



SHREE MINERALS LTD

25th Oct 2016

The General Manager
Circular Head Council
33 Goldie St Smithton
Smithton, TAS 7330 .
Via email

Dear Sir,

Re: NELSON BAY RIVER MAGNETITE MINE

Development Application

This letter accompanies a completed Development Application form and is intended to provide back ground information for the application.

Please also find attached the completed Development Application form, Planning Report and correspondence with Mineral Resources Tasmania.

A CD contining the 2012 DPEMP has also been mailed directly to the Council.

The location of the project is shown in **Figure 1**.



FIGURE 1 MINING LEASE 3M/2011 LOCATION – NW TASMANIA

SHREE MINERALS LTD, ACN 130618683
Unit 2, The Pines Business Centre,
88 Forrest Street, Cottesloe, WA6011
Phone: + 61 (08) 92861509, FAX: +61 (08) 93855194
www.shreeminerals.com

1 Background

Shree Minerals is an ASX listed mining and mineral exploration company (ASX: SHH). Shree is well supported by cornerstone investors including , RB Investments Pte Ltd, a Singapore based investment group and China Alliance International Holdings Group Limited, a Chinese investment group . The Company's 100% owned Nelson Bay River Project is an advanced project that has significant iron resources estimated as per the Australasian Code for Reporting of Mineral Resources and Ore Reserves (the 'JORC Code' or 'the Code') guidelines.

We are the first company to conceptualise and discover direct shipping ore (DSO) iron ore resources in Tasmania, paving way for other similar discoveries and investments in the region , like Venture Minerals.

Due to delays in the environmental approval process, the mine was delayed by some 2 years and as such did not start until November 2013 and pushed the project out to the bottom of commodity price cycle. Unfortunately, the start up coincided with a marked decline in iron ore prices by nearly 50%. This rendered the project uneconomic and it was placed in care and maintenance in June 2014 with excavation of the SDSO pit only about 25% complete. As the NBR project has been planned for a phased development , a normal approval time frame would have had the project well placed to execute the DSO phase of the project at the right point in the price cycle which would underwrite the capital for the magnetite phase to produce dense media magnetite (DMM) used for the coal washery industry.

Nelson Bay River Iron Project is the first Greenfield mine in North West Tasmania in many years creating economic benefits for the region. For the brief period the mine operated, over 50 people were directly employed through the company and/ or Contractors working for the mine with a huge spin off multiplier effect.

Significant investment and economic activity / turnover totalling over \$ 25 million to date has been made in the project with substantial contribution to State and Commonwealth economies to date.

Shree Minerals has recently (mid 2016) raised additional capital and have confirmed their support for the mine, which as been on care and maintenance since June 2014. The Company has also in 2016 taken steps to crush and transport the iron ore inventory to port and has made a shipment of iron ore in August 2016 & expects to make another shipment in October 2016. During this period again employment has been generated for appx 25 people (directly employed through the company and/ or Contractors) during this 6 month period.

The Company has also worked relentlessly at cost rationalisation during the period to make the operations economically viable and the estimated C1 costs (US\$ per DMT CFR North China) are now estimated , in the current environment to appx US\$ 54 (compared to US\$ 88 as at year end June 2014 & US\$ 63 at year end June 2015) for Company's Iron Ore products (Fines & Lump). The company has also embarked on further studies to optimise the mine plan for stage 2 such that it may be commenced earlier.

2 The Nelson Bay River (NBR) Mine Project

2.1 History of Mine Development and Regulation

The NBR project has a JORC compliant global Iron resource of 11.3 Million tonnes (MTs) including goethitic-hematite resource of 1.4 Mts and magnetite resource of 7.8 Mts.

Shree was granted a permit (DA 2001/00171) to operate from the Circular Head Council the mine in 2012 . The information provided for the planning application was a DPMP (with supplements), which also became endorsed documents and part of the development consent (Pitt and Sherry, 2011, Pitt and Sherry 2012(a), 2012 (b), 2012 (c), 2012 (d) .

The Permit (DA 2001/00171) included the EPA Permit Conditions – Environmental No 8568. These Permit conditions essentially divide the Mine Development into two stages. Stage 1 and Stage 2 refer to the two stages of mining defined in sections of the first DPMP Supplement dated 23 March 2012 (Pitt and Sherry, 2012(a).

Stage 1 refers to the mining of oxidised hematite (DSO) from the Southern DSO Pit (SDSO) and beneficial oxide ore (BFP) from the Main (magnetite) Pit, and Stage 2 includes any mining and processing (including tailings) of magnetite ore. CN5 of the EPA Permit Conditions requires a Stage 2 Feasibility Plan to be submitted at least 6 months prior to the commencement of construction of Stage 2.

These permit conditions included a requirement to store all PAF waste rock within the SDSO Pit (OP2). There were also additional conditions regarding the preparation of a PAF Materials Separation and Verification Plan and a requirement to operate the activity in compliance with the Plan (OP1).

By Aug 2013 (when all approvals were in hand), the mineral resource had grown due to further exploration and revised mine plan resulted in following :

Estimates	Mine Life (years)	Total Ore Mining (tonnes)	Total Waste Rock Mining (M3)	Total PAF Waste Rock Mining (M3)
2011	10	3,836,079	11,673,545	1,675,679
2013	10.7	4,111,101	12,796,725	1,891,950
Change (%)	7%	7%	10%	13%

It is normal for every mine to increase resources over period of time and hence the total quantity of mining ore and waste by increasing mine life which evolves progressively.

Consequently, Shree reviewed its mine plans and approximately 230,000 BCM (bank cubic meters) of PAF materials were identified as potentially to be excavated from the Southern DSO pit. The storage of this material within the pit below the final flood level, as required by OP2, was not practicable while mining the pit as such a void below final flood level would only be created after the mining of the SDSO pit was substantially completed. The alternative proposed by Shree Minerals was to construct a temporary PAF storage facility above the final flood level, to the east of the Southern DSO pit for operational efficiencies and with due management plans to manage the PAF waste rock in the temporary dump. Consequently, Shree submitted an application to vary the permit conditions to the EPA in October 2013 (Nelson Bay River Mine Temporary PAF Storage

Proposal – information to support Permit Variation (V3) (Shree Minerals 28 October 2013).

The EPA issued EPN 8977/1 (1 Nov 2013) which varied the original permit (PCE 8568) to allow the temporary storage of Potentially Acid Forming (PAF) waste rock outside the footprint of the SDSO Pit.

Consequently, Shree designed and operated the SDSO pit with the PAF materials mined and stored in the temporary waste dump with the planned long-term storage to be in the SDSO pit after mining of this pit was completed.

Due to a marked decline in iron ore prices by nearly 50% , the project was placed in care and maintenance in June 2014 with excavation of the SDSO pit only about 25% complete.

Since then the Company has complied in all respects with EPA requirements and requests. Shree has completed annual environmental reports (AER) (Shree Minerals, Annual Environmental Report 2014, 2015) and operates under an approved Care and Maintenance Plan (Shree Minerals Care and Maintenance Plan V 3, John Miedecke and Partners Pty Ltd , September 2014).

In a letter dated 30 March 2015, the Tasmanian EPA Director advised that as a consequence of a judgment in the Supreme Court of Tasmania, he advised that since the current PAF Storage Dump is situated outside the footprint of the SDSO pit, He required actions to bring PAF waste rock management at the mine site into compliance with the requirements of PCE 8568. This included the management of the PAF waste rock while it is located outside the Pit.

Shree has been in constant discussions and communication with Tasmanian Government authorities and investigated various options including preparing a management plan for relocating the current PAF dump to within southern end of SDSO pit, and making a new development application from the Circular Head Council.

In a letter dated 3 March 2016, the EPA advised that the proposal could not be considered anything other than an integral aspect of the mine and therefore it was not possible to consider assessment of the management of mine wastes rock in isolation from the mine. Further, it advised Shree that it should apply for a new permit for the entire mine as a whole, incorporating the above ground waste rock facility for waste rock that has come from the mine.

Shree, in a letter to the EPA dated 3 June 2016 has agreed to apply for a new permit for the mine , so that the new permit when granted will replace the existing permit.

The major reasons to apply for a new permit is:

- i. because the SDSO pit is only 25% complete, there is insufficient space for the PAF waste rock dump to be stored below surface and ultimate flood level of the pit; and
- ii. that this action (storage PAF waste rock in the deepest part of SDSO pit before mining of the pit is completed) may sterilise the remaining resources in the SDSO pit ; and
- iii. PAF storage above ground level in a safe environmental manner is universally practiced throughout the world by almost all open cut mines and with adequate

procedures like truck dumping, compaction, alkali addition (by trucking it in from offsite sources) etc will meet Best Practice Environmental Management (BEMP). To our knowledge NBR is one of the first bulk mining open cut projects to have this condition of storing PAF rock below ground level under permanent water cover probably due to lack of alkali material at site and not considering the possibility of trucking it in from offsite sources; and

- iv. While , there are no adverse effects on the surrounding environment by disposal of PAF rock in an above surface storage dump, under the current legislative framework in Tasmania there is no simple procedure / mechanism which applies to an application to amend an extant planning permit. In consequence , there is no choice but to make a new development application for precisely the same approved development and use, but which specifies a different methodology for storage of the PAF rock , in a safe environmental manner.

2.2 Mine Development to Date

The SDSO pit, as the first pit to be excavated, is some 25% complete, with waste rock materials deposited in two dumps designated as the NAF (Non Acid Forming) waste rock dump, and the Potentially Acid Forming (PAF) waste rock dump..

Figure 2 shows the existing mine development on site. The main features are the SDSO pit and waste dumps. Other elements are the mine water treatment dams, run of mine (ROM) stockpile area and the facilities area. **Figure 3** shows a Google Image.

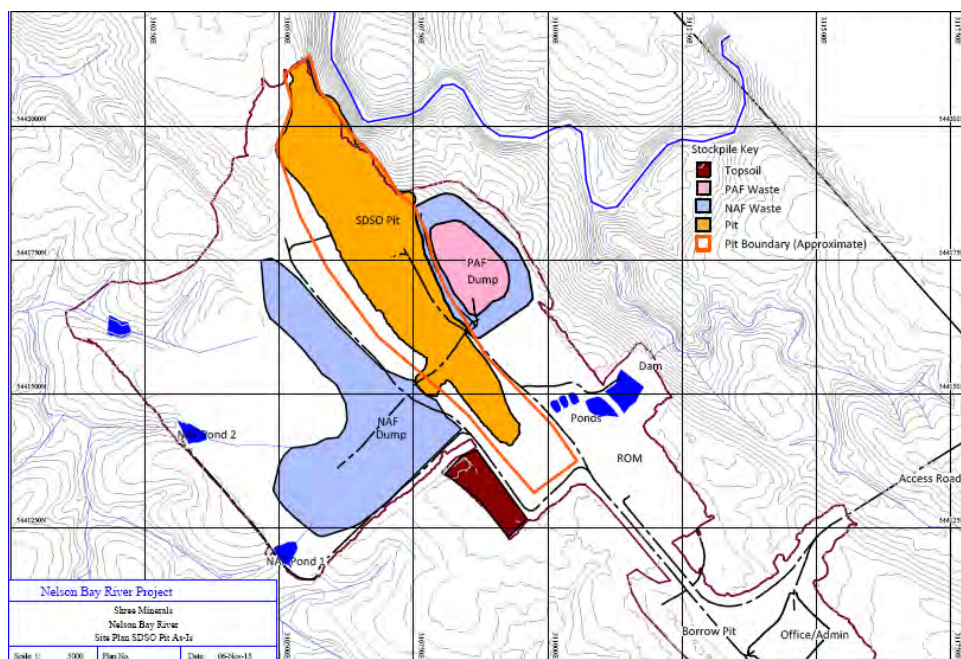


FIGURE 2 EXISTING SITE PLAN



FIGURE 3 GOOGLE IMAGE December 2015

3 Proposed Project Description

The mine site is located adjacent to the Nelson Bay River. As described below, the site has been substantially cleared of vegetation (after appropriate surveys under the requirements of the Permit and Commonwealth Government approvals).

3.1 Planning Scheme

For the purposes of the development application, “The Land” will be the Mining Lease as shown in the existing Permit. **Figure 4** shows the Lease details. The mining lease is valid and current until 2027.

The ML is zoned as ;

- Rural Resource; and
- Environmental Management.

Extractive Industry is a permitted use in the Rural Resource Zone (if not on prime agricultural land) and in Environmental Management Zone, discretionary.

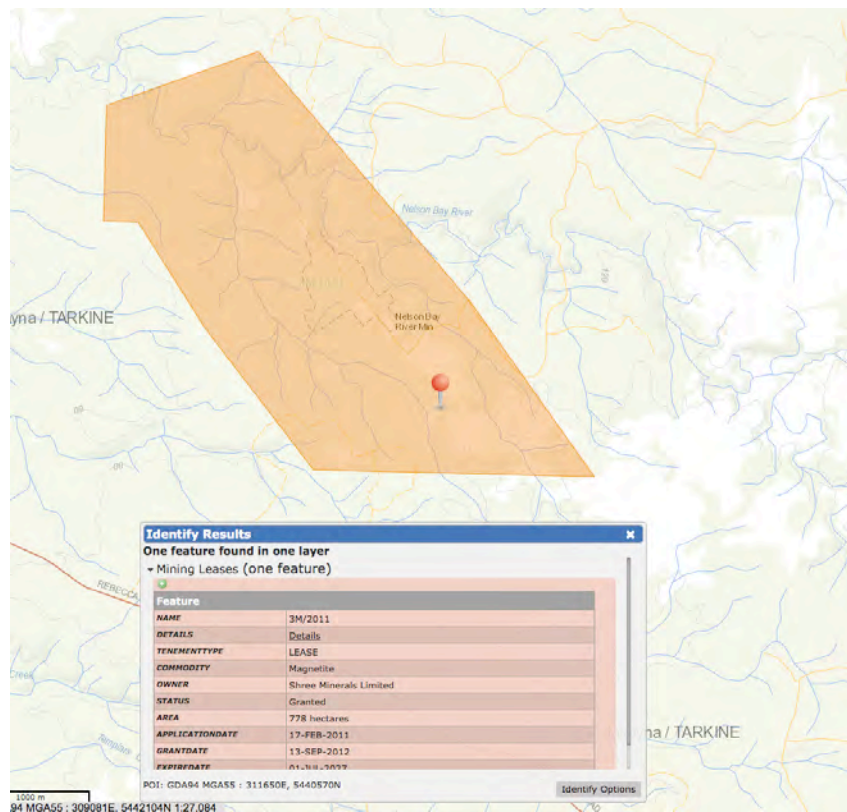


FIGURE 4 MINING LEASE 3M/2011

3.2 General Arrangement

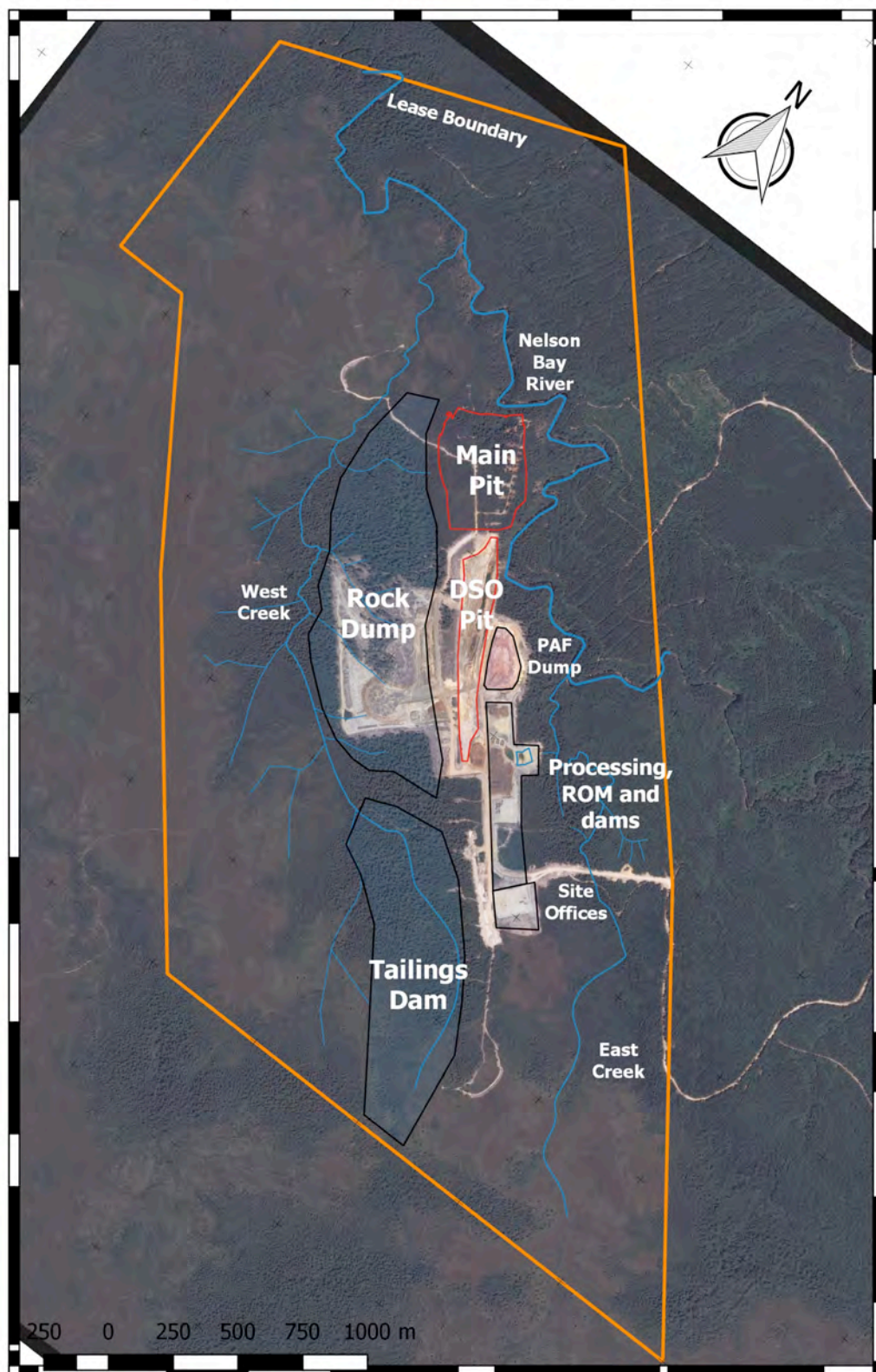
The project will be located as described in the original DPMP (Pitt and Sherry, 2011) and within the mining lease. **Figure 5** shows the general arrangement.

The likely only difference to the original proposal – the proposed surface PAF dumps, are to be located within the original planned footprint and disturbed areas. This area for stage 1 has been cleared of vegetation (after appropriate surveys under the requirements of the Permit and Commonwealth Government approvals). Bush Fires in early 2016 has passed through the mining lease and all the vegetation in the lease area has been essentially burnt away.

3.3 Development Staging

The project is described in two discrete stages, based on the different areas of the mine. It is possible that Shree may proceed directly to Stage 2 (ie not completing the SDSO Pit) if commodity prices do not justify the resumption of the hematite ore prior to commencement of the Stage 2.

Stage 1 will comprise the SDSO pit, which has been commenced and partly completed. This will involve the continuation of mining and disposal of waste rock to the NAF dump and a PAF dump, ore mining and mine dewatering and treatment. No additional areas are



Shree Minerals Nelson Bay River general site layout - approximate only, subject to detail survey and design.
 Map rotated 38 degrees relative to MGA94 Z55. Drawn 6/9/2016. Scale 1:20,000.

FIGURE 5 PROJECT GENERAL ARRANGEMENT

planned to be cleared within the existing footprint. The direct shipping ore will be stored on the existing ROM pad, screened and trucked to Port to markets overseas.

Stage 2 is the development of the Main Pit to mine the magnetite ore body to a depth of approximately 225m. The top 20m approximately of this is Beneficial grade Ore (BFO) which requires only dry magnetic separation in addition to crushing and screening prior to shipping. The balance of the orebody requires wet magnetic separation, filtration and drying which requires the construction of a tailings dam to contain the wastes.

It is proposed that these terms are used in the permit, and the development of Stage 2 to be conditional on particular conditions being met, as it is in the current permit

3.4 Stage 1 Description

Mining will continue in the existing pit and to a depth of approximately 90m. Mine dewatering will continue as is the existing practice with mine waters discharged via a lime treatment plant to settling ponds and recycle dam.

Waste rock will be deposited in one of two dumps – the NAF dump and the PAF dump.

3.4.1 Waste Rock Materials

The waste rock excavated in the pit will consist of:

- The country rock: predominantly quartz sandstone with lesser amounts of grey laminar bedded siltstone, of the Proterozoic Rocky Cape Group (Cowrie Siltstone).
- Some oxidised ore that is not of sufficiently high iron concentration for direct shipment.
- Ultramafic dyke material, and.
- Thermally metamorphosed sediments: dyke-country rock contact material (skarn).

The waste rock materials are primarily sediments which weather and break down to form clay which can be compacted and become virtually impermeable. This has resulted in both the NAF and PAF dumps having minor or negligible seepage from their bases, unlike the volcanics and hard rock of most of the other West Coast Mines.

Some of this material will be PAF and some non-acid forming (NAF).

Shree has committed to ongoing geochemical studies to enhance the current knowledge and assessment.

Geo- Environmental Management was commissioned for calibration and review of the NAG testwork results, in the early months of the mining operation.

The review recommended the criteria provided in the table below be assigned to any previous and all future data. It also recommends that a similar review/calibration of the field NAG tests results be conducted at least annually to check for consistency of the waste rock classification as the mine potentially moves into different geochemical material types. It is noted that no high capacity PAF materials have been identified.

Field NAG Test Criteria Classification

NAGpH	<3.0	PAF
NAGpH	3.0 to 4.4	PAF/LC (≤ 5 kg H ₂ SO ₄ /t)
NAGpH	≥ 4.5	NAF

A separate study is also currently being undertaken to evaluate the feasibility of alkali blending in order to convert the typical lower capacity PAF waste rock to a non-acid forming (NAF) material prior to disposal in order to reduce the quantity of material requiring encapsulation. This testwork (ongoing) is indicating that a relatively low application rate of limestone or similar, will render the low capacity PAF non-acid forming and ongoing mine operations can incorporate alkali addition in ongoing operations.

3.4.2 Waste Rock Dumps

Waste rock mined from the SDSO pit when mining recommences will be managed in accordance with a PAF Materials Separation and Verification Plan (Permit Condition PO1) which will be revised for EPA review and approval prior to mining operations recommencing.

NAF waste rock will be placed in the existing waste rock dump (together with alkaline materials), and the identified PAF waste rock trucked from the pit to the new dump site within the SDSO pit footprint.

The proposed new PAF waste rock storage consists of two parts :

- a permanent storage for all PAF waste rock that will be mined from the SDSO pit going forward as per existing approved plans but differs to the extent that the new storage is above permanent flood level of the SDSO pit. This is expected to contain approximately 160,000 bcm of PAF waste rock (230,000 bcm total estimated PAF rock from SDSO pit less approx 70,000 bcm stored in current temporary PAF dump).
- a temporary PAF waste rock storage dump for all previously mined PAF rock and stored in the previously approved temporary PAF rock dump as constructed in 2014 and approved under EPN 8977/1 (approximately 75,000 bank cubic metres (bcm) of PAF rock) (**Figure 2**). All drainage is directed to the SDSO pit. This PAF rock is proposed to be relocated to the SDSO pit after completion of mining in the SDSO pit.

The construction of the PAF waste rock dump will be in accordance with industry best practice, which will include:

- material segregation (higher PAF materials identified)
- base preparation;
- rock dumping method;
- alkalinity addition;
- compaction;
- encapsulation;
- periodic and final covering; and
- drainage management.

3.5 Stage 2 Description

Stage 2 is the development of the Main Magnetite Pit as described in the original DPMP and as permitted.

The top 20m approximately of the pit is Beneficial grade Ore (BFO) which requires only dry magnetic separation in addition to crushing and screening prior to shipping.

The balance of the the magnetite ore body to a depth of approximately 225m, requires wet magnetic separation, filtration and drying which requires the construction of concentration plant and a tailings dam to contain the wastes.

Waste rock will be deposited in one of two dumps – the NAF dump and the PAF dump. All plans for waste rock management for Stage 2 will be provided as required by the EPA in future applications.

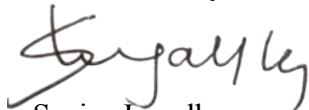
It is expected that all materials designated as NAF will be carted to the existing NAF dump and encapsulate the existing dump, as described above.

The PAF dump will be constructed within the SDSO pit if Stage 2 is commenced after completion of SDSO pit. If Stage 2 is commenced prior to completion of the SDSO pit an above surface PAF rock dump may be created to store excess material within a separate area earmarked within the proposed footprint of the NAF dump on the west side of the mining pits and will be constructed in accordance with industry best practice, which will include:

- material segregation (higher PAF materials identified)
- base preparation;
- rock dumping method;
- alkalinity addition;
- compaction;
- encapsulation;
- periodic and final covering; and
- drainage management.

If you have any questions relating to the proposal please contact the undersigned, or John Miedecke our consultant. (0418 130672).

Yours sincerely,



Sanjay Loyalka

Director

Cc Brett Stewart, MRT

Malcom Budd, EPA

John Miedecke and Partners Pty Ltd



APPLICATION FOR PERMIT *Land Use Planning and Approvals Act 1993*

Circular Head Interim Planning Scheme 2013

to Planning Authority Circular Head Council
PO Box 348, SMITHTON TAS 7330

Details of Proposed Development or Use

Address:	Mining Lease 3M/2011 Wuthering Heights Road	Lot No:	
Description:	Hematite and magnetite mine, processing plant and associated facilities	Certificate of title No:	
Value of work (inc GST):	\$ 20 million	<input type="checkbox"/> Contract Price	<input checked="" type="checkbox"/> Estimate
Existing use of site	Hematite and magnetite mine		

Includes

New Use/ Change of use
 Subdivision
 New Buildings
 Alterations
 Demolition

Applicant / Owner details:

Applicant(s):	Shree Minerals Ltd ACN 130618683		
Address:	Unit 2 88 Forrest St Cottesloe WA 6011	Phone No:	0892861509
		Mobile:	0418166004
Fax:		Email:	Sanjay Loyalka <loyalka.sanjay@gmail.com>

Applicant owns the property (tick if yes, if no complete owner details)

Owner details:

Owner (s):		Phone No:	
Postal address:		Fax No:	

Applicants listed above declare that the owner(s) of the property have been notified of the intention to make this application.

Signed by:		Date:	
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Council or Crown Land

Must be signed if Council or Crown Land and accompanied with a letter of permission

Signed by	see attached correspondenc from Min Res Tasmania	Date	
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Minister (or delegate) of the responsible State Department OR General Manager (or delegate)

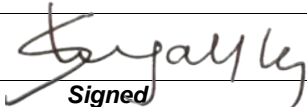
Designer Details

Designer Name	Shree Minerals	Category:	
Address:		Phone No:	
		Fax No:	
Accreditation No:		Email address:	

Documents and certificates provided:

The following specified documents and certificates are provided with this application together with any necessary information to demonstrate compliance with applicable provision of the planning scheme. A separate checklist is available from Council. The Planning Scheme provisions can be viewed at www.schemes.planning.tas.gov.au follow the links through to Circular Head.

	<i>Document or certificate description:</i>	<i>Prepared by</i>
<input checked="" type="checkbox"/>	Full copy of the current Certificate of Title including plan and any schedule of easements	MRT Tas ML 3M/2011 <small>(Clause 8.1.2)</small>
<input checked="" type="checkbox"/>	A full description of the proposed use or development and	Irene Duckett <small>(Clause 8.1.2)</small>
<input checked="" type="checkbox"/>	A description of how the proposed use or development will operate	DPEMP (original) <small>(Clause 8.1.2)</small>
<input type="checkbox"/>	<i>All applicable information listed in clause 8.1.3 including:</i> Where it is proposed to erect buildings, a detailed layout plan of the proposed buildings with dimensions at a scale of 1:100 or 1:200	<small>(Clause 8.1.2)</small>
	Listed reports, plans and supporting information accompanying this application (Please list)	
	Development Application report	Irene Duckett
	Original Shree Minerals Development Proposal and Environmental Management Plan (DPEMP) and Supplements	Pitt and Sherry
	Email from Mineral Resources Tasmania	MRT

Copyright Authority	Unless a written refusal of authority to copy documents relating to this application is provided, the Council and the Crown (Tasmanian State Government) departments and agencies may provide a partial or complete copy of any documents relating to this application, to any person for the purpose of assessment. Notwithstanding this these documents may be displayed publicly in accordance with the provisions of the Land Use Planning and Approvals Act 1993, including display on a website.
Declaration	I/We declare the information and details supplied in this application are a true and accurate description of the proposed development. I/We hereby give/have arranged permission for Council Officers to enter the property to conduct inspections for this application.
Applicant (s)	 <div style="display: flex; justify-content: space-between; margin-top: 10px;"> Signed Date </div>

Please note that all applicants need to sign this form. If the application is by an owner, all title owners listed on the title need to be on the form and sign this form.

Privacy Statement

The personal information on this form is required by Council for building purposes under the Land Use Planning and Approvals Act 1993. We will only use your personal information for this and related purposes. If this information is not provided, we may not be able to deal with this matter. You may access and/or amend your personal information at any time. How we use this information is explained in our **Privacy Policy**, which is available at www.circularhead.tas.gov.au or at Council office.

LEVEL TWO MAGNETITE MINE, NELSON BAY



LEVEL 2 MAGNETITE MINE, NELSON BAY

Submission to the Circular Head Council Development Application

Last Updated - 26 October 2016

Author - Irene Duckett

Reviewed - Jacqui Blowfield

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1. INTRODUCTION

Ireneinc Planning has been engaged to prepare an application for the use and development of a mining operation, involving magnetite and hematite extraction and processing activities. The site is located on Crown land near Nelson Bay River, off Wuthering Heights Road, approximately 7 km north east of Temma.

The documentation that accompanies this application includes:

- Application Form
- Cover letter, S. Loyalka
- DPEMP (Pitt & Sherry 2011, and Pitt & Sherry 2012 (a, b, c & d))

The DP&EMP submitted is that which was approved in 2011. Subsequent changes have been made in relation to the PAF and depth of DSO extraction. As the application is one submitted to the Environmental Protection Authority (EPA) as a level 2 activity, the development application will be sent to the EPA after determination by Council, for the EPA to undertake assessment of environmental factors, and issue of guidelines for the revised DP&EMP.

2. THE SITE

The subject site is identified by mining lease 3M/2001 which is valid and current until 2027, and is identified in Figure 1.



Figure 1: Site Location (Source: The LIST)

The site has been substantially cleared of vegetation, under the permit DA 2011/00171 and a proportion of the remaining vegetation was destroyed in bush fires that swept through the site in January 2016.

The site is located approximately 4 km east of Cousta Rocks, in north western Tasmania, the location of the nearest sensitive uses. The site is accessed by road from the Arthur River via Temma and Rebecca Roads, and by Wuthering Heights Road. Road access from the Roger River township direction (northeast) is via Blackwater Road and the Rebecca Link Road and then Wuthering Heights Road; the latter being a forestry road leading to Forestry Tasmania gravel quarry and forestry plantations. Local access to the site is via forestry spur road, and newly upgraded local access road.

The site lease is aligned from southeast to northwest, reflecting the underlying resource lineaments. Two unnamed creeks cross the lease area, and are referred to for the purpose of this application as West Creek and East Creek. The mine pits and infrastructure have been designed to be located between these two creeks to minimise disturbance or loss of riparian habitat.

The vegetation is largely *Eucalyptus nitida* and *Eucalyptus obliqua* forest and western wet scrub, none of which are threatened communities. The footprint of the mine (stage 1) has now been cleared (under the previous permit). Sensitive wet heathland lies to the west of West Creek. The layout and confinement of the mine has been designed to avoid impact on this heathland.



Figure 2: Site Topographical Map (source: The LIST)

2.1 SITE SURROUNDS

The site is located on the southern side of the Nelson Bay River, which flows northwest and west to the Southern Ocean at Nelson Bay, and is located wholly within the Nelson Bay River catchment. A portion of the site sits within the Arthur-Pieman Conservation Area, and is subject to the prescriptions for mining operations in the Arthur-Pieman Conservation Area Management Plan.

2.2 EXISTING DEVELOPMENT

The Shree mine was granted planning approval by the Circular Head Council in August 2012 (DA 2011/00171) an integral part of which included the DPEMP (Pitt & Sherry 2011, and Pitt & Sherry 2012 (a, b, c & d)), incorporating EPA Permit Conditions Environmental No 8568. The permit divides activity into two stages, the first including the mining of oxidised hematite from the Southern DSO pit, and beneficial oxide ore from the Main Pit. Stage 2 includes any mining and processing (including tailings), and is subject to the submission and approval of a Stage 2 feasibility plan, prior to the commencement of construction of stage 2.

Construction and Development work commenced in April 2013.

Existing works undertaken under that permit include internal road construction, vegetation clearance, and construction of mine site infrastructure (like ROM pad, office areas, water treatment ponds & dams, waste dumps etc) and commencement of excavation of Southern DSO pit.

These permit conditions included a requirement to store all PAF waste rock within the SDSO Pit (OP2). There were also additional conditions regarding the preparation of a PAF Materials Separation and Verification Plan and a requirement to operate the activity in compliance with the Plan (OP1). By August 2013, the identified mineral resource had grown due to further exploration and revised mine plan resulted in following:

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It is normal for every mine to increase resources over period of time and hence the total quantity of mining ore and waste by increasing mine life which evolves progressively.

Consequently, Shree reviewed its mine plans and approximately 230,000 BCM (bank cubic meters) of PAF materials were identified as potentially to be excavated from the Southern DSO pit. The storage of this material within the pit below the final flood level, as required by OP2, was not practicable while mining the pit as such a void below final flood level would only be created after the mining of the SDSO pit was substantially completed. The alternative proposed by Shree Minerals was to construct a temporary PAF storage facility above the final flood level, to the east of the Southern DSO pit for operational efficiencies and with due management plans to manage the PAF waste rock in the temporary dump. Consequently, Shree submitted an application to vary the permit conditions to the EPA in October 2013 (Nelson Bay River Mine Temporary PAF Storage Proposal - information to support Permit Variation (V3) (Shree Minerals 28 October 2013).

The EPA issued EPN 8977/1 (1 November 2013) which varied the original permit (PCE 8568) to allow the temporary storage of Potentially Acid Forming (PAF) waste rock outside the footprint of the SDSO Pit.

Development and mining activities continued up till June 2014, when it was placed in care and maintenance due to decline in iron ore prices by approximately 50% with excavation of the SDSO pit only about 25% complete. In December 2014, the Supreme Court¹ determined that the approval of the changes as an amendment went beyond the powers afforded to the EPA under section 44 (10), and concluded EPN 8977/1 to be invalid by consequence of the qualitative and quantitative changes requested by the amendment.

This application is therefore being submitted to address the jurisdictional requirements resulting from this sequence of events. This application is being made such that the new permit when granted, will replace the existing permit.

¹ Tarkine National Coalition Inc v Schaap (2014) TASSC 66

3. PROPOSED DEVELOPMENT

The proposal is for the mining operations within the lease area identified by Mining Lease 3M/2011. The proposal is for two stages, however it is possible that stage 2 may be commenced directly without completion of the SDSO pit, depending on commodity prices.

Stage 1 will comprise the SDSO pit, which has been commenced and partly completed. This will involve the continuation of mining and disposal of waste rock to the NAF dump and a PAF dump, ore mining and mine dewatering and treatment. No additional areas are planned to be cleared within the existing footprint. The direct shipping ore will be stored on the existing ROM pad, screened and trucked to Port to markets overseas.

- Mining

A near surface oxidised ore body containing direct shipping ore (hematite)(DSO) is proposed to be extracted by shovel and truck open cut mining, to a depth of approximately 90m. The ore will be processed on site by crushing and screening, and removed to its port destination by road transport;

- Waste water

Waste water will be directed to a central treatment plant to which all significant mine water will be directed, to allow neutralisation, if required. Mine dewatering and treatment via lime treatment plant to settling ponds and recycling dam, or discharged to East Creek. Development will include the construction of the plant and dam.

- Waste rock

Waste rock will be sorted and stockpiled on site. Stockpiles will include:

- topsoil for future rehabilitation
- crushed material for construction of roads and road surfacing
- waste rock for construction of tailings dam and walls
- ROM stockpile

Some waste rock contains pyritic material, which is potentially acid forming (PAF). This rock will be identified and treated in the following manner:

- Storage and disposal of Potentially Acid Forming (PAF) material:

- a temporary PAF waste rock storage dump for all previously mined PAF rock and stored in the previously approved temporary PAF rock dump as constructed in 2014 and approved under EPN 8977/1 (approximately 75,000 bank cubic metres (bcm) of PAF rock). All drainage is directed to the SDSO pit. This PAF rock is proposed to be relocated to the SDSO pit after completion of mining in the SDSO pit.

- Permanent storage for all PAF waste rock that will be mined from the SDSO pit going forward as per existing approved plans but differs to the extent that the new storage is above permanent flood level of the SDSO pit. This is expected to contain approximately 160,000 bcm of PAF waste rock.
- Storage and disposal of Non Acid Forming (NAF) material:
 - NAF waste rock will be placed in the existing waste rock dump (together with alkaline materials), and the identified PAF waste rock trucked from the pit to the new dump site within the SDSO pit footprint.
- Infrastructure
 - The mine will have basic support infrastructure including parking, workshops, change rooms, ablutions, security, first aid rooms, crib room, office, diesel powered generator, communications, storage buildings and areas. All buildings will be transportable and all entrances, car ports and access paths between buildings will be covered.
 - Sewage collected in an underground tank which is periodically emptied by a contractor for disposal in an approved facility.

Stage 2

- Extraction of magnetite ore by developing a pit (Main Pit) to a depth of approximately 225m.
- Processing by dry magnetic separation, crushing and screening of top 20m of material consisting of beneficial grade ore.
- Remaining magnetite processed by wet magnetic separation, filtration and drying; construction and use of concentration plant and tailings dam;
- If Stage 2 is commenced prior to completion of the SDSO pit, an above surface PAF rock dump may be created to store excess material within a separate area earmarked within the proposed footprint of the NAF dump on the west side of the mining pits including:
 - material segregation (higher PAF materials identified)
 - base preparation;
 - rock dumping method;
 - alkalinity addition;
 - compaction;
 - encapsulation;
 - periodic and final covering; and
 - drainage management.

Stage 3 - Decommissioning and Rehabilitation.

On completion of mining operations, formal mine closure, decommissioning and rehabilitation will occur. This will include the following elements:

- Infrastructure
 - All infrastructure, plant, buildings and foundations to be removed. Areas recontoured, provided with appropriate soil covering, and revegetated.
- Tailings Dam
 - Tailings dam will be rehabilitated with permanent water cover, with overflow directed to the settling pond prior to discharge.
- Main and DSO Pits
 - These pits will be filled with water, with overflow drainage from the DSO pit to the Main pit, and then on to the settling pond prior to discharge.
- Potentially Acid Forming Material
 - PAF material will be neutralised, and encapsulated in the waste rock dump, as per EPA specification.
- Waste Rock Dump
 - Waste Rock dump will be rehabilitated, with re-contouring, soil cover and revegetation.

The following figure provides the conceptual layout of the proposed works.

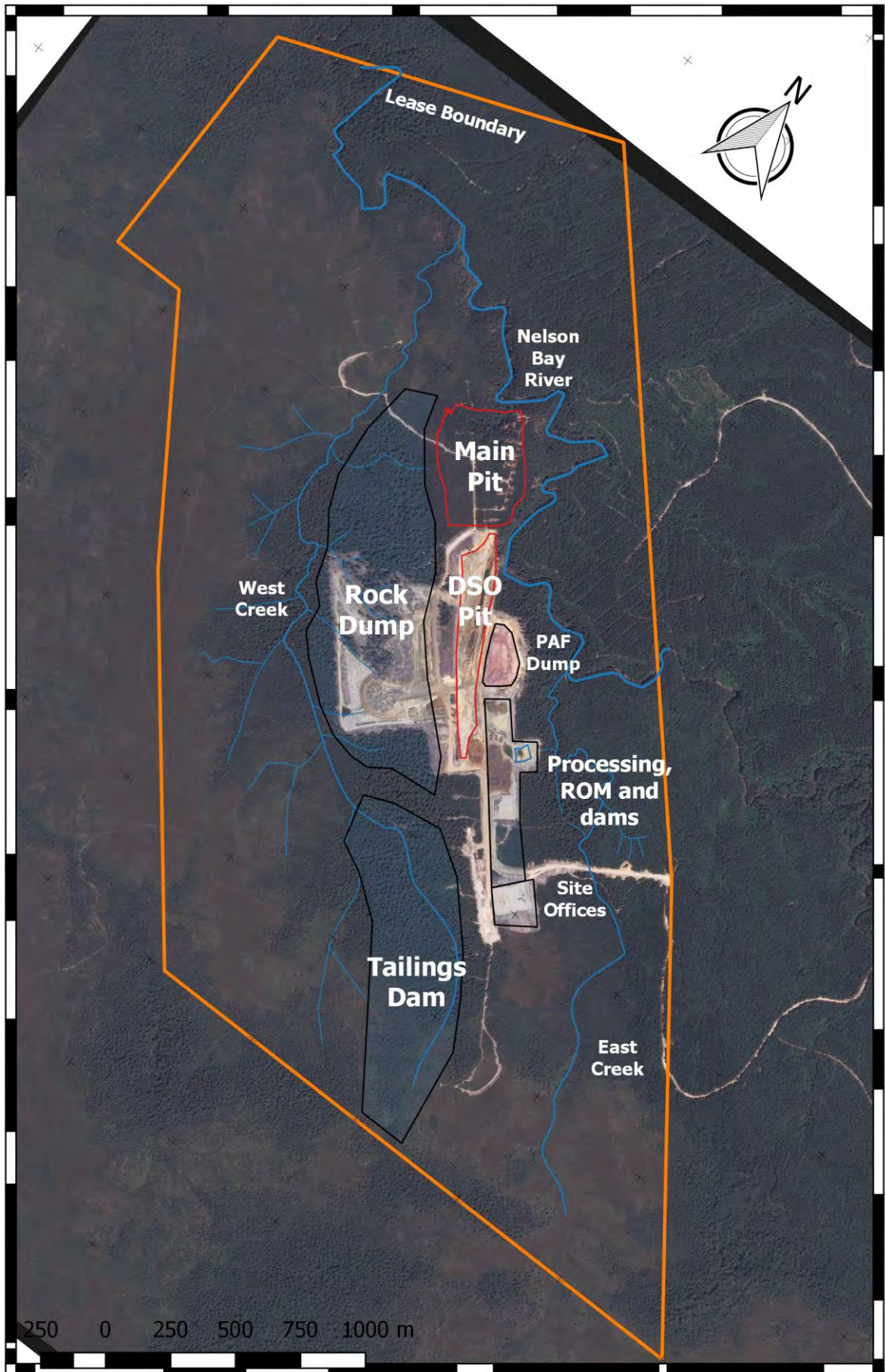


Figure 3 Conceptual layout of proposed works

- 29.1.1.1 *To provide for the protection, conservation and management of areas with significant ecological, scientific, cultural or aesthetic value, or with a significant likelihood of risk from a natural hazard.*
- 29.1.1.2 *To only allow for complementary use or development where consistent with any strategies for protection and management.*
- 29.1.1.3 *To facilitate passive recreational opportunities which are consistent with the protection of natural values in bushland areas.*
- 29.1.1.4 *To recognise and protect highly significant natural values on private land.*
- 29.1.1.5 *To recognise and protect reserved natural areas as great natural assets. The proposed development of a residential dwelling is supported by the zone purpose statements in that the site is fully serviced.*

Local Area Objectives state the following:

29.1.2 *Local Area Objectives*

Environmental management land is protected, conserved and managed to -

- (a) sustain biodiversity and ecological process;*
- (b) retain habitat value for native vegetation communities and fauna species;*
- (c) protect significant geological features, natural landforms, and aesthetic or scenic landscape, including within the coastline and waterways;*
- (d) protect places of special cultural value or heritage importance;*
- (e) retain capacity of naturally occurring or renewable resources for productive economic use;*
- (f) support recreation and tourism use;*
- (g) minimise against intrusion and impact of conflicting use such as settlement and intensive primary production; and*
- (h) Restrict new use or development on land with a high level of risk from exposure to a natural hazard.*

The Desired Future Character Statements are as follows:

29.1.3 *Desired Future Character Statement*

- (a) Use or development -*
 - (i) is in accordance with any conservation management requirement applying for the land in accordance with a law of or an agreement enforceable by the Commonwealth of Australia;*
 - (ii) is in accordance with any reserve management plan applying for the land;*
 - (iii) is in accordance with a municipal management plan for protection or conservation applying for the land and incorporated as a document forming part of this planning scheme; or*
 - (iv) is in accordance with best practice management principles for protection and conservation of an area of significant ecological, scientific, cultural or aesthetic value, or with a significant likelihood of risk from a natural hazard; or*
- (b) Use or development on land of significant ecological, scientific, cultural, or aesthetic value -*
 - (i) is required to enhance conservation and protection; or*

- (ii) *may involve an activity dependent on access to land of significant ecological, scientific, cultural, or aesthetic value;*
- (iii) *involves minimal clearing and conversion of native vegetation and modification of natural topography; and*
- (iv) *is typically self-sufficient with respect to provision for a water supply and for drainage and disposal of sewage and stormwater.*

The purpose of the Rural Resources Zone is as follows:

26.1.1 Zone Purpose Statements

26.1.1.1 To provide for the sustainable use or development of resources for agriculture, aquaculture, forestry, mining and other primary industries, including opportunities for resource processing.

26.1.1.2 To provide for other use or development that does not constrain or conflict with resource development uses.

Local Area Objectives for the Rural Resource Zone are:

26.1.2 Local Area Objectives

- (a) *The priority purpose for rural land is primary industry dependent upon access to a naturally occurring resource;*
- (b) *Air, land and water resources are of importance for current and potential primary industry and other permitted use;*
- (c) *Air, land and water resources are protected against -*
 - (i) *permanent loss to a use or development that has no need or reason to locate on land containing such a resource; and*
 - (ii) *use or development that has potential to exclude or unduly conflict, constraint, or interfere with the practice of primary industry or any other use dependent on access to a naturally occurring resource;*
- (d) *Primary industry is diverse, dynamic, and innovative; and may occur on a range of lot sizes and at different levels of intensity;*
- (e) *All agricultural land is a valuable resource to be protected for sustainable agricultural production;*
- (f) *Rural land may be used and developed for economic, community, and utility activity that cannot reasonably be accommodated on land within a settlement or nature conservation area;*
- (g) *Rural land may be used and developed for tourism and recreation use dependent upon a rural location or undertaken in association with primary industry*
- (h) *Residential use and development on rural land is appropriate only if -*
 - (i) *required by a primary industry or a resource based activity; or*
 - (ii) *without permanent loss of land significant for primary industry use and without constraint or interference to existing and potential use of land for primary industry purposes.*

Desired Future Character Statements for the Zone require the following:

26.1.3 Desired Future Character Statements

Use or development on rural land -

- (a) *may create a dynamic, extensively cultivated, highly modified, and relatively sparsely settled working landscape featuring -*
 - (i) *expansive areas for agriculture and forestry;*
 - (ii) *mining and extraction sites;*
 - (iii) *utility and transport sites and extended corridors; and*
 - (iv) *service and support buildings and work areas of substantial size, utilitarian character, and visual prominence that are sited and managed with priority for operational efficiency*
- (b) *may be interspersed with -*
 - (i) *small-scale residential settlement nodes;*
 - (ii) *places of ecological, scientific, cultural, or aesthetic value; and*
 - (iii) *pockets of remnant native vegetation*
- (c) *will seek to minimise disturbance to -*
 - (i) *physical terrain;*
 - (ii) *natural biodiversity and ecological systems;*
 - (iii) *scenic attributes; and*
 - (iv) *rural residential and visitor amenity;*
- (d) *may involve sites of varying size -*
 - (i) *in accordance with the type, scale and intensity of primary industry; and*
 - (ii) *to reduce loss and constraint on use of land important for sustainable commercial production based on naturally occurring resources;*
- (e) *is significantly influenced in temporal nature, character, scale, frequency, and intensity by external factors, including changes in technology, production techniques, and in economic, management, and marketing systems*

4.2 USE STATUS

The proposed use is for extractive industry, which is a discretionary use in the Environmental Management Zone, and Permitted in the Rural Resource Zone, if not on prime agricultural land.

Extractive Industry is defined as:

Use of land for extracting or removing material from the ground, other than Resource development, and includes the treatment or processing of those materials by crushing, grinding, milling or screening on, or adjoining the land from which it is extracted. Examples include mining, quarrying, and sand mining.

4.3 USE STANDARDS - ENVIRONMENTAL MANAGEMENT ZONE

29.3.1 USE STANDARDS FOR STATUTORY CONSERVATION RESERVE

Objective: *Use in a statutory conservation reserve is to -*

- (a) *be consistent with any applicable prescribed statutory conservation outcome, including a reserve management plan; and*
- (b) *support and service a conservation or hazard management purpose*

SCHEME PROVISION	DEVELOPMENT RESPONSE
A1 <i>The relevant conservation management</i>	Parts of the site are subject to the Arthur Pieman Conservation Area Management Plan

agency must advise -

- (a) the use is in accordance with any applicable reserve management plan;
- (b) it is satisfied the health and safety of people, property and the environment is not at risk from the use; and
- (c) any conditions and requirements for protection, conservation, or management.

P1

No performance Criteria

2002. Section 5.3 recognises the importance of the extraction of mineral resources located within the area, and provides for mineral exploration and extraction.

The stated aims of the Management Plan are “To ensure that exploration or any subsequent extraction and rehabilitation are undertaken in accordance with best practice to provide maximum environmental protection.”

The prescriptions to be followed include:

- Exploration shall be conducted in accordance with conditions laid out in the Mineral Exploration Code of Practice.
- Extraction will be subject to the Quarry Code of Practice and environmental assessment as required by State legislation including the *Environmental Management and Pollution Control Act 1994*, the *Mineral Resources Development Act 1995* and the *Mining Act 1993*.
- Rehabilitation shall be carried out on all activities associated with mineral exploration and mining activity in the Arthur-Pieman Conservation Area.

The prescriptions for mining activities contained in the Arthur-Pieman Conservation Area Management Plan are addressed and achieved through the commitments outlined in the accompanying DPEMP².

29.3.2 DISCRETIONARY PERMIT USE

Objective: Use of land that is a discretionary use in this zone, other than residential use, is to -

- (a) protect, conserve and manage significant ecological, scientific, cultural or aesthetic value; or
- (b) minimise likelihood of significant risk from exposure to a natural hazard

SCHEME PROVISION	DEVELOPMENT RESPONSE
<p>A1</p> <p><i>Discretionary permit use, other than residential use, must be -</i></p> <ul style="list-style-type: none">(a) on a site that is not located in an area of significant ecological, scientific, cultural or aesthetic value; or(b) consistent with any advice or decision of the relevant entity for a statutory outcome applying for protection, conservation and management of a	<p>The statutory entity responsible for the protection, conservation and management of the Arthur Pieman Conservation Area, which overlaps a portion of the site, is the state Department of Parks and Wildlife, in applying the Arthur Pieman Conservation Area Management Plan.</p> <p>The management plan, as outlined above, defers to the Quarry Code of Practice and the provisions of EMPCA, which are being administered by the EPA through the</p>

² Development Proposal and Environmental Management Plan (DPEMP) Nelson Bay River Magnetite Mine, Pitt & Sherry, 28th November 2011, and subsequent addendums

<p><i>significant ecological, scientific, cultural, or aesthetic value of the land or adjacent land</i></p>	<p>assessment of the DPEMP.</p> <p>The specific prescriptions for mining activities contained in the Arthur-Pieman Conservation Area Management Plan are addressed and achieved through the commitments outlined in the accompanying DPEMP³.</p>
<p>P1</p> <p><i>Discretionary permit use, other than residential use, must -</i></p> <p>(a) <i>be required to locate in an area of significant ecological, scientific, cultural or aesthetic value -</i></p> <p>a) <i>to provide immediately access to a specific naturally occurring resource;</i></p> <p>b) <i>to facilitate conservation, protection or management of a significant ecological, scientific, cultural or aesthetic value;</i></p> <p>c) <i>to provide opportunity for diversification, innovation, and value-adding to secure a conservation outcome;</i></p> <p>d) <i>to provide utility infrastructure of critical importance for the municipal or regional community or for Tasmania; or</i></p> <p>e) <i>to provide significant social, economic or environmental benefit to the Region or Tasmania; and</i></p> <p>(b) <i>have regard to any advice or decision of the relevant entity for a statutory outcome applying for protection, conservation and management of a significant ecological, scientific, cultural, or aesthetic value of the land or adjacent land</i></p>	<p>As no use can or will occur in a manner that is not consistent with the conditions of approval of the EPA, the proposal is consistent with the Acceptable Solution.</p>
<p>A2</p> <p><i>No Acceptable Solution</i></p> <p>P2</p> <p><i>Use on land with a high level of risk from exposure to a natural hazard must be required to provide an overriding social, economic or environmental benefit to the Region or Tasmania; and</i></p> <p>(a) <i>no suitable alternate site is available; and</i></p> <p>(b) <i>a hazard risk assessment in accordance with Code E2 - Bushfire Prone Areas and Code E6 - Hazard Management indicates-</i></p>	<p>The planning scheme identifies that parts of the site area impacted by Landslip Hazard Overlay, at a low level category.</p> <p>The DPEMP specifies that a detailed risk (hazard) assessment will be undertaken in relation to site stability, infrastructure design and risk management of explosives and fuel (Commitments 61 - 66)⁴</p> <p>A Fire Management Plan has been developed for the proposed use and development, and will be regularly updated and enforced as part of the DPEMP (commitments 67 - 70).⁵</p>

³ Pitt & Sherry, 2011

⁴ Pitt & Sherry 2011, P 185

⁵ Pitt & Sherry 2011, P 188

-
- (i) *there is an insufficient increase in the level of risk to warrant any specific hazard reduction or protection measures; or*
 - (ii) *a hazard management plan demonstrates a tolerable level of risk can be achieved and maintained for the type, scale and intensity of the use*
-

4.4 DEVELOPMENT STANDARDS - ENVIRONMENTAL MANAGEMENT ZONE

29.4.1 DEVELOPMENT IN A STATUTORY CONSERVATION AREA

Objective:

Development in a statutory conservation reserve is to -

- (a) *be consistent with any applicable prescribed statutory conservation outcome, including a reserve management plan; and*
 - (b) *support and service a conservation or hazard management purpose*
-

SCHEME PROVISION	DEVELOPMENT RESPONSE
<p>A1 <i>The relevant conservation management agency must advise -</i></p> <ul style="list-style-type: none"> (a) <i>the development is in accordance with any applicable reserve management plan;</i> (b) <i>it is satisfied the health and safety of people, property and the environment is not at risk from the development; and</i> (c) <i>any conditions and requirements for protection, conservation, or management.</i> <p>P2 <i>No performance criteria</i></p>	<p>Parts of the site are subject to the Arthur Pieman Conservation Area Management Plan 2002. Section 5.3 recognises the importance of the extraction of mineral resources located within the area, and provides for mineral exploration and extraction.</p> <p>The stated aims of the Management Plan are “To ensure that exploration or any subsequent extraction and rehabilitation are undertaken in accordance with best practice to provide maximum environmental protection.”⁶</p> <p>The prescriptions to be followed include:</p> <ul style="list-style-type: none"> • <i>Exploration shall be conducted in accordance with conditions laid out in the Mineral Exploration Code of Practice.</i> • <i>Extraction will be subject to the Quarry Code of Practice and environmental assessment as required by State legislation including the Environmental Management and Pollution Control Act 1994, the Mineral Resources Development Act 1995 and the Mining Act 1993.</i> • <i>Rehabilitation shall be carried out on all activities associated with mineral exploration and mining activity in the Arthur-Pieman Conservation Area.</i> <p>The prescriptions for mining activities contained in the Arthur-Pieman Conservation Area Management Plan are addressed and</p>

⁶ Arthur Pieman Conservation Area Management Plan, P 42.

achieved through the commitments outlined in the accompanying DPEMP⁷.

29.4.3 LOCATION AND CONFIGURATION OF DEVELOPMENT

Objective: *The location and configuration of development does not dominate or otherwise detract from the performance, appearance, and character of an area of significant ecological, scientific, cultural or aesthetic value or unreasonably intrude onto the occupation of adjacent land*

SCHEME REQUIREMENT	DEVELOPMENT RESPONSE
<p>A1 <i>A building and any development area must be setback -</i></p> <p>(a) <i>not less than 20.0m from the frontage to a road; or</i></p> <p>(b) <i>if the development is on land that adjoins a road specified in the Table to this Clause, not less than the setback specified from that road; and</i></p> <p>(c) <i>not less than 10.0m from each side boundary;</i></p> <p>(d) <i>not less than 10.0m from the rear boundary; or</i></p> <p>(e) <i>in accordance with any building area shown on a sealed plan.</i></p> <p>P1 <i>The setback of a building and development area from the frontage or from a side or rear boundary must -</i></p> <p>(a) <i>be consistent with prevailing frontage setbacks for any existing and approved building or structure on the site or on adjacent land;</i></p> <p>(b) <i>provide a sufficient physical and visual separation between the road and any use on the site sufficient to buffer or screen the site to view from a road or public place; and</i></p> <p>(c)</p> <p>(d) <i>provide measures to attenuate visual impact of the site</i></p>	<p>Buildings proposed as part of the support infrastructure will be set back approximately 300m from the nearest boundary.</p> <p>Works associated with the mineral extraction including mining pits, tailings dams and material storage will also be setback in excess of 20m of the boundaries.</p>
A2	N/A
<p>A3 <i>A building or a utility structure must be -</i></p> <p>(a) <i>not less than 15m below the level of any adjoining ridgeline;</i></p> <p>(b) <i>not less than 30m from any shoreline to</i></p>	<p>The proposed buildings and utility structures are located approximately 50m from the nearest watercourse.</p> <p>The immediate site ridgeline is represented by the 120m contour at the southern end of</p>

⁷ Development Proposal and Environmental Management Plan (DPEMP) Nelson Bay River Magnetite Mine, Pitt & Sherry, 28th November 2011, and subsequent addendums

-
- a marine or aquatic water body, water course, or wetland;*
 - (c) *below the canopy level of any adjacent forest or woodland vegetation; and*
 - (d) *clad and roofed with materials with a light reflectance value of less than 40%.*
- the subject site. The proposed buildings and utility structures will be located at approximately around 100m contour, with the Concentrator estimated at 17m high on the 100m contour level. The proposed buildings are not within Environmental Management Zone however; therefore these provisions do not apply.

A4

- (a) *Clearing and conversion of native vegetation, and any change in natural ground level must not occur on any part of a site outside the designated building area; and*
- (b) *Rehabilitation must use vegetation of a type consistent with the native vegetation of the locality*

Clearance of vegetation has occurred under the previously issued permit. The DP&EMP identifies that no vegetation community listed under Schedule 3A of the *Tasmanian Nature Conservation Act 2002* or the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* occurs within the study area.⁸

Rehabilitation commitments have been included in the DPEMP, including revegetation with native vegetation.

P4

Clearing and conversion of native vegetation, and any change in natural ground level -

- (a) *must be consistent with the objective for any conservation management regulation or reserve management plan applying for the land; and*
 - (b) *must -*
 - (i) *retained sufficient vegetation to maintain an intact tree canopy and provide screening to cleared and converted areas;*
 - (ii) *minimise impact on the visual qualities of a shoreline, skyline, ridge and other prominent landform feature;*
 - (iii) *minimise exposure to view from a road, public place, or settlement area; or*
 - (c) *must -*
 - (i) *provide an overriding community benefit; or*
 - (ii) *be required by an exceptional circumstance*
-

⁸ Ibid P 95

4.5 DEVELOPMENT STANDARDS - RURAL RESOURCE ZONE

26.4.2 LOCATION AND CONFIGURATION OF DEVELOPMENT

Objective: *The location and configuration of development is to provide a reasonable consistency between sites for setback from a boundary, height of buildings, and location within the landscape*

SCHEME REQUIREMENT	DEVELOPMENT RESPONSE
<p>A1 <i>A building or a utility structure, other than a crop protection structure for an agricultural use, must be setback -</i></p> <ul style="list-style-type: none"> <i>(a) not less than 20.0m from the frontage; or</i> <i>(a) if the development is for sensitive use on land that adjoins a road specified in the Table to this Clause, not less than the setback specified from that road;</i> <i>(a) not less than 10.0m from each side boundary; and</i> <i>(a) not less than 10.0m from the rear boundary; or</i> <i>(a) in accordance with any applicable building area shown on a sealed plan</i> 	<p>Buildings proposed as part of the support infrastructure will be set back approximately 300m from the nearest boundary.</p>
<p>A2 <i>Building height must be not be more than 8.5m</i></p> <p>P2 <i>Building height must -</i></p> <ul style="list-style-type: none"> <i>(a) minimise likelihood for overshadowing of a habitable room or a required minimum area of private open space in any adjacent dwelling;</i> <i>(b) minimise apparent scale, bulk, massing and proportion in relation to any adjacent building;</i> <i>(c) be consistent with the streetscape and rural landscape;</i> <i>(d) respond to the effect of the slope and orientation of the site; and</i> <i>(e) take into account the effect and durability of screening other than vegetation to attenuate impact</i> 	<p>Proposed mine infrastructure includes plant and buildings which may exceed 8.5m, and located within the Rural Resources Zone.</p> <p>The concentrator plant (as outlined in Appendix C of the DPEMP) rises to RL 17 (total height as defined by the planning scheme would be dependent on finished ground level at construction, relative to natural ground level).</p> <p>There are no adjacent habitable buildings, therefore no risk of overshadowing. The scale and bulk of the proposed structures are proportionate to the nature and scale of works, and necessary for engineering and logistical purposes, and have been located on the site to maximise efficiency and minimise visibility.</p> <p>A landscape and viewshed analysis undertaken within the DPEMP identifies that the mine infrastructure (plant and pits) have no significant visibility from Rebecca and Temma Roads⁹.</p>

⁹ Ibid P181

4.6 CODES

4.6.1 BUSHFIRE PRONE AREAS CODE

The Code applies to hazardous uses, which is defined by the scheme as:

Uses where;

- (a) *the amount of stored hazardous chemicals on a site exceeds the manifest quantity as specified in the Work Health and Safety Regulations 2012; or*
- (b) *where explosives are stored on a site and where classified as an explosives location or large explosives location as specified in the Explosives Act 2012.*

26.4.2 STANDARDS FOR HAZARDOUS USES

Objective: *Only in exceptional circumstances should hazardous uses be located on land which is within a bushfire-prone area. If a hazardous use is proposed to be located on land which is in a bushfire-prone area, bushfire protection measures must reflect the risk arising from the bushfire-prone vegetation and take into consideration the characteristics, nature and scale of the use to:*

- (a) *prevent the hazardous use from contributing to the spread or intensification of bushfire;*
- (b) *limit the potential for bushfire to be ignited on the site;*
- (c) *prevent exposure of people and the environment to the hazardous chemicals, explosives or emissions as a consequence of bushfire; and*
- (d) *reduce the risk to firefighters.*

SCHEME REQUIREMENT	DEVELOPMENT RESPONSE
<p>A1 <i>No acceptable solution</i></p> <p>P1 <i>Where a hazardous use is proposed to be located in a bushfire-prone area it must be demonstrated that:</i></p> <ul style="list-style-type: none"> (a) <i>there is an overriding benefit to the community;</i> (b) <i>there is no suitable alternative lower-risk site; and</i> (c) <i>the bushfire risk can be managed to an acceptable level having regard to any advice from the TFS.</i> 	<p>The proposed mine will provide significant economic and social benefits at a local and regional scale, with economic modelling estimating that at full operating capacity the project would employ 75 full time employees, and result in a business turnover of approximately \$30 million per annum.</p> <p>The site is specific to the availability of the resource to be mined. Within the context of this code, an alternative lower risk site would be one with lower bushfire risk, which is unlikely to be found given the location of mineral resources in remove and vegetated areas.</p> <p>Notwithstanding this, the bushfire risk can and will be managed through conditions specified by the EPA and MRT in relation to the safe handling and storage of hazardous materials associated with mining operations.</p>
<p>A2.1 <i>A bushfire hazard management plan that contains appropriate bushfire protection measures that:</i></p> <ul style="list-style-type: none"> (a) <i>addresses the characteristic, nature and scale of the hazardous use;</i> (b) <i>addresses the nature and extent of the surrounding bushfire-prone</i> 	<p>The hazardous materials which will be stored and used within the operation of the mine site include fuels and lubricants required for the running and maintenance of machinery and vehicles.</p> <p>A 10,000 L (approx) diesel above ground storage tank, contained within a bunded area, as per Australian Standard.</p>

<p>vegetation;</p> <p>(c) that takes into consideration;</p> <p>(i) exposure to hazardous chemicals;</p> <p>(ii) ignition potential from the site; and</p> <p>(iii) flammable material contributing to the intensification of a fire; and</p> <p>(d) is certified by the TFS or an accredited person.</p> <p>A2.2</p> <p>An emergency plan which:</p> <p>(a) is consistent with TFS Bushfire Emergency Planning Guidelines; and</p> <p>(b) complies with AS 3745-2010 Planning for emergencies in facilities; and</p> <p>(c) if applicable, complies with AS 4083-2010 Planning for emergencies - Health care facilities; and</p> <p>(d) is approved by TFS.</p> <p>P2</p> <p>No Performance Criteria</p>	<p>The tank would be located with a minimum 100m cleared area to the nearest vegetation, with firefighting equipment accessible nearby.</p> <p>Other flammable materials stored on site include lubricating oils and greases. These will be stored in a steel container, with a minimum 100m cleared area.</p> <p>A detailed Bushfire Hazard Management Plan and Emergency Plan will be prepared in accordance with the provisions of this code, and any requirements of the EPA and MRT, as part of the DPEMP, and prior to any further works.</p>
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4.6.2 CLEARING AND CONVERSION OF VEGETATION CODE

This code applies to the clearance and conversion of vegetation for extractive industry.

Clearing and conversion of vegetation is defined as:

a deliberate process to remove native vegetation from all or part of a site so as to -

- (a) permanently leave all or part of the site in an un-vegetated state;
- (b) permanently replace native vegetation with a building or group of buildings and associated development;
- (c) permanently replace native vegetation with exotic vegetation

Previously cleared and converted land is defined as:

- (a) land that did not contain a native forest or native non-forest vegetation community for a consecutive period of not less than 5 years prior to the effective date; or
- (b) land that has been cleared and converted in accordance with -
 - (i) a permit granted under the Land Use Planning and Approvals Act 1993; or
 - (ii) a forest practices plan certified under the Forest Practices Act 1985

Clause E3.4.1 allows for exemption from this Code if the clearance of vegetation is:

Development is exempt if the clearing of vegetation is:

- (a) on previously cleared land; or
- (b) in accordance with a reserve management plan;

- (c) for level 2 activities or matters called in for assessment by the Board of the Environment Protection Authority, in accordance with the provisions of the Environmental Management and Pollution Control Act 1994;
- (d) in the Port and Marine zone; or
- (e) clearing within a road reserve.

Vegetation clearance occurred on the site between 2013 and 2014, under the planning permit as issued, and therefore is to a large extent defined as previously cleared. Notwithstanding this, the application is classified as a level 2 activity under EMPCA, and all vegetation clearance and rehabilitation forms part of the DPEMP. The proposal is therefore not subject to this code.

4.6.3 CHANGE IN GROUND LEVEL CODE

Development is exempt from this code if for extractive industry. The proposal is therefore not subject to this code.

4.6.4 HAZARD MANAGEMENT CODE

This code applies to land exposed to risk from coastal inundation, coastal erosion and recession, potential contamination as a result of previous use, flooding or landslide. Parts of the site are subject to low level landslide risk as indicated on the Landslide Hazard Map.

E6.4.4 Development is exempt under this Code if -

- (d) a new building and an extension to a building on land located in a Low Landslide Hazard Area shown on the planning scheme map;

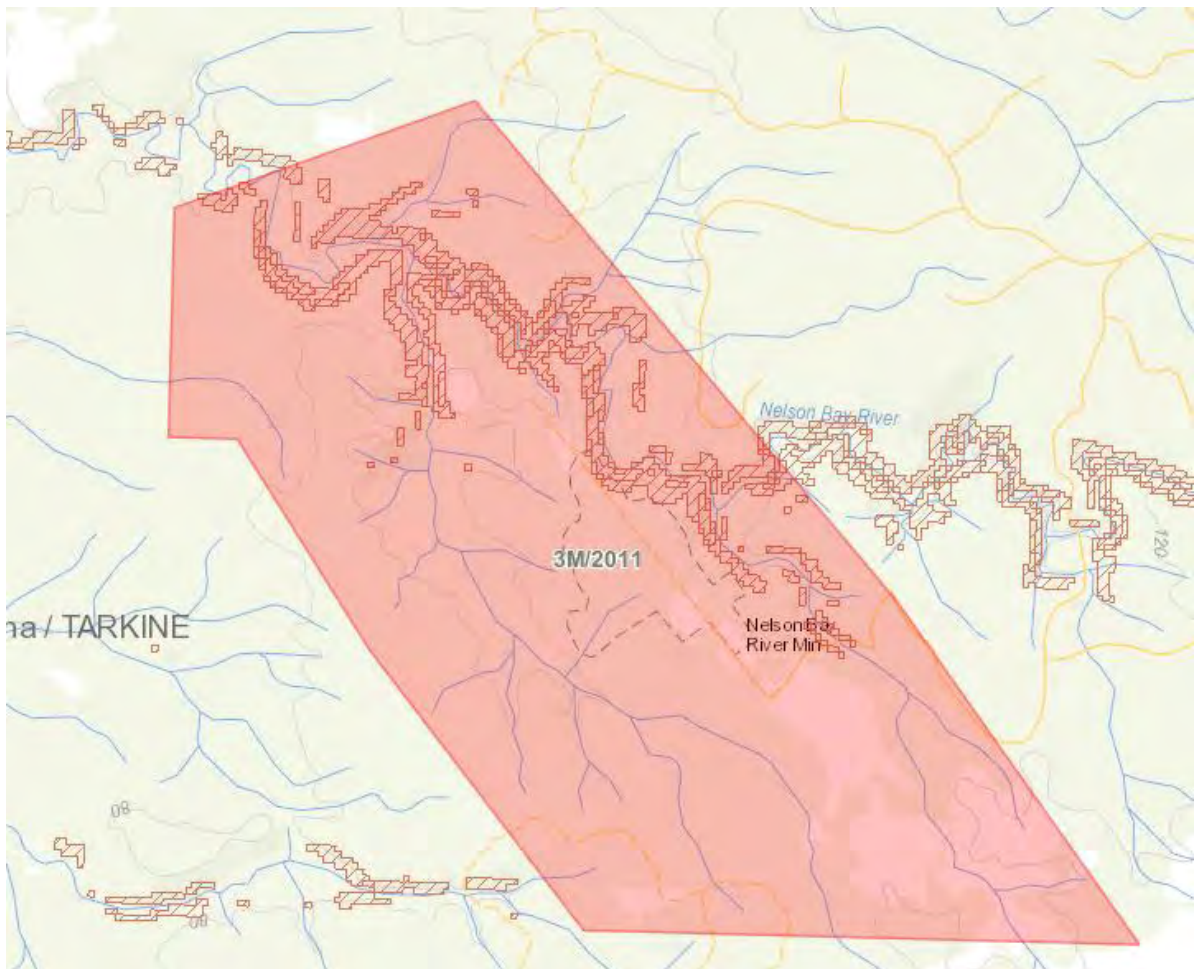


Figure 5: Occurrence of landslip zone (source: the LIST)

4.6.5 TRAFFIC GENERATING USE AND PARKING CODE

Pursuant to this code, the requirement for parking provision for Extractive Industry is unspecified. Spaces must be provided to service the likely workforce and attendance on the land, and minimum loading requirements are for one articulated truck space. Adequate provision has been made for parking and circulation, as outlined in the attached DPEMP.

4.6.6 WATER AND WATERWAY CODE

This code applies to the use and development of land within 30m of the bank of a watercourse. With the exception of the tailings dam, all other works are clear of the Waterway and Coastal Protection Code.



Shree Minerals Nelson Bay River site layout - approximate only, subject to detail survey and design. 30m buffer zones shown for East and West Creeks and Nelson Bay River. Map rotated 38 degrees relative to MGA94 Z55. Scale 1:20,000.

Figure 6 Works relative to 30m watercourse setback

SCHEME REQUIREMENT	DEVELOPMENT RESPONSE
<p>A1 <i>There is no acceptable solution</i></p> <p>P1 <i>Development must -</i></p> <p>(a) <i>minimise risk to the function and values of a water body watercourse or wetland, including for -</i></p> <ul style="list-style-type: none"> (i) <i>hydraulic performance;</i> (ii) <i>economic value;</i> (iv) <i>disturbance and change in natural ground level;</i> (vi) <i>public access and use;</i> (vii) <i>aesthetic or scenic quality;</i> (viii) <i>water quality management arrangements for stormwater and sewage disposal;</i> (ix) <i>modification of a natural drainage channel;</i> (x) <i>biodiversity and ecological function;</i> (xi) <i>level of likely risk from exposure to natural hazards of flooding and inundation; and</i> (xii) <i>community risk and public safety; and</i> <p>(b) <i>be consistent with any advice or decision of a relevant entity administering or enforcing compliance with an applicable protection and conservation regulation for-</i></p> <ul style="list-style-type: none"> (i) <i>impact of the development on the objectives and outcomes for protection of the water body, watercourse or wetland; and</i> (ii) <i>any condition or requirement for protection of the water body, water course or wetland</i> 	<p>The statutory entity responsible for the protection, conservation and management of the Arthur Pieman Conservation Area, which overlaps a portion of the site, is the state Department of Parks and Wildlife, in applying the Arthur Pieman Conservation Area Management Plan. The management plan, as outlined above, defers to the Quarry Code of Practice and the provisions of EMPCA, which are being administered by the EPA through the assessment of the DPEMP.</p> <p>The specific prescriptions for mining activities contained in the Arthur-Pieman Conservation Area Management Plan are addressed and achieved through the commitments outlined in the accompanying DPEMP .</p> <p>All development must occur in a manner that is not consistent with the conditions of approval of the EPA.</p>

5. CONCLUSION

The proposed application has been submitted as part of a broader application process undertaken by the EPA. The EPA will issue guidelines in relation to the final DPEMP which will dictate the environmental conditions of use and development.

In relation to the provisions of the planning scheme, the proposal and accompanying DPEMP demonstrate a high degree of compliance with the Circular Head Interim Planning Scheme 2013.

From: Parnell, Jennifer (StateGrowth)
[<mailto:Jennifer.Parnell@stategrowth.tas.gov.au>] **Sent:** Monday, 19
September 2016 10:28 AM **To:** michael.leonard@landroe.com.au **Cc:**
Townsend, Peta (StateGrowth)
<Peta.Townsend@stategrowth.tas.gov.au>; Stewart, Brett
(StateGrowth) <Brett.Stewart@stategrowth.tas.gov.au> **Subject:** FW:
Shree Minerals

Hi Michael,

As the lease remains in force, section 52(1A) of the LUPAA would apply:

(1A) Subsection (1) does not apply to an application for a permit to carry out mining operations, within the meaning of the [Mineral Resources Development Act 1995](#), if a mining lease, or a production licence, has been issued under that Act which authorises those operations.

The exception would be if the permit also regulates activities outside of the lease area e.g. access roads, in which case the land manager may need to provide consent. We are seeing this happen more and more of late. Happy to discuss if needed.

Kind regards

Jennifer Parnell | Manager Scientific Services
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2012 DPEMP DOCS on separate CD to accompany DA

