

ANNUAL REPORT TO FEDERAL GOVERNMENT PERMIT EPBC 2011/5846

1st November 2015 – 31st October 2016

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Introduction

This Annual Report is submitted in fulfilment of Condition 25 of Shree Minerals Limited's permit EPBC 2011/5846.

Clearing and preliminary construction works at the Nelson Bay River site began on 29th April 2013. However work was halted in early May due to legal action between an environmental group and the Commonwealth Government regarding the approval of the mine. During the period of the legal action (May to July) no work was permitted on-site.

On 29th July 2013, permit EPBC 2011/5846 was issued, and site clearing works recommenced on 12th August 2013. Notification to the department (DSEWPaC) was done on 16th August 2013 for commencement on 12th August 2013 to comply with Condition 22 (EPBC 2011/5846).

Ore production commenced in November 2013. Iron Ore sales commenced in January 2014. The company notes with regret the impact of the inordinate delayed approvals moving the project start-up by approximately two years into the bottom of the commodity price cycle, the project has had to be suspended within 6 months of start up & put under care & maintenance. Consequently, since June 2014, no mining operations are being carried out and the project is operating under a care and Maintenance Plan approved by the Tasmanian EPA.

Consequent to bottoming out of Iron Ore prices this year , the company took steps to crush & ship out some of the Iron Ore from the inventory at site , while the operations continue on care & Maintenance. This was communicated to the Department vide email 28th April 2016 to post.approvals@environment.gov.au.

The mining & production figures are as per Table 1.

Table 1

		Year ending 30/06/2014	Year ending 30/06/2015	Year ending 30/06/2016	Period 1/7/2016 to 31/10/2016
Waste Stripping	BCM	636,347	0	0	0
Ore Mining	Tonnes	224,571	0	0	0
Ore Crushing & screening	Tonnes	153,332	0	20,059	23,211
Sales	Tonnes	130,899	0	0	50,696

Shree intend to recommence operations when the iron ore price is economic. The NBR project is being developed in a phased philosophy with the initial plan to mine the goethitic-hematite resource to export Iron Ore over the first couple of years at low capital expenditure to be followed by the magnetite resource to produce Dense Media Magnetite (DMM) used for Coal Washery. Studies to-

date have reflected a stable market & pricing for DMM as an industrial mineral in Eastern Seaboard of Australia with domestic production not being adequate to meet demand resorting to imports , thereby conforming the long-term value potential of the NBR project.

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 cycle which would underwrite the capital for the magnetite phase to produce dense media magnetite (DMM) used for the coal washery industry .

This annual report covers the period of 12 months ending 31st October 2016.

Compliance With Conditions

Summary of induction training and awareness activity undertaken or proposed

(Condition 25(a))

Construction phase inductions were held at Riverbend, Smithton on 8th April 2013. Twenty-nine people attended including contractors and Shree Minerals staff. Several individual inductions were also undertaken.

Mining phase inductions were held on Thursday 17th October and Friday 18th October 2013 at the Circular Head Community & Recreation Centre with over 80 people in attendance over four sessions. These sessions consisted of both a mine safety induction and environmental induction. The environmental induction includes a section on identification and awareness of 13 EPBC listed species, as well as general education of the various permits and site processes.

Routine induction sessions are held on a regular basis for new staff, contractors and visitors, with additional sessions scheduled where necessary.

A Visitor Induction was held at Tall Timbers on Thursday 31st October 2013 for the mine opening ceremony, with 33 inductees. Visitor inductions are valid for a period of one month. Visitors to site must be accompanied at all times by a fully inducted employee or contractor, and are not permitted to perform any works (other than office based work) nor operate any vehicles or machinery.

The mine has been under Care & Maintenance since June 2014.

EPBC Species Register

(Condition 25(b), Condition 12)

A copy of the EPBC Species Register is located in Appendix A. GPS coordinates of EPBC species sighted on the mine lease may not be included for public release for site security reasons (including unauthorised access) and/or where recommended by flora and fauna consultants (e.g. for locations of Giant Freshwater Crayfish).

The EPBC Register is also available on the Shree company website, www.shreeminerals.com.

Details of Progress Against Actions

Condition 25(c) of permit EPBC 2011/5846 requires the annual compliance report to include "details of progress against actions (including documentary evidence of payments) required under Conditions 13, 15, 16 and, if required, 20."

Preparation of a Tasmanian Devil Monitoring Strategy

(Condition 13)

Tasmanian Devil Monitoring Strategy

A Tasmanian Devil Monitoring Strategy (TDMS) was prepared for Shree Minerals Ltd in January 2013 by consultants Pitt & Sherry following consultation with a recognised Tasmanian devil and wildlife expert, and the Save the Tasmanian Devil Program (STDP). The Tasmanian Devil Monitoring Strategy (Version 1) was approved by the Minister on 21st March 2013. Following legal action and issue of permit EPBC 2011/5846 in July 2013, the TDMS was revised and version 3 was subsequently approved on 9th August 2013. A copy of the plan is published on the company's website to comply with Condition 30 (EPBC 2011/5846).

Monitoring Program

A number of infrared monitoring cameras have been placed in the mining lease area in order to monitor for Devil Facial Tumour Disease (DFTD). Further cameras have been placed to monitor denning/lay-up opportunities within the Fauna Habitat Protection Zone (FHPZ) once clearing activities are substantially complete. Note that clearing will be undertaken progressively, with only those areas immediately required for production being cleared (as consistent with Best Practice Environmental Management).

Under the TDMS, cameras are scheduled to be checked weekly and data downloaded fortnightly. However this schedule may be disrupted by inclement weather conditions and site access track conditions. All cameras have been set up such that they have a battery life of over two months, and either 4GB or 8GB of storage, to ensure that no data is lost in the event of a site becoming temporarily inaccessible.

The 154ha FHPZ has been established as per the TDMS.

The TDMS includes measures for the detection and prompt reporting of DFTD. A Tasmanian devil expert has been engaged to review camera images and provide monthly advice in relation to any DFTD visible on infrared camera images. This information is also provided to the Save the Tasmanian Devil Program.

Findings

There have been no documented (or suspected) signs of DFTD on the site during this period.

Changes to the monitoring program

Under Section 2.5 of the TDMS, it is stated that;

"All information will be added to the EPBC species register (established under condition 12 of the EPBC approval).

Shree Minerals will also ensure that all data from this monitoring strategy is entered onto the Natural Values Atlas"

While sightings recorded by the cameras are being added to the EPBC Species Register, the locations of these sightings are not as this presents a safety and security risk to the company, particularly in relation to unauthorised access of the mine lease. Shree Minerals had a number of cameras stolen from the mine lease area, and this theft was subsequently reported to the Police.

Save the Tasmanian Devil Program (STDP) contribution

(Condition 15)

Under Condition 15 (EPBC 2011/5846), Shree Minerals must contribute \$350 000 to the Save the Tasmanian Devil Program (STDP), of which 10% is to be paid within 30th October 2014. Shree Minerals had made contact with the STDP in October 2014 & following receipt of invoice & payment instructions, the same has been paid.

Contribution to orchid baseline research

(Condition 16)

Condition 16 (EPBC 2011/5846) states that:

"The person taking the action must fund and implement their 'Proposed contribution to orchid baseline research', as provided with the finalised environmental impact statement prepared in relation to the action."

An orchid specialist has been engaged in 2014 to carry out this work . This work was commenced & payments made as milestones are completed as per agreed schedule . In 2016 , the work has been suspended during the period of care & maintenance of the mine & will be resumed when mining recommences.

Mining Lease security deposit

(Condition 20)

Security deposits have been made as part of the Schedule 3 provisions of Mining Lease 3M/2011

Compliance

Emergency Travel

Condition 8 (EPBC 2011/5846) allows for emergency travel to site in authorised vehicles outside of daylight hours. There has been no emergency travel undertaken during the period.

Worker Knowledge

Condition 2 (EPBC 2011/5846) requires a monthly meeting to maintain worker knowledge about the importance of avoiding & minimising impacts on EPBC species and of recording and reporting observations of EPBC species. Monthly toolbox templates created & rolled out. The mine has been under Care & Maintenance since June 2014.

Pre Clearance Surveys

Condition 4 (EPBC 2011/5846) requires targeted pre-clearance surveys for EPBC species by suitably qualified or experienced expert. The same was done for both flora & fauna .

Bus service

Condition 5 (EPBC 2011/5846) requires a provision for each shift a bus service to transport staff, contractors and visitors between the mine site and the town of Smithton. The same was provided.

As per Condition 6 (EPBC 2011/5846) measures were implemented to ensure that personnel staff, contuse the bus service except for the specified written exceptions agreed to by the department. A number of vehicles are exempted from this condition, with a register of those vehicles maintained

on site. All vehicles greater than 4.5 GVT are considered automatically exempt in accordance with written advice from the Department (letter dated 21st November 2013) .

The mine has been under Care & Maintenance since June 2014.

Roads within mine site to minimise potential for EPBC species roadkill

All roads within the mine site have been designed , built and maintained to comply with Condition 7 (EPBC 2011/5846) .

Speed Limit

Clearly signposted speed limits were installed on the road from the mine site to the intersection of Wuthering Heights Road and Rebecca Roads to comply with Condition 9 (EPBC 2011/5846) . Highlighted in inductions, including question in induction assessments.

Inspection of roads

Procedures were implemented for daily visual inspection of all roads from within the mine site to the intersection of Wuthering Heights Road and Rebecca Roads to comply with Condition 10 (EPBC 2011/5846) and all carcasses removed to at least 40 metres from the edge of the road.

The mine has been under Care & Maintenance since June 2014.

Road kill recording

Procedures were implemented for recording EPBC species roadkill to comply with Condition 11 (EPBC 2011/5846).

Management Documents

Management documents refers to all plans, strategies, and reports developed in fulfilment of EPBC 2011/5846 conditions. These are:

- EPBC Species Management Plan (Condition 3)
- Tasmanian Devil Monitoring Strategy (Condition 13)
- Mine Closure Plan (Condition 17)
- Decommissioning and Rehabilitation Plan (Condition 18)

Compliance with the TDMS is detailed on page 3 and the other management documents are detailed below.

EPBC Species Management Plan

EPBC Species Management Plan (Version 1) was approved by the Minister¹ on 21st March 2013. It was subsequently revised on 31st July and 6th August 2013, in light of the new permit EPBC 2011/5846. The current plan is EPBC Management Plan (Version 3), which was approved on 9th August 2013. A copy of the plan is published on the company's website to comply with Condition 30 (EPBC 2011/5846).

Prescribed management measures included in the plan relate to;

- Vegetation clearance
- Food waste
- Hazardous substances

¹ 'the Minister' is the Australian Government minister administering the EPBC Act

- Open Pits and Excavation
- Protocols for dealing with injured native fauna
- Protocols for recording any sightings of EPBC species

Vegetation clearance

Clearance has been limited to those areas required for the DSO Pit and its associated roadways, infrastructure, waste rock dumps and stockpiles. Construction drawings were provided to contractors, and clearing activities were conducted in accordance with *Environment Protection Guideline 3 – Clearing* (EPG 3, Shree Minerals Ltd). This included pre-clearance flora and fauna surveys carried out by relevant experts prior to each stage of clearing to ensure there would be no disturbance of EPBC species.

Areas to be cleared were delineated with flagging tape; for steeper areas 'Danger' tape was utilised. No vegetation clearance or disturbance occurred in the Fauna Habitat Protection Zone (FHPZ).

Food Waste

Management of food waste onsite is in accordance with *Environment Protection Guideline 5 – Food Waste* (EPG 5, Shree Minerals Ltd). Garbage bins have been provided in the crib room and office buildings. Currently all mine waste is removed from the site by Shree Minerals and their contractors on a regular basis. There is a zero tolerance procedure for littering, and this along with details of disciplinary proceedings and general waste management protocols are included in the site induction.

Hazardous Substances

A diesel holding tank has been provided by Caltas for refuelling trucks. This is a stand-alone self-bunded tank with a capacity of 30 000 litres. Two diesel generators are located onsite to power the office areas and the Caltas fuel tank. These are both located on the cleared office/workshop area pad. The Caltas fuel tank & diesel generators have since been demobilised offsite during the care & maintenance period .

No explosive materials are currently kept on the site. On days when a blast crew is working, an explosives truck arrives at and leaves the site on the same day.

As there is no processing plant facility required in the early stages of mining, there are no other hazardous substances currently kept onsite in bulk form.

Open Pits and Excavation

All excavations during the construction phase were carried out in accordance with the guidelines contained in the Construction Environmental Management Plan (CEMP, 2013). Diversion drains were established and two shallow (≤2m) borrow pits were excavated. Excavation of the ore pit has also now commenced. All pits are accessible by vehicle, thus allowing fauna to escape in the unlikely event they enter the excavation.

All excavation at the site is carried out in accordance with *Environment Protection Guideline 16 – Excavation* (EPG 16, Shree Minerals Ltd)

Mine lease signage has been placed around the lease in accessible locations, including at the mine entrance. Detailed mine plans are produced and updated daily, and the company has procured the regular services of a surveying company for the purpose of delineating pit and stockpile extents. Current pit and waste rock dump designs are located between East and West Creeks, which provide physical barriers preventing the operation from encroaching on the mining lease boundary.

Mine Plans & Management plans are updated periodically to update mine plan estimates & modelling progressively & appropriate approvals taken thereof. Further drilling and modelling in 2013, subsequent to the original DPEMP (Development Proposal & Environment Management Plan) & EIS (Environment Impact Statement) submitted for public display in 2011 has provided a better understanding of the DSO resource, which is now known to be larger than originally thought. This will support a larger and deeper DSO pit, which in turn has increased the overall ore & waste

volumes to be excavated. Further, the modelling in 2013 also took a precautionary measure to minimise risk of potential acid forming waste rock (PAF) segregation from other non acid forming waste rock (NAF) by including areas which are only partially mineralised with pyrite but represent all the potential PAF material.

These two factors (increased mining quantities and precautionary modelling of increased proportion of PAF waste) combined result 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%

For handling and temporarily storing Potentially Acid Forming Materials (PAF) the engineering design was developed for a specialised clay lined and bunded site close to the DSO pit . Upon completion of mining of the DSO phase, the PAF material is to be relocated back into the Southern DSO. Hence the Temporary Potentially Acid Forming Materials Separation and Verification Plan (TPAFM) was drafted and approved by the Tasmanian Environmental Protection Agency (EPA) in October 2013. This new plan and approved variation meets the requirements of the approved in the Environment Protection Guideline numbers 16(7) and 16(8) of the EPBC Species management plan Version 3. The total area for vegetation clearing would also not increase beyond the final life of mine construction zones and consequently meets the requirements of the approved in the Environment Protection Guideline numbers 3(1) of the EPBC Species management plan Version 3. Additionally, the new design ensures that all outflows are collected and treated (if required) before release into the general environment as per requirements of the approved in the Environment Protection Guideline numbers 16(6) of the EPBC Species management plan Version 3.

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 and required actions to bring PAF waste rock management at the mine site into compliance with the requirements of PCE 8568, and management of the PAF waste rock while it is located outside the Pit. Our understanding is that the Court case (to which the Company was not a party) & decision thereof was on procedural legality relating to decision making of permit amendment rather than any environmental impact or issue.

Shree in consultation with Tasmanian Government authorities has investigated various options including preparing a management plan for relocating the current PAF dump to within southern end of Southern DSO (SDSO) pit , making a new development application from the Circular Head Council for a Permit to construct a PAF Waste Rock Dump (WRD) within the SDSO pit boundaries and including the previously permitted WRD. In March 2016, the EPA advised that as the proposal is considered an integral aspect of the mine , Shree should apply for a new permit for the mine. Shree has after discussions with Tasmanian Government authorities , during the year (October 2016)

submitted an application to Circular Head Council such that the new permit when granted, will replace the existing permit. The application is attached as Appendix B to this Report . The major reasons for a new permit is:

- I. because the SDSO pit is only 25% complete, there is insufficient space for the PAF WRD to be stored below surface and ultimate flood level of the pit; and
- II. Moving the PAF WRD in the pit below ultimate flood level of the pit , prior to completion of mining of the pit , may result in contravention of the Mineral Resources Development Act .
- 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 etc will meet Best Practice Environmental Management (BEMP); and

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 little choice but to make a new development application for precisely the same approved development and use, but which specifies a different methodology for disposal of the PAF rock.

The project will be located as described in the EIS (Pitt and Sherry, 2011) and within the mining lease.

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 & all the vegetation in the lease area has been essentially burnt away.

The proposed surface PAF dumps also provide flexibility in quantum of PAF waste rock being excavated as estimates are updated with more knowledge due to mining as well as exploration success etc leading to increase in the life of the mine.

This project, will not require approval under the Environment Protection and Biodiversity Conservation Act 1999, as it is consistent with the existing EPBC approval. There is no potential to significantly impact upon matters of national environmental significance or upon Commonwealth land, as it is within the boundaries of the Mining Lease and previously approved area.

Protocols for Dealing with Injured Native Fauna

Trained in animal handling procedures at a workshop at Trowunna Wildlife Park were done.

There have been no injured native fauna on the mine site.

Protocols for Recording any Sightings of EPBC Species

Shree Minerals has developed an Environmental Induction, which is given in conjunction with the Site Safety Induction to all contractors, staff and visitors to the site. This includes images and information relating to 13 EPBC listed species, provision of glove-box guides and EPBC Species Sightings Forms as per the EPBC Species Management Plan.

Mine Closure Plan

A Mine Closure Plan with approximate rehabilitation costs was developed in November 2011 by Pitt & Sherry as part of the *Development Proposal and Environmental Management Plan* (DPEMP). A

copy of the plan is published on the company's website to comply with Condition 30 (EPBC 2011/5846) .

A review of this Closure Plan (in draft) with updated site information, current disturbed footprint areas, and revised costs has been lodged with EPA .

Decommissioning and Rehabilitation Plan

A Decommissioning and Rehabilitation Plan is required to be prepared "within 30 days of any decision that is likely to give rise to the permanent cessation of the activity" (Permit Part B 8977/1). Therefore a DRP is not required at this stage.

Incidences of non-compliance

Condition 25(f) requires the inclusion of details of any incidences of non-compliance with the EPBC 2011/5846 permit conditions, along with any associated remedial action undertaken, underway or proposed.

There have been no incidences of non-compliance during this period.

Appendix A

EPBC Species Register

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Application for New Tasmanian Planning Permit