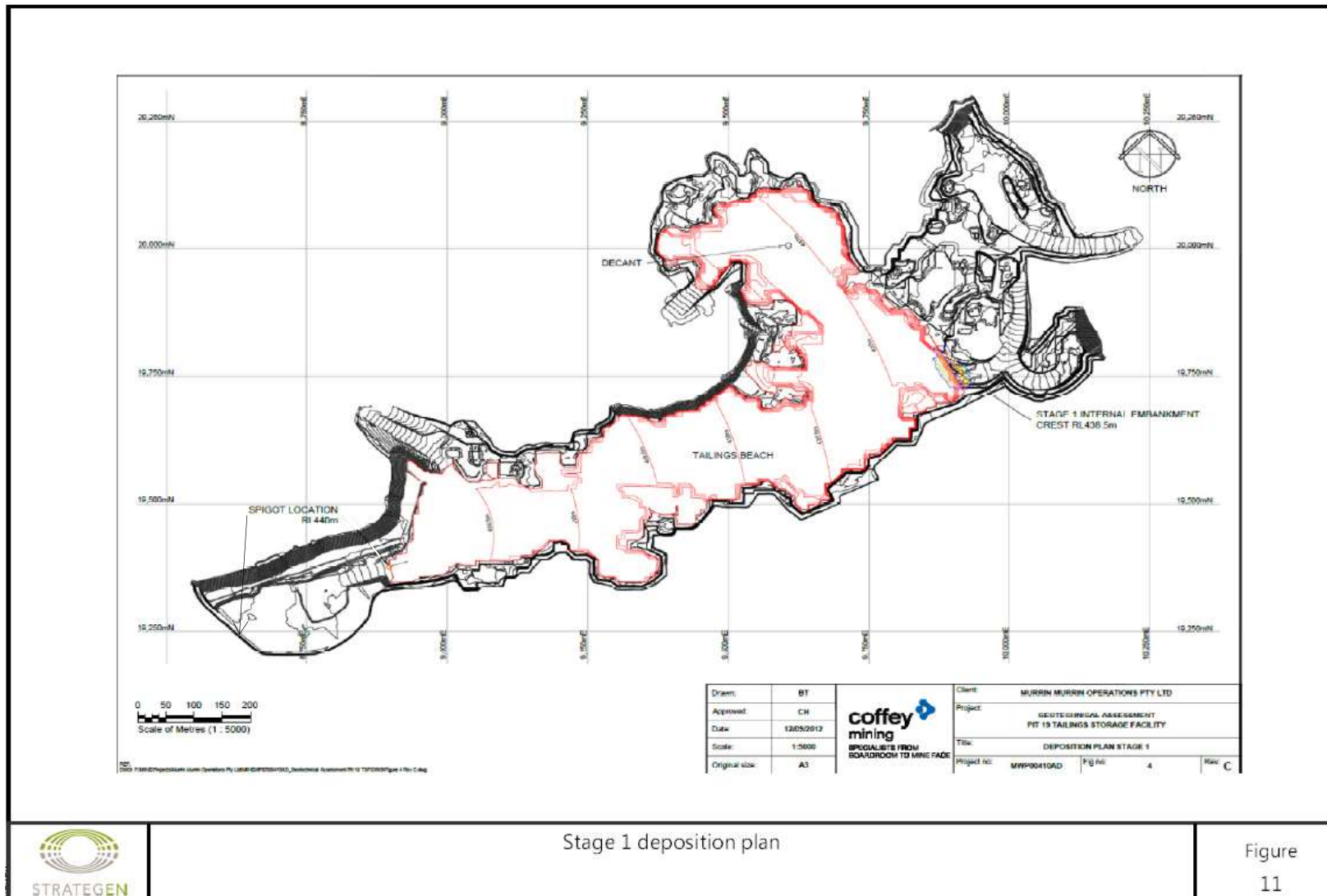
As part of this amendment to Works Approval W5399/2013/1 the current works approval format has been adopted to allow time limited operation conditions to be added.

The obligations of the Works Approval Holder have not changed in relating to the construction requirements of the in-pit TSF and associated infrastructure. The department has not undertaken any additional risk assessment in relation to the construction of the infrastructure.

In consolidating the Works Approval, the CEO has:

- updated the format and appearance of the works approval; and`
- revised works approval condition's numbers, and removed any redundant conditions and realigned condition numbers for numerical consistency.

The full consolidation of works approval conditions as they relate to this Revised Works Approval are detailed in Section 5.1.



Stage 1 deposition plan

Figure
11

Figure 2: 19Sth TSF Stage 1 spigot and decant locations

Works Approval: W5399/2013/1

IR-T15 Amendment report template v3.0 (May 2021)

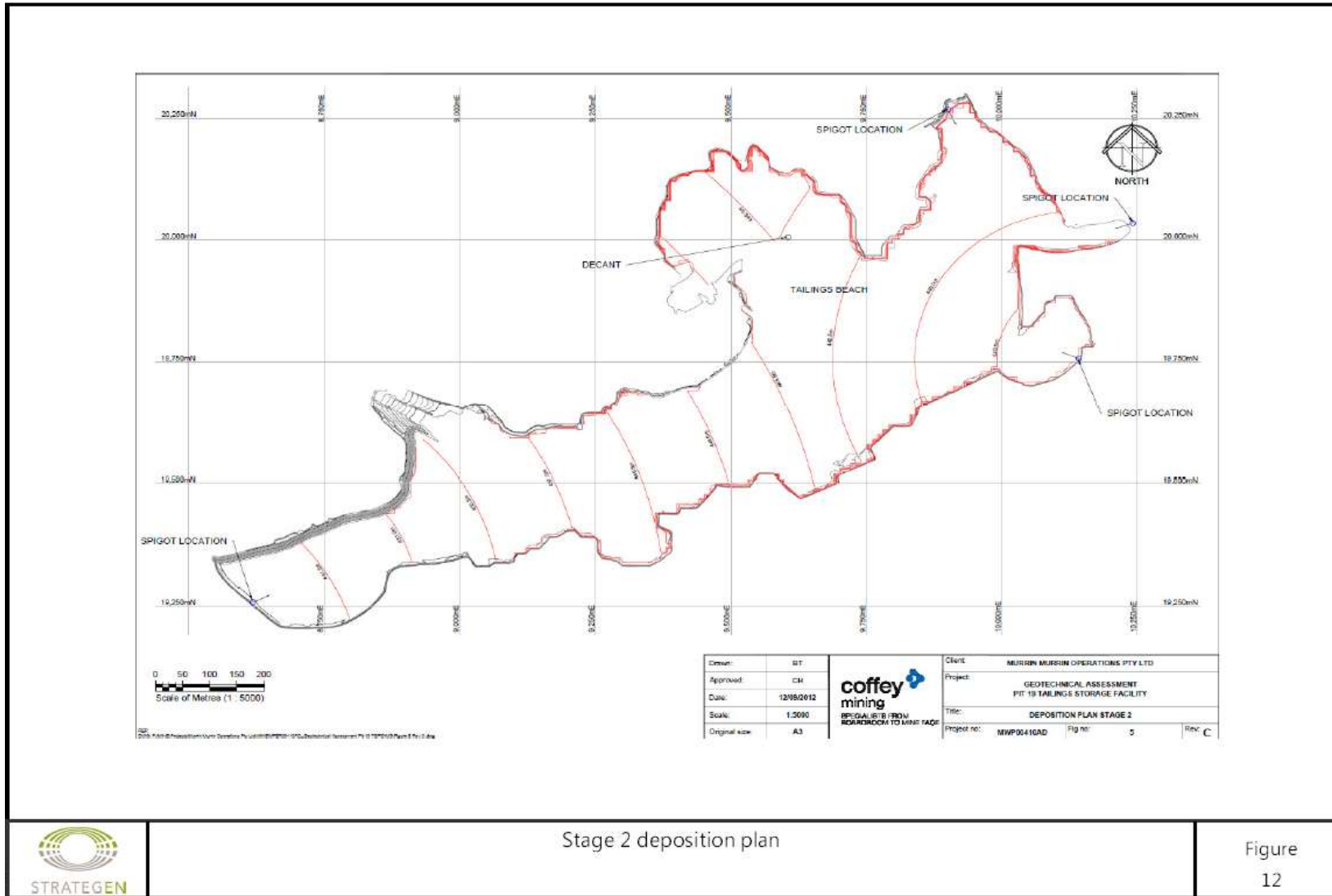


Figure 3: 19Sth TSF Stage 2 spigot and decant location

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and limited time operations which have been considered in this Amendment Report are detailed in Table 1 below.

Table 1 also details the proposed control measures the Works Approval Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Works Approval Holder controls

Emission	Sources	Potential pathways	Proposed controls
Operation			
Tailings	Deposition of tailings into in-pit TSF	Seepage through pit wall	<ul style="list-style-type: none"> Managed through decant recovery to reduce amount of water within the pit; Eight existing monitoring bores surrounding the in-pit TSF to be used to monitor or abstract water if mounding or contaminants mobilisation occurs; and Standing water level (SWL) in surrounding eight monitoring bores to remain below 4 mbgl.
		Overtopping of in-pit TSF	<ul style="list-style-type: none"> Total freeboard of 0.5 m; and Rotation of tailing disposal between existing and proposed TSFs (Strategen 2013).
Tailings/decant water	Transportation of tailings or decant water to and from the in-pit TSF	Pipeline breaks or leakages	<ul style="list-style-type: none"> Tailings and return decant situated within a bunded corridor (approximately 15 m wide); Flow monitors with telemetry reporting installed; Scour sumps installed at low points along the pipeline corridor; and Daily pipeline inspections.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Works Approval Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Minara Pastoral Homestead (<i>screened out</i>)	The homestead is located approximately 14 km south-west of the prescribed premises. Due to the distance of the receptor to the activity there is little to no risk to the receptor and therefore will not be assessed within the risk assessment.
Mt Margaret Settlement (<i>screened out</i>)	The settlement is located approximately 25 km east of the prescribed premises boundary. Due to the distance of the receptor to the activity there is little to no risk to the receptor and therefore will not be assessed within the risk assessment.
Environmental receptors	Distance from prescribed activity
Native Vegetation	Native bushland is present approximately 25 m south of the proposed In-Pit TSF separated by the Laverton-Leonora Rd. Option B pipeline route Figure 4 has native vegetation approximately 20 m west along the pipeline route. It is assumed and it's likely that the vegetation visible on Geocrotex is heavily impacted by the mining operations as it is completely surrounding by pits and infrastructure.
Groundwater	Approximately 25 to 50 mbgl during baseline testing from September to October 2012 (Strategen, 2013).
Priority Fauna (<i>screened out</i>)	Vulnerable bird species located approximately 3.5 kms southwest and northeast of the prescribed premises. The fauna was sited in 2011 and 1996 respectively. Due to the distance from the receptor and the mobile nature of birds these vulnerable bird species are unlikely to act as receptors for this risk assessment.
Native Fauna (<i>screened out</i>)	The 19 South In-Pit TSF is situated at the southern portion of the prescribed premises. Native bushland is present approximately 22 m south of the proposed In-Pit TSF separated by the Laverton-Leonora Rd. Due to the noise generated from the mine site operations noise is likely to persuade native fauna from accessing the In-Pit TSF and is therefore

	removed from the risk assessment.
<p>Priority Flora or Threatened Ecological Communities (TECs) <i>(screened out)</i></p>	<ul style="list-style-type: none"> • <i>Hybanthus floribundus</i> (P3) and <i>Hemigenia exilis</i> (P4) has previously been located during vegetation surveys (G&G Environmental 2012). • An environmental consultant Strategen (2012) states within the 2013 Murrin Murrin 19 South In-Pit TSF Proposal that these species are not located within the vicinity of the 19 South In-Pit TSF and the proposed location of the pipeline extensions. • No priority flora or TECs were identified during the search on GeoCortex during September 2023.
<p>Water lines and bodies <i>(screened out)</i></p>	<p>A Non-perennial water line is located approximately 165 m south of the TSF. The water course appears to terminate prior to flowing directly into Lake Carey (22kms east of the prescribed premises) or Lake Raeside (approximately 42 kms southwest of the site).</p> <p>Due to the distance of the non-perennial water line from the 19 South In-Pit TSF and the disconnect from sensitive receptors this risk assessment for this receptor is considered to be discounted.</p>
Indigenous/Heritage receptors	Distance from activity / prescribed premises
<p>Nyalpa Pirniku Native Title – Accepted for registration (WC2019/002)</p> <p><i>No current Native Title exists within the prescribed premises. It's observed however that Nyalpa Pirniku has been accepted for registration on 10 December 2021.</i></p>	<p>It's noted that there are number of Aboriginal Sites and Heritage Places located within and surrounding the prescribed premises (Figure 4).</p> <ul style="list-style-type: none"> • 62 Aboriginal Sites and Heritage Places are located within the prescribed premises.



Figure 4: Heritage places near proposed pipeline routes

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Works Approval Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Works Approval Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the Works Approval Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

The Revised Works Approval W5399/2013/1 that accompanies this Amendment Report authorises construction and time-limited operations. The conditions in the Revised Works Approval have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required following the time-limited operational phase authorised under the works approval to authorise emissions associated with the ongoing operation of the Premises i.e. category 5 activities involving the processing or beneficiation of metallic or non-metallic ore where tailings are discharged into a containment cell or dam. A risk assessment for the operational phase has been included in this Amendment Report, however licence conditions will not be finalised until the department assesses the licence application.

Table 3. Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating ¹	Works Approval Holder's controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls / comments
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Works Approval Holder's controls	C = consequence L = likelihood			
Operation (including time-limited-operations operations)								
Deposition of tailings into in-pit TSF (19 South In-Pit TSF)	Tailings, and process water	Pathway Seepage through base and embankments of pit wall to groundwater.	Native vegetation	Refer to section 3.1.1	C = Moderate L = Possible Medium Risk	Yes	Condition 6 – operating requirements Condition 7 – groundwater monitoring requirements	See Section 3.3 for detailed risk assessment
		Impacts Reduction in groundwater quality, groundwater mounding and damage to surrounding vegetation.	and Groundwater					
		Pathway Overtopping of pit and discharge to land.	Native vegetation	Refer to section 3.1.1	C = Moderate L = Unlikely Medium Risk	Yes	Condition 6 – freeboard requirement	Applicant's controls have been conditioned as per Guideline: Risk Assessments
		Pathway Spill or leak from pipeline discharging to the surrounding environment.	Native vegetation	Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Yes	Condition 1 – pipeline construction requirements Condition 6 – bunds to be maintained and daily pipeline inspections	N/A
		Impacts Direct contact to receptors degrading environmental or heritage values.	and Aboriginal sites and heritage places					

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed Works Approval Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

3.3 Detailed risk assessment for seepage into groundwater from in-pit TSF

The 19Sth in-pit TSF has an estimated volume capacity to store approximately 5.41 Mt of tailings resulted from the extraction of nickel and cobalt. The projected life of 19Sth in-pit TSF will provide storage capacity for approximately 1.8 year with a topping up phase extending it up to 2.5 years (Strategen 2013). Tailings are to be transported to the TSF via an extension of existing tailings and decant return pipeline from either the MM8/5-9/4 in-pit TSF (option A) or the Heap Leach Facility (option B) (Figure 4). Decant water from the TSF will be deposited in the evaporation ponds located east of the paddock TSF.

3.3.1 Tailings seepage characterisation

Tailings were sampled and analysed in 2009 and reported an average total dissolved solids (TDS) result of 185,000 mg/L and a pH result of 3.53 (Environ 2010). In the Works Approval application for the 17 series in-pit TSF, TDS was reported approximately 180,000 mg/L with a pH of 2.3 (Coffey 2020) to 3.0 (Strategen 2013). Concentrations of aluminum, magnesium, iron, manganese and nickel were reported at elevated concentrations in tailings. Discharged tailings slurry density is expected to be at approximately 30% (Strategen 2013) to 43% (Coffey 2020) by weight. No sulphide was reported in the tailings reducing the risk of acid mine draining from tailings disposal.

3.3.2 Potential impacts on groundwater and vegetation

Background groundwater quality sampling of the newly installed monitoring bores at MM19Sth pit TDS ranged from 800 to 5,200 mg/L with a pH of 7.7 to 8.4 (Saprolite Environmental 2012a). Tailings were reported concentrations of TDS to be hypersaline (section 3.3.1) which can have the potential to leach into the groundwater aquifer affecting groundwater conditions.

Saprolite Environmental (2012b) notes that the Murrin Murrin North mining area consists of lateritic profiles that have the potential as highly permeable aquifers with capacity for groundwater. There are a number of different aquifers within the lateritic profile, including primary and secondary porosity aquifers.

Seepage analysis modelling was completed by Saprolite Environmental (2012b), Figure 5, presents the expected groundwater mounding during tailings deposition at the TSF.

Distance from centre of pit along length (m)	Groundwater mounding (m)			Distance from centre of pit along width (m)	Groundwater mounding (m)		
	1 year	2 years	3 years		1 year	2 years	3 years
300	11.03	20.92	29.00	50	10.83	20.15	17.87
600	11.03	20.77	28.35	100	9.68	17.40	24.17
700	10.77	19.31	25.64	125	8.21	14.87	21.02
750	9.64	16.68	22.09	150 (edge of pit)	5.55	11.10	16.60
775	8.18	14.30	19.21	175	2.73	7.00	11.71
800 (edge of pit)	5.53	10.69	15.15	200	1.16	4.04	7.72
825	2.72	6.74	10.65	225	0.43	2.14	4.76
850	1.16	3.89	7.01	250	0.14	1.06	2.76
875	0.43	2.06	4.32	275	0.04	0.49	1.53
900	0.14	1.02	2.51	300	0.01	0.22	0.81

Figure 5: Seepage analysis results from Saprolite Environmental 2012b

The nearest native vegetation is approximately 25 m south of the proposed 19Sth in-pit TSF (Table 2) and according to Figure 5 groundwater is expected to rise 10.65 m after 3 years of tailings deposition bringing the groundwater level to approximately 38 mbgl (using monitoring data from October 2012 Saprolite Environmental 2012a). The nearby surrounding Acacia woodlands is mostly comprised of shallow rooted (<1 m) vegetation (Strategen 2013) therefore reducing the risks of groundwater being exposed to nearby vegetation.

If sufficient mounding does occur native vegetation could be exposed to groundwater potentially containing high salinity concentrations, acidic pH parameters and/or high concentrations metals (etc) leached from the in-pit TSF. All listed parameters have the possibility to degrade and reduce native vegetation in the immediate and nearby surrounding area.

3.3.3 Works Approval Holder Controls

Eight monitoring bores were installed August 2012 and were positioned both up and down the hydraulic gradient. The purpose of the bores is to detect the occurrence, extent and source of any contamination associated with seepage from the in-pit TSF and to establish baseline groundwater conditions (Saprolite Environmental 2012). Monitoring bores were installed to a depth between 58.7 to 60.5 with 100 mm diameter casing and screened from end of hole upwards with 48 meters of casing (Saprolite Environmental 2012a).

The bores were constructed in such a way that they can be equipped as recover bores if required. The department notes that it does not accept conversion of monitoring bores to seepage recovery bores as the reliability of the monitoring data cannot be ensured. Monitoring bores will be sampled quarterly for a suite of contaminants of potential concern and field parameters recorded during sampling to identify if leaching is occurring.

A decant recovery system will be used to remove decant liquor from the in-pit TSF and deposit it within the evaporation ponds under existing Licence L7276/1996/12. Tailings will also be deposited on a rotation system at different spigots during stage 2 of the project.

The Works Approval Holder has a Trigger Action Response (TARP) within Licence L7276/1996/12 to address elevated levels of nickel, cobalt, TDS and standing water levels (SWL) around other in-pit TSFs which is understood they intend to impose to the 19Sth in-pit TSF once time limited operations begin.

3.3.4 Rating of risk event

The department considers the consequences of seepage occurring resulting in groundwater mounding in the vicinity of the 19Sth in-pit TSF resulting in scenarios where native vegetation could become impacted as Moderate.

The department determines that the likelihood of the event occurring is Possible as groundwater mounding affecting native vegetation could occur at some time. This likelihood justification has been reached due to other in-pit TSFs in the surrounding area that is operated under Murrin Murrins Licence L7276/1996/12 has shown evidence of increases in SWL post deposition of tailings in in-pit TSFs (Minara 2023) presented in Figure 6 and Figure 7.

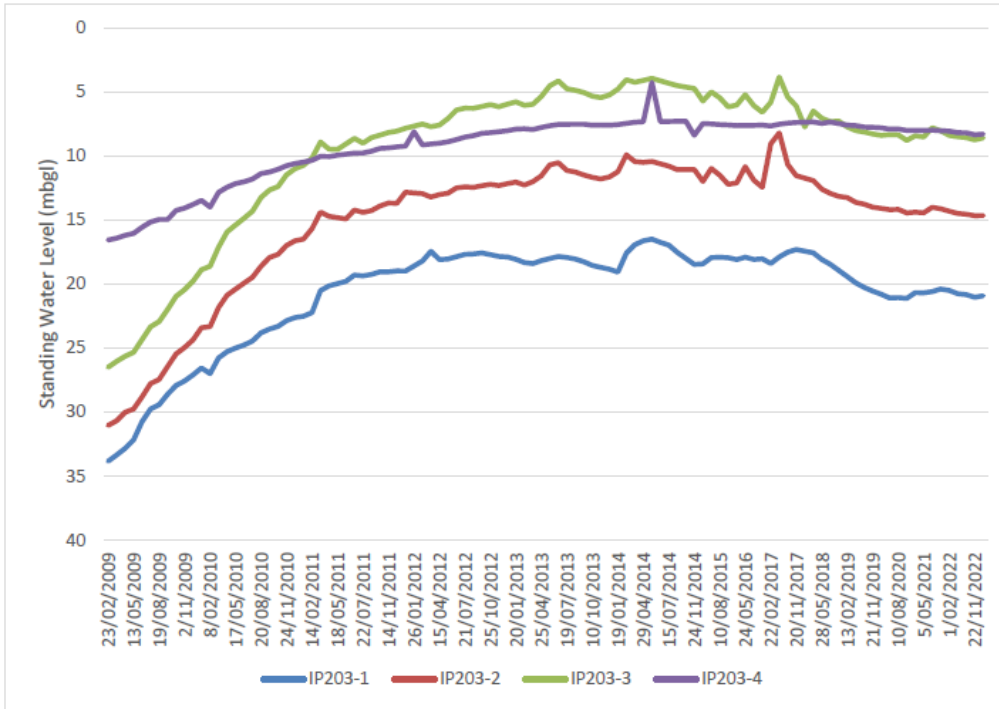


Figure 6: Standing water levels at the 2/3 in-pit TSF, sourced from Minara 2023

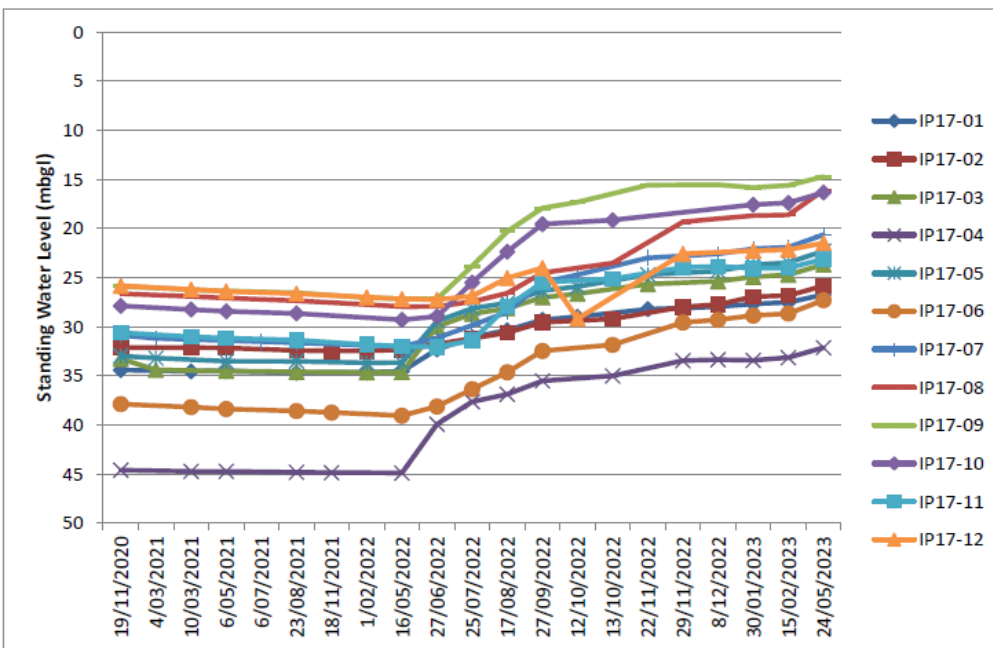


Figure 7: Standing water levels at the 17 Series in-pit TSF, sourced from Minara 2023

The Delegated Officer has considered the consequence and likelihood of this risk event and determined the overall rating is Medium. Based on this rating the risk event is subject to multiple risk regulatory controls listed in Table 3.

3.3.5 Regulatory controls

The department has added nickel to the list of analytes as baseline sampling completed by Saprolite Environmental (2012a) report nickel concentrations above laboratory limit of reporting (LOR) and below 1 mg/L.

Baseline monitoring is to occur up to one year prior to the deposition of tailings. It is

understood that the last monitoring event occurred in 2012 and due to the everchanging parameters of the groundwater aquifer caused by the abstraction of groundwater and the deposition of tailings a proper representative groundwater baseline is required.

The presence of hypersaline groundwater reported in initial sampling by Saprolite Environmental (2012a) and its potential impacts on nearby native vegetation if groundwater mounding occurs has resulted in a limit of 4 mbgl has been adopted on surrounding monitoring wells at the 19Sth in-pit TSF presented in Works Approval W5399/2013/1 Table 4.

It is recommended when 19Sth in-pit TSF is added to the premises operating licence L7279/1996/12 the need for a 6 mbgl trigger for standing water levels within groundwater bores is considered. Along with a corresponding management action condition. This will be in line with similar conditions already on the licence for the premises other in-pit TSFs.

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Works Approval Holder was provided with draft amendment on 20 December 2023.	<ul style="list-style-type: none"> The Works Approval Holder requested to remove a monitoring bore completion report from condition 1 as it only relates to how the monitoring bores were constructed. During the Works Approval Holders review of the draft amendment, it was requested that a minor detour of proposed pipeline option B be added to the Works Approval to avoid a future pit. 	<ul style="list-style-type: none"> Removed monitoring completion report (Saprolite Environmental 2012a) from condition 1 as it is not a construction requirement. The Department reviewed the request, and it was determined that no increase of risk to the receptors would occur due to the change of pipeline route. Schedule 1 Figure 1 in Works Approval W5399/2013/1 shows the correct pipeline route as of this amendment report date.

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Works Approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table provides a summary of the proposed amendments and reformatting changes required to update approval to current works approval format.

Table 6: Amendments to works approval conditions

Existing condition	Condition summary	Revised works approval condition	Notes
Front page	-	New works approval template used.	-
	Works approval end date	New works approval end date now 26/05/2026	Amended from 26/05/2025

Existing condition	Condition summary	Revised works approval condition	Notes
1.1.1	Statement that definitions from the <i>Environmental Protection Act 1986</i> apply.	N/A	Redundant condition.
1.1.2	List of definitions.	Definitions moved to Table 3 at end of instrument	Updated as per current works approval template. Definitions updated.
1.1.3	Standards used statement	Replaced by new interpretation section	Updated as per current works approval template
1.1.4	Guidelines or code of practise used statement	Replaced by new interpretation section	Updated as per current works approval template
1.2.1	List of documents that the holder is to construct the works according to.	Relevant documents transferred to new condition.	Condition wording updated as per current works approval template.
2.1.1	Requirement to submit a compliance document	2	New numbering and condition wording updated as per current works approval template. Intent of condition remains the same.
2.1.2	Requirements of the compliance document	3	New numbering and condition wording updated as per current works approval template. Intent of condition remains the same.
-	Time limited operations commencement	4	New condition authorising time limited operation commencement.
-	Time limited operations duration	5	New condition authorising time limited operations duration.
-	Time limited operations requirements	6	New condition outlining operational requirements during time limited operations
-	Groundwater monitoring requirements	7 -9	New conditions requiring groundwater monitoring within bores surrounding the in-pit TSF.
-	Compliance reporting for time limited operations	10-11	Standard conditions from new WA template regarding reporting requirements for time limited operations
-	Records and reporting (general)	12-14	Standard conditions from new WA template regarding record keeping and complaints register.
-	Schedule 1: Maps	Schedule 1: Map	New premises maps included
-	Groundwater monitoring requirements	Schedule 2: Monitoring	New conditions added outlining groundwater monitoring program for bores surrounding in-pit TSF

References

1. Coffey, A Tetra Tech Company 2020, Murrin Murrin Operations Pty Ltd, Murrin Murrin Mine, Geotechnical Assessment of 17 Series In-Pit TSF.
2. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.cop
3. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
4. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
5. Environ Australia Pty Ltd (Environ) 2010, Murrin Murrin North 8/5 and 9/4 In-pit Tailings Disposal: Mining Proposal and Works Approval Supporting Documentation, report prepared for Minara Rouses Pty Ltd, February 2010.
6. G&G Environmental 2023, *Flora and Vegetation Survey of Selected Areas at the Murrin Murrin Nickel Mine*, Unpublished report prepared for Minara Resources Pt Ltd.
7. Minara Resources 2023, Murrin Murrin Nickel Cobalt Project, Annual Environmental Report 1 May 2022 to 30 April 2023.
8. SaproLite Environmental 2012a, Murrin Murrin In-pit tailings disposal into put void MM19 South. Monitoring Bore Completion Report.
9. SaproLite Environmental 2012b, *Murrin Murrin North Mining Area Proposed In-Pit Tailings Disposal into Pit Void MM19 South: Hydrogeological Assessment*, report prepared for Murrin Murrin Operations Pty Ltd, November 2012.
10. Strategen Environmental Consultants 2013, MM19Sth In-pit Tailings Storage Facility Mining Proposal and Works Approval Application.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Works approval	<input type="checkbox"/>			
Licence	<input type="checkbox"/>	Relevant works approval number:		None <input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
		Environmental Compliance Report / Critical Containment Infrastructure Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Date Report received:		
Renewal	<input type="checkbox"/>	Current licence number:		
Amendment to works approval	<input checked="" type="checkbox"/>	Current works approval number:	W5399/2013/1	
Amendment to licence	<input type="checkbox"/>	Current licence number:		
		Relevant works approval number:	N/A	<input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:	None	<input type="checkbox"/>
Date application received	25/08/2023			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Murrin Murrin Operations Pty Ltd			
Premises name	Murrin Murrin Nickel Cobalt Project			
Premises location	M39/420, M39/421, M39/423, M39/848 and M39/1066			
Local Government Authority	Shire of Laverton			
Application documents				
HPCM file reference number:	DWERDT825821			
Key application documents (additional to application form):	Amendment Supporting Documentation			
Scope of application/assessment				

<p>Summary of proposed activities or changes to existing operations.</p>	<p><u>Works approval amendment</u></p> <p>The current Works Approval (W5399/2013/1) is a departments older style of Works Approval and the Holder wishes to update it to bring it into a more modern style and up to date policies (ie time-limited-operations).</p> <p><u>Amendment to monitoring conditions</u></p> <ul style="list-style-type: none"> • The applicant has requested for the incorporation of the reference document “<i>MM19Sth In-pit Tailing Storage Facility Mining Proposal and Works Approval Application</i>” (2013) into the works approval to make is more clear on the requirements for monitoring. • Monitoring that are required by Works Approval W5399/2013/1 are listed in the document above and to consolidate the requirements into a single document (ie the Works Approval). • Inclusion of standard time-limited-operation groundwater monitoring conditions. <p><u>Amendment to Time Limited Operations phase and Compliance Reporting</u></p> <ul style="list-style-type: none"> • The applicant has requested for the addition of time-limited-operations to allow the operation for 180 calendar days while the works approval holder applies for an amendment to include the 19 South in-pit TSF into Licence L7276/1996/12. • Inclusion of a standard compliance document report post construction and before time-limited-operations and compliance report on the time-limited-operations.
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Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore premises on which	3,800,000 tonnes per year	No changes

Legislative context and other approvals

<p>Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Referral decision No: Managed under Part V <input checked="" type="checkbox"/> Assessed under Part IV <input type="checkbox"/></p>
<p>Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Ministerial statement No: 444 and 506 EPA Report No: 1038 and 1229</p>

<p>Has the proposal been referred and/or assessed under the EPBC Act?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Reference No: N/A</p>
<p>Has the applicant demonstrated occupancy (proof of occupier status)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Mining lease / tenement <input checked="" type="checkbox"/> Expiry: M39/420 / 6 September 2041 M39/421 / 25 July 2038 M39/423 / 25 July 2028 M39/848 / 6 July 2025 M39/1066 / October 2029 (Murrin Murrin Operations Pty Ltd holds all tenements listed above).</p>
<p>Has the applicant obtained all relevant planning approvals?</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>	<p>Approval: N/A Expiry date: N/A Works are occurring on mining tenements held by the works approval holder.</p>
<p>Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>CPS No: N/A Clearing is approved under Ministerial Statement 506 Murrin Murrin Nickel-Cobalt Project Stage 2 Expansion.</p>
<p>Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Application reference No: N/A Licence/permit No: N/A</p>
<p>Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Application reference No: N/A Licence/permit No: N/A Licence / permit not required.</p>
<p>Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: Swan Avon / Mid-West Gascoyne / Kwinana Peel / North West / South West / Goldfields / South Coast</p>

<p>Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Name: N/A Priority: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/></p>
<p>Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i>)</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><i>Mining Act 1978</i> <i>Dangerous Goods Safety Act</i> <i>Environmental Protection (Controlled Waste) Regulations 2004</i></p>
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>N/A</p>
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>N/A</p>
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>Classification: N/A Date of classification: N/A</p>