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TRITTON OPERATIONS, NYNGAN NSW

Tritton Resources Pty Ltd

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1. Introduction

1.1. Background

Tritton operations comprises three mining operations and several exploration tenements in the Nyngan area of NSW. The mining operations and exploration tenements subject to audit are detailed in Table 1. The leases and licences are all held by Tritton Resources Pty Ltd.

Table 1 Details of mining leases and exploration licences subject to audit

LEASE	OPERATION	GRANT	EXPIRY
ML1544	Tritton Copper Mine	22 December 2003	21 December 2024
ML1280	Murrawombie Copper Mine	6 August 1992	5 August 2034
ML1383	North East Copper Mine	13 January 1996	13 January 2038
EL4962	Galaxy and Marlin Prospects	19 March 1996	19 March 2022
EL6126	Kurrajong Prospect	15 September 2003	14 September 2021

Both the Tritton and Murrawombie Mines are operational with mining being undertaken by underground methods. The North East Mine is in care and maintenance. All ore from both Tritton and Murrawombie is processed at the Tritton Mine processing plant from where tailings are deposited in the Tritton tailings storage facility (TSF).

Regional exploration has been undertaken on the surrounding exploration tenements in the past two years. These exploration programs have involved the drilling of 12 drill holes on privately owned lands.

As part of the compliance audit program, an audit of the mining operations and exploration activities associated with the Tritton operations was undertaken between 21 and 23 May 2019.

1.2. Audit objectives

The objectives of the audit were to:

- undertake a compliance audit of the Tritton Copper Mine, Murrawombie Copper Mine, North East Copper Mine and regional exploration activities, operated by Tritton Resources Limited, against the requirements of the *Mining Act 1992* and the conditions of the mining leases and exploration licences issued pursuant to that Act
- assess the operational performance of the mining and exploration operations and the ability of the titleholder and/or operator to implement management systems and controls to provide for sustainable management of the operations.

1.3. Audit scope

The scope of the audit included:

- the mining and rehabilitation activities associated with the Tritton Resources mining leases including:
 - Tritton Copper Mine (ML1544)
 - Murrawombie Copper Mine (ML1280)
 - North East Copper Mine (ML1383)
- a selection of exploration boreholes (as detailed in Table 2) within EL4962 and EL6126, particularly focussing on the rehabilitation of exploration drilling
- a review of documents and records pertaining to the mining and exploration activities
- the assessment of compliance for the period commencing 1 May 2017 and ending 14 May 2019.

Table 2 Exploration drill holes selected for inspection

EXPLORATION LICENCE	DRILL HOLE
EL4962	TGHRCD004
EL4962	TGHRCD005
EL6126	TKJD014
EL6126	TKJD017
EL6126	TKJD018
EL6126	TKJD020
EL6126	TKJD024

1.4. Audit criteria

The audit criteria against which compliance was assessed included:

- *Mining Act 1992*, specifically, Sections 5, 6, 23A, 30, 65, 140, 163C to 163E, 163G, 378D
- Mining Regulation 2016, specifically clauses 59 to 68
- conditions attached to ML1544 (granted 22 December 2003), ML1280 (granted 6 August 1992, renewed 17 July 2014), and ML1383 (granted 13 January 1996, renewed 16 October 2017)
- commitments made in Mining Operations Plan for the Tritton Copper Mine (ML1544), prepared by RW Corkery & Co. Pty Ltd, dated March 2016
- commitments made in Mining Operations Plan for the Murrawombie Copper Mine (ML1280), prepared by RW Corkery & Co. Pty Ltd, dated February 2016
- commitments made in Mining Operations Plan for the North East Copper Mine (ML1383), prepared by RW Corkery & Co. Pty Ltd, dated December 2017
- conditions attached to EL4962 (granted 19 March 1996 and last renewed 4 October 2017) and EL6126 (granted 15 September 2003 and last renewed 7 February 2017)

- Application to conduct exploration activities (ESF4) for 10 drill holes on EL4962 dated 26 February 2018 and associated approval dated 6 March 2018
- Application to conduct exploration activities (ESF4) for 4 drill holes on EL6126 dated 26 February 2018 and associated approval dated 6 March 2018
- Application to conduct exploration activities (ESF4) for 12 drill holes on EL6126 dated 15 June 2018 and associated approval dated 26 June 2018
- *Exploration code of practice: Environmental management* (Version 2, April 2017)
- *Exploration code of practice: Rehabilitation* (Version 2, April 2017)
- *Exploration code of practice: Community consultation* (Version 1.1, May 2016)
- *Exploration code of practice: Produced water management, storage and transfer* (Version 2, April 2017)
- *Exploration reporting: A guide for reporting on exploration and prospecting in New South Wales* (Version 2, March 2016)
- *ESG4: Guideline for preparing an environmental and rehabilitation compliance report for exploration* (Version 2.1 November 2016)

1.5. Publishing and disclosure of information

This audit report will be published on the NSW Resources Regulator's website consistent with Section 365 of the *Mining Act 1992*.

This audit report may be publicly disclosed consistent with the *Government Information (Public Access) Act 2009*.

2. Audit methods

The audit process involved the interview of site personnel, a review of documentation and samples of records provided by the titleholder and/or operator and a site inspection of the operations to determine the level of compliance of the operations and assess the status of the operational performance. The audit process and methodology are described in more detail below.

2.1. Opening meeting

The opening meeting was held onsite at the Tritton Copper Mine office on 21 May 2019.

The audit team was introduced and the scope of their responsibilities was conveyed to the auditees. The objectives and scope of the audit were outlined. The methods to be used by the team to conduct the audit were explained.

It was stated that the audit team would interview personnel, review documentation, examine records and conduct a site inspection to assess specific compliance requirements.

2.2. Site interviews and inspections

2.2.1. Data collection and verification

Where possible, documents and data collected during the audit process were reviewed on site. Several documents were unable to be reviewed on site and were provided after the site visit.

All information obtained during the audit process was verified by the audit team where possible. For example, statements made by site personnel were verified by viewing documentation and/or site inspections where possible. Where suitable verification could not be provided, this has been identified in the audit findings as not determined.

2.2.2. Site inspections

A site inspection was undertaken comprising the following elements of the mining operations:

- Tritton Tailings Storage Facility
- Tritton waste emplacements
- Murrawombie heap leach pads and associated infrastructure

- Murrawombie pit
- Murrawombie waste emplacement
- water pipeline spill area between Murrawombie Mine and North East Mine
- North East Mine – Larsens/Hartmans waste emplacement
- North Dam goat trap
- exploration drill holes:
 - TGHRC004 (EL4962) – rehabilitated
 - TGHRC005 (EL4962) – rehabilitated
 - TKJD017 (EL6126) – preliminary rehabilitation
 - TKJD024 (EL6126) – preliminary rehabilitation
 - TKJD008 (EL6126) – drilled 2013, sumps have subsided

Exploration borehole sites TKJD014, TKJD018, and TKJD020 were not inspected as planned because the sites had only preliminary rehabilitation completed in a manner similar to the three sites inspected in EL6216. Instead of inspecting the three sites from the 2018 drilling, an opportunity was taken to inspect the rehabilitation success of a hole drilled in 2013 that was near the other holes inspected.

2.3. Closing meeting

The closing meeting was held onsite at the Tritton Copper Mine office on 23 May 2019. The objectives of this meeting were to discuss any outstanding matters, present preliminary findings and outline the process for finalising the audit report.

2.4. Compliance assessment definitions

The reporting of results from the compliance audit was determined based on the definitions presented below in Table 3.

Table 3 Audit assessment categories

ASSESSMENT	CRITERIA
Compliance	Sufficient and appropriate evidence is available to demonstrate the particular requirement has been complied with.
Non-compliance	<p>Clear evidence has been collected to demonstrate the particular requirement has not been complied with. There are three subcategories of non-compliance reflecting the severity and level of risk associated with the non-compliance:</p> <p>NC1 – the absence of planning or implementation of a required operational element that has the potential to result in a significant risk</p> <p>NC2 – an isolated lapse or absence of control in the implementation of an operational element that is unlikely to result in a significant risk</p> <p>NC3 – an administrative or reporting non-compliance that does not have a direct environmental or safety significance</p> <p>Note: The identification of a non-compliance in this audit may or may not constitute a breach of, or an offence under, the <i>Mining Act 1992</i>. Non-compliances identified in this audit report may be further investigated by the NSW Resources Regulator and regulatory action may be undertaken.</p>
Observation of Concern	<p>Where an auditee may be compliant at the time of the audit but there are issues that exist that could result in the potential for future non-compliance if not addressed.</p> <p>Observation of concern was also used where an issue may not have particular compliance requirements, but which was not conducive to good management or best practice.</p>
Suggestion for improvement	Where changes in processes or activities inspected or evaluated at the time of the audit could deliver improvement in relation to risk minimisation, sustainable outcomes and management practices.
Not determined	<p>The necessary evidence has not been collected to enable an assessment of compliance to be made within the scope of the audit.</p> <p>Reasons why the audit team could not collect the required information include:</p> <ul style="list-style-type: none"> ■ insufficient information on the file relating to the period covered by the audit or insufficient evidence collected to reach a conclusion

ASSESSMENT	CRITERIA
	<ul style="list-style-type: none"> ■ the wording on the criteria (approval condition) meant that no evidence could be gathered, or it was too difficult to gather the evidence. <p>A 'Not determined' assessment was also made where the condition was outside of the scope of the audit.</p>
Not applicable	<p>The circumstances of the authorisation or titleholder have changed and were no longer relevant, e.g. no longer mining, mining equipment and plant has been removed, etc.</p> <p>An invoking element in the criteria was not activated within the scope of the audit.</p>

2.5. Reporting

Following completion of the site audit, the audit checklists were completed and audit notes were reviewed to compile a list of outstanding matters to be noted in the audit report. This report was prepared to provide an overview of the operational performance of the site in relation to the mining operations and exploration activities and identify any non-compliances or observations of concern noted by the auditors during the site inspections and interviews.

The draft audit findings were forwarded to Tritton for comment. Consideration was given to the representations made during the finalisation of the audit report as discussed in the audit findings.

3. Audit findings – mining operations

3.1. Mining operations plan

Mining operations plans (MOPs) are required for each mining operation in accordance with the conditions attached to each of the mining leases as follows:

- condition 2 of ML1544 (Tritton Copper Mine) – Mining, Rehabilitation, Environmental Management Process (MREMP) mining operations plan (MOP)
- condition 3 of ML1280 (Murrawombie Copper Mine) – mining operations plan and annual rehabilitation report
- condition 3 of ML1383 (North East Copper Mine) - mining operations plan and annual rehabilitation report

MOPs have been prepared and approved for each of the three Tritton Resources mining operations as listed in Table 4.

Table 4 Summary of MOP submission and approval details for each mining operation

MINING OPERATION	MOP SUBMISSION	MOP APPROVAL
Tritton Copper Mine ML1544	INW16/14252/DOI 4 April 2016	OUT16/16904/DOI 29 April 2016
Murrawombie Copper Mine ML1280	INW16/14294/DOI 4 April 2016	OUT16/16907/DOI 29 April 2016
North East Copper Mine ML1383	INW17/73495/DOI 4 December 2017	OUT17/48903/DOI 7 December 2017

Conditions 28 to 30 of ML1544 (Tritton Copper Mine) require the lease holder to prepare the following additional management plans that are required to form part of the MOP for the Tritton mining operations:

- condition 28 – Mine closure plan
- condition 29 – Waste rock characterisation and management plan

- condition 30 – Tailings management plan

The approved MOPs listed in Table 4 include these management plans.

Although required specifically by the conditions attached to ML1544, it was noted that Tritton had generally applied these plans to the Murrawombie and North East mining operations. Where relevant, the implementation of these management plans was reviewed during the audit during the assessment of the implementation of the approved MOPs.

As a general observation, it was noted that the approved MOPs did not contain very many risk controls. More detailed controls were included in the issue specific management plans (e.g. erosion and sediment control plan). It was also noted that there was no formal process for checking implementation of the MOP, and MOP commitments were not fully included in the compliance register. As a result, some inconsistencies were identified between what was in the MOP and the rehabilitation and environmental management activities on site. Examples are included in the following sections.

3.1.1. Waste rock characterisation and management plan

Tritton has prepared a *Waste rock characterisation and management plan: Tritton Mine (ML1544), Murrawombie Mine (ML1280) and North East Mine (ML1383)*, dated January 2016 that was considered to generally comply with the requirements of condition 29 of ML1544. The plan describes the waste rock production at each of the mining operations and the location of the waste rock emplacements (WRE) at each site. Inspection of each of the mining operations confirmed that waste rock was generally stored in the locations identified in the plan.

The plan identified that potential acid forming (PAF) material would either remain in situ, be placed underground into completed mining stopes, stored in the open cut pit void, placed onto and encapsulated with the heap leach pads, or be back loaded underground where possible.

In addition, Section 6.3 of the plan identified that waste rock brought to the surface with a high positive net acid generating potential would be deposited with tailings into the tailings storage facility (TSF) to reduce the risk of excessive acid generation in the WREs. The Tritton TSF was inspected during the audit and it was observed that there was no facility for placing PAF waste rock into the TSF. It was also noted that the operations and maintenance manual for the TSF did not include any provisions for the deposition of waste rock with the tailings. This may indicate that there were some inconsistencies between the various management plans that should be addressed.

Section 6.7 of the plan states that the mine's environmental personnel would sample the surface and batters of the WREs to ensure that the management controls were implemented and effective in managing waste rock produced by mining operations. Evidence in the form of certificates of analysis from the NATA accredited laboratory ALS and an Excel spreadsheet summarising the results of testing

from 2016 to 2019 was provided by Tritton to confirm that sampling was undertaken as required. It is recommended that the results of sampling required by the Waste rock management plan is reported in the AEMR to ensure transparency and demonstrate compliance with this requirement.

3.1.2. Tailings management plan

In accordance with the requirements of condition 30 of ML1544, Tritton has prepared *Tailings Dam 1 Operations and Maintenance Manual & DSC Emergency Action Plans, Tritton Mines*. The most recent version of this document is Revision 5, dated June 2018.

The operation of the Tritton TSF was subject to a review by the Regulator and other agencies during the *Compliance Priority Project: Tailings Management* undertaken by the Regulator in late 2018. In view of this, further assessment of the operation of the TSF was not included in the audit scope.

3.1.3. Water management plan

Section 3.2 of each MOP references a series of management plans, including the *Water management plan 2016*, that provides further details on management measures to be implemented to control identified environmental risks.

Generally, evidence was available in the form of monitoring reports to confirm implementation of the water quality monitoring program. Results were noted to be reported in the AEMR for each mine. Tritton provided a copy of Safe Work Instruction TRL-ENV-SWI-009 Groundwater sampling dated 6 April 2016 that identifies the bores to be sampled and provides a sampling procedure that was noted to be generally consistent with Australian Standard AS/NZS 5667.1:1998, although the Standard is not specifically referenced.

An investigation into the groundwater mounding at the TSF has been undertaken and reported. Tritton has proposed an additional three piezometers to be installed in the upstream lift of the dam walls to monitor the groundwater situation and allow for further analysis to be undertaken.

3.1.4. Erosion and sediment control plan

An *Erosion and sediment control plan – Tritton Mine* (ESCP) was noted to have been prepared for the Tritton operations, as an appendix to the *Water management plan 2016* that forms part of the approved MOP. The most recent version of this plan was Revision 1 dated July 2015. It was observed by the auditors that the provisions of this plan were not always implemented.

For example, topsoil stripping and stockpiling was not undertaken in accordance with the best management practices identified on page 4 of the plan that states that '*All stockpiles must be*

constructed in accordance with SD4-1 (Sheet 08). Several examples of topsoil stockpiles were inspected during the audit and it was observed that different stockpiling techniques were used on the selection of stockpiles inspected.

Figure 1 shows an example of a topsoil stockpile on the northern side of the TSF that had generally been constructed in accordance with drawing SD4-1 in the plan. However, it was noted that no erosion and sediment controls were installed around the stockpile. Figure 2 shows another topsoil stockpile to the south of the TSF that has been established using a paddock dumping technique, which is not in accordance with the requirements of the ESCP. This is raised as **observation of concern no. 1**. Tritton should review the procedures for topsoil management having regard to the risks associated with topsoil stockpiling.

Issues related to topsoil management that have the potential to affect rehabilitation outcomes are discussed below in relation to rehabilitation.

Figure 1 Shaped topsoil stockpile to the north of the Tritton TSF



Figure 2 Paddock dumped topsoil stockpile to the south of the Tritton TSF



Page 6 of the ESCP describes a self-auditing program 'to be undertaken by the HSET manager or his delegate'. No evidence of such a self-audit program was observed during the audit and interviews with Tritton staff confirmed that the self-audit program had not been established. It was noted that a general environmental site inspection is undertaken and documented on form TRL-ENV-FRM-007, however this inspection does not address the requirements for a self-audit program outlined in the ESCP. This issue is raised as **observation of concern no. 2**. Tritton should develop the self-audit program as described in the ESCP.

3.2. Rehabilitation

3.2.1. Risk assessment

A very basic and generic risk assessment is provided in each of the MOPs for the three mining operations. This risk assessment may not reflect the actual risks to successful rehabilitation outcomes.

For example, there are risks associated with the stockpiling of topsoil that may not be fully understood by the site personnel. Section 3.2.6 of the MOP states that *'soil resources are preserved through stockpiling within the mine site. Stockpiles are preserved for future use in rehabilitation. As a result, any risks associated with soil and its suitability are considered to be negligible'*.

Poor handling and stockpiling practices may result in a significant loss of viable seed and topsoil quality. Management and maintenance of topsoil stockpiles is essential to prevent erosion and weed infestation and to retain maximum soil reserves for use during rehabilitation works. These factors do not appear to have been considered in the current risk assessment. This issue is raised as **observation of concern no. 3**. It was noted that Tritton is reviewing and updating the environmental risk assessments using the bowtie method. Work in progress was reviewed by the auditors and considered to be an improvement. Changes to the rehabilitation risk profile should be reflected in the site trigger action response plan (TARP) as it was noted that consideration of adverse conditions such as the recent drought were not reflected in existing TARPs. It is also recommended that development of new risk management systems and procedures is embedded in the MOP where practicable and the Regulator is kept abreast of improvements via the AEMR.

3.2.2. Tritton Mine

There is an emerging risk to rehabilitation success on the batters of the TSF because of adverse climatic conditions and soil fertility that have only been partially addressed. Topsoil quality is poorly understood and little in the way of testing has been done to ascertain different grades of topsoil. The lack of characterisation has resulted in sodic topsoil being placed on the TSF batters and erosion is evident on areas with this soil type (Figure 3). This is raised as **observation of concern no. 4**. Further investigation and testing should be undertaken to determine remedial actions to reduce the risk of further erosion of the embankment.

Further, it would be beneficial to consider repairing erosion before implementation of erosion control works. The installation of jute mesh in relation to discharge points on the TSF has been ineffective and will not arrest erosion unless the underlying surface is repaired.

Figure 3 Erosion on the western embankment of the TSF



Erosion of the TSF embankments would trigger the TARP in Section 9.2 of the MOP either for ‘final landform not safe, stable and secure’ or ‘sediment and erosion control structures inadequate or fail’. The responses for each of these triggers involve the engagement of a technical expert to prepare an assessment report and recommendations. Tritton provided a copy of *Erosion and sediment control procedures – Tritton Tailings Dam 1: Management recommendations* prepared by CMW Geosciences dated 27 August 2018, which was prepared in response to the erosion issues identified on the TSF embankments. This would indicate that the TARP actions were initiated. The recommendations provided by CMW Geosciences included additional investigation work to better understand the lack of success experienced in the revegetation of the western embankment.

Rehabilitation of the TSF eastern embankment (2009) and western embankment (2016) have separate monitoring requirements. Evidence was not available to demonstrate that all these monitoring requirements were implemented (for example LFA monitoring and biomass assessment). Monitoring of TSF embankments should be standardised so the same monitoring criteria and methods are employed for the sake of clarity and consistency in reporting. The AEMR should distinguish between each separate rehabilitation batter and include an evaluation of performance against completion criteria, monitoring results and maintenance requirements that may differ according to the progress of rehabilitation. It is noted that the TARP contained in the MOP includes requirements to engage with relevant technical experts relating to growth medium development and revegetation, however no technical consultation was undertaken to address these issues. Consultation and planning are required before undertaking further work to ensure target outcomes are achieved.

Rehabilitation monitoring should consider various soil types, ameliorants and ground preparation methods however this has not occurred. Trial plots to exclude grazing animals have been established on the TSF embankments but the plots appear to be undersized (Figure 4). These small plots are clearly showing signs of success suggesting grazing pressure is strong on the site. Given the outcome of trial

results, it would be reasonable to expect some asset protection measures (i.e. fencing) but no exclusion zones were observed to have been established on rehabilitation areas at Tritton. This is raised as **observation of concern no. 5**. Tritton should review the trial plot results and establish controls to minimise the impact of grazing animals.

Figure 4 Small exclusion trial plot on the TSF embankment



3.2.3. Murrawombie Mine

The approved MOP for the Murrawombie Mine indicates that 10.8 hectares of the heap leach pads (HLP) were to be rehabilitated in year six of the MOP (2021), with a further 10.8 hectares rehabilitated by the end of the MOP period (2022). Rehabilitation of the HLP appears to be behind schedule as the pads are still actively used (Figure 5) and no rehabilitation actions have progressed to date.

Figure 5 Heap leach pads and pregnant liquor pond at Murrawombie Mine



A remediation action plan was prepared by Environmental Strategies in June 2013. The goal of the plan was to ensure that groundwater impacts occurring through the use of the site for heap leach ore processing was not adversely affecting water quality downgradient of the site and was unlikely to in the future. Six monthly progress reports have been prepared by Environmental Strategies/Arcadis about the progress of the implementation of recommendations from the plan. Results from the monitoring programs will be used in the development of suitable remediation strategies for this area.

Rehabilitation of the Murrawombie WRE is highly variable with rehabilitation last completed in 2002. The rehabilitation is in various stages of progress from 'growth medium development' through to 'ecosystem establishment'. Little to no maintenance appears to occur on the landform and there were several sites exhibiting high levels of instability with developed erosion scours and rilling. It was noted that revegetation outcomes were poor on the Murrawombie WRE and particularly on batters where soil development was poor and sparse groundcover had established. It was noted that the TARP contained in the MOP includes requirements to engage with relevant technical experts should revegetation outcomes not meet performance criteria. Additional technical consultation and planning will be required before undertaking further revegetation work. This is raised as **observation of concern no. 6**.

3.2.4. North East Mine

It was observed that the Hartman-Larsens WRE was poorly vegetated and unstable in several areas. It was also noted that there was no erosion and sediment control plan for the site. The sediment basin on the southern flank of Hartman-Larsens WRE appeared to be undersized and a fan of sediment was observed during the site inspection originating from the sediment dam indicating it was overtopped on several occasions in the past (Figure 6).

Rehabilitation performance was also poor at this WRE and issues included landform instability, inadequate growth medium development and poor revegetation outcomes. It was noted that the TARP contained in the MOP included requirements to engage with relevant technical experts about growth medium development and revegetation, however in a similar manner to the Murrawombie WRE, no technical consultation was undertaken to address these issues. Consultation and planning are required before undertaking further work to ensure target outcomes are achieved. This is raised as **observation of concern no. 7**.

Figure 6 Sediment overflow from undersized basin



Rehabilitation monitoring at North East Mine identified that grazing animals were a risk to rehabilitation outcomes and exclusion fencing has been implemented at the mine. Tritton has also constructed a goat trap (Figure 7) to trap and remove goats that do find their way into the rehabilitation area.

Figure 7 Goat entry on the goat trap behind the WRE rehabilitation area



3.3. Reporting

3.3.1. Annual rehabilitation reporting

Condition 3(f) of ML1280 and ML1838 require the preparation and submission of an annual rehabilitation report that provides a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP. Condition 3 of ML1544 requires the submission of an annual environmental management report (AEMR) which, among other things, is required to detail progress towards final rehabilitation objectives. Details of reports submitted for each operation for the audit scope period are summarised in Table 5.

Table 5 Summary of annual rehabilitation reports submitted

MINING OPERATION	2017	2018
Tritton Copper Mine	INW18/10971/DOI Submitted 18 April 2018 Accepted 23 August 2018	DOC19/174428 Submitted 1 March 2019 Accepted 2 May 2019
Murrumbidgee Copper Mine	INW18/10963/DOI Submitted 18 April 2018 Accepted 24 August 2018	DOC19/174615 Submitted 28 February 2019 Accepted 6 May 2019
North East Copper Mine	INW18/10966/DOI Submitted 18 April 2018 Accepted 23 August 2018	DOC19/174668 Submitted 1 March 2019 Accepted 6 May 2019

For both 2017 and 2018 reporting periods, the reports were lodged after the due date for reporting. However, it was noted that Tritton had applied for and was granted an extension to the reporting date and the reports were submitted within the revised timeframe.

3.3.2. Compliance reporting (ML1280 and ML1383)

Condition 4 of mining leases ML1280 and ML1383 originally included a condition requiring the lease holder to submit an annual compliance report prepared in accordance with any relevant guidelines or requirements for compliance reporting published by the Minister.

A compliance report for ML1280, and its associated mining purposes leases, for the 2017 reporting year was submitted on 21 May 2018 (DOC18/320495). No non-compliances or reportable incidents were in the 2017 compliance report.

In February 2018, condition 4 of ML1280 and ML1383 was varied by deleting the existing condition and inserting a new condition 4 that requires the lease holder to notify the Regulator upon becoming aware of any breaches of the conditions, the Mining Act or the Mining Regulation.

Although ML1383 included the original condition 4 at renewal in October 2017, the condition was varied before any reporting was required. Hence, no compliance reports were submitted or were required for ML1383.

A review of Regulator systems identified that no breaches have been notified by Tritton Resources since the date of the variation to condition 4.

3.3.3. Environmental incident reporting (ML1280 and ML1383)

The original condition 5 of ML1280 and ML1383 required the lease holder to immediately notify the Regulator of all breaches of the conditions of the mining lease or breaches of the Act causing or threatening material harm to the environment. In February 2018, condition 5 was amended such that the lease holder would be required to provide environmental incident notifications and reports to the Regulator no later than seven days after those incidents have been notified to the relevant authorities under the *Protection of the Environment Operations Act 1997*.

On 11 December 2017, Tritton reported a water pipeline spill between the North East Mine and Murrawombie Mine to the EPA (reference no. C18318-2017). On the same day, Tritton forwarded the email confirmation from the EPA Environment Line to the Regulator as notification of the incident. A written report of the incident was provided by Tritton by email dated 15 December 2017. This is consistent with the requirements of condition 5 of the title.

The site of the spill was inspected during the audit and it was noted that the area had been remediated and had recently been reseeded (Figure 8 and Figure 9). The water pipeline had been segmented to assist in isolating any future failures of the transfer pipeline. The site will continue to be monitored by the site environmental advisor and validation testing will be carried out to measure the effectiveness of remediation. It was noted that the incident continues to be managed by the EPA.

Figure 8 Remediation of the water pipeline spill area*Figure 9 Remediation of the water pipeline spill area*

3.4. Other mining compliance requirements

3.4.1. Notice to landholders (all MLs)

Condition 1 of each mining lease requires the lease holder to serve a notice in writing on each landholder within the area indicating that the lease has been granted or renewed. ML1280 and ML1544 were both last renewed outside of the audit period, so the issue of notification was not determined.

ML1383 was last renewed in October 2017. The land within ML1383 is owned by Tritton Resources, so notification was not required.

3.4.2. Co-operation agreements (ML1280 and ML1383)

Condition 8 of both ML1280 and ML1383 requires the lease holder to make every reasonable attempt to enter into a co-operation agreement with the holder(s) of any overlapping titles. A review of information held by the Regulator, Minview, did not identify any overlapping titles for either ML1280 or ML1383. This was confirmed by Tritton staff. Therefore, co-operation agreements are not applicable to either title.

3.4.3. Prescribed dam (ML1383)

Condition 9 of ML1383 requires that the lease holder must not mine within any part of the lease area that is within the notification area of the Tritton Tailings Dam without the prior written approval of the Minister.

The mining operations at North East Copper Mine (ML1383) are about 20 kilometres to the north-north-east of the Tritton Tailings Dam (located on ML1544) and as such are outside of the notification area for the tailings dam. Condition 9 is not applicable to the North East Mine at this stage of the operations.

3.4.4. Travelling stock reserves, trigonometrical stations and survey marks (ML1544)

Conditions 25 and 26 of ML1544 include requirements for the management of travelling stock reserves (TSRs), trigonometrical stations and survey marks within or immediately adjacent to the mining lease area as follows:

- Condition 25 – the lease holder must permit free and uninterrupted passage of stock through that part of the lease covered by TSR 9606 and TSR 6000 and must conduct operations in a manner that does not cause danger to travelling stock.
- Condition 26 - the leaseholder shall take all necessary precautions to preserve the trigonometrical station, Permanent Mark or State Survey Mark, and the cairn, mast or vanes that might be erected on the lease area.

It was observed that Tritton has identified the location of the TSRs, trigonometrical stations and permanent marks in its mapping systems maintained by the mine's surveyors. Generally, the identified locations were noted to be outside of active mining operational areas. Permanent Mark 86035 is within the active mining area but is located adjacent to the car park area.

Tritton has established and implemented a surface disturbance permitting process that includes a check for infrastructure in the area to be disturbed (for example, Permit No. 103 dated 20 November 2018 to install a temporary water supply to the core shed). This system should identify if there was the potential for any impacts to survey marks and trig stations. No issues of concern in relation to TSRs, survey marks and trig stations were identified during the audit.

4. Audit findings - exploration activities

4.1. Work programs

Condition 1 of both EL4962 and EL6126 requires the licence holder to carry out the operations described in the work program and comply with any commitments in relation to the conduct of operations specified in the work program.

Work programs were prepared, submitted and approved upon renewal of both EL4962 and EL6126. Revised work programs have been submitted with each annual activity report for each EL. Although there have been minor variations in the work programs from year to year, the work programs are generally progressing as planned.

The exploration manager has systems in place to monitor the work programs and has provided justifications where variations to the work programs have occurred. A search of systems (MEA) showed that the Division of Resources and Geosciences (DRG) had accepted exploration progress as satisfactory on both titles.

4.2. Access agreements

Section 140 of the Mining Act states that 'the holder of a prospecting title must not carry out prospecting operations on any particular area of land except in accordance with an access arrangement or arrangements applying to that area of land'. The access arrangement is required to be agreed in writing between the holder of the prospecting title and each landholder of that area of land.

Evidence was sighted to show that Tritton identified the landholders within EL4962 and EL6126 and has executed land access agreements with the landholders for the exploration activities subject to this audit. Generally, contact details for each landholder are maintained by the Exploration Manager in an Excel spreadsheet. Examples of signed land access agreements were sighted for Myall Station (dated 14 November 2016) and Koreegah (dated 6 October 2016 and 26 March 2018). The access agreements were developed based on a standard template and it was noted that no additional conditions had been added by the landholders for either property.

4.3. Native title and exempt areas

The Exploration Manager was able to demonstrate that mapping systems have included the identification of Crown land and exempt areas within the exploration licence areas. No drilling was

conducted in these areas during the audit scope period, therefore further approvals under Section 30 of the Mining Act were not required.

Tritton identified that a native title claim exists over the Crown lots within the exploration licence areas and drilling in these areas was avoided where possible. A review of mapping data confirmed that drilling had not been conducted in the areas on which native title has not been extinguished during the audit period. The Exploration Manager was aware of the requirement to obtain the prior written consent of the Minister before carrying out any activities on land on which native title has not been extinguished (condition 2 of each EL).

4.4. Exploration activity approvals

Section 23A of the Mining Act requires the holder of an exploration licence to obtain an activity approval before carrying out assessable prospecting operations. Applications to conduct exploration activities for assessable prospecting operations were submitted and approved as detailed in Table 6.

No drilling was in progress at the time of the audit, so many of the environmental controls identified in the exploration activity applications could not be verified. Ten of the 16 planned holes in EL6126 had been drilled and rehabilitated at the time of the audit. Two of the 10 planned holes in EL4962 had been drilled and rehabilitated. A total of seven holes were inspected across EL4962 and EL6126 during the audit site inspection.

Table 6 Summary details of exploration activity approvals

TITLE	DESCRIPTION	SUBMITTED	APPROVED
EL6126	4 drillholes with depths ranging from 400-500 metres	26 February 2018 INW18/5407/DOI	6 March 2018 OUT18/3742/DOI
EL6126	12 drillholes with depths ranging from 400-800 metres	15 June 2018 INW18/393946/DOI	26 June 2018 DOC18/423616
EL4962	10 drillholes with depths ranging from 400-500 metres	26 February 2018 INW18/4843/DOI	6 March 2018 OUT18/3742/DOI

It was noted that Tritton had established some systems for managing exploration activity approvals and rehabilitation sign off, but further development of these systems might be beneficial. As **suggestion for improvement no. 1**, Tritton may wish to consider the development of a tracking spreadsheet to record the drill holes by activity approval, identifying the drill hole number corresponding to the site identification number assigned to each site in the activity approval application. Such a tracking

spreadsheet could also be used to identify when rehabilitation of each hole has been signed off as satisfactory, therefore allowing easy identification of outstanding rehabilitation liabilities.

4.5. Community consultation

Condition 3 of the conditions of title for both EL6126 and EL4962 requires the licence holder to carry out community consultation in relation to the planning and conduct of activities carried out under the licence. This consultation must be undertaken in accordance with the requirements of the *Exploration code of practice: Community consultation*.

Evidence was sighted to confirm that the Exploration Manager had undertaken an assessment of the activity impact level for the exploration programs in accordance with Table 2 in Appendix 1 of the code and identified that the programs for both ELs were assessed as low impact. This assessment meets the requirements of mandatory requirement 1 in the code. The auditor concurs with the assessment of low impact for both programs.

Tritton staff advised that exploration activities were addressed as part of the mine's community consultation committee (CCC). Liaison is also reported to be maintained with the local landholders. Generally, this would meet the minimum consultation requirements set out in Tables 3 and 4 in Appendix 1 of the code.

Mandatory requirement 2 of the code requires the titleholder to prepare a community consultation strategy to manage the risks identified in the activity impact assessment. A documented consultation strategy is a required record identified in mandatory requirement 5. Tritton provided a copy of the terms of reference for the Tritton CCC as evidence of its exploration consultation strategy. The terms of reference included some information on the objectives and purpose of the CCC and included a preliminary identification of community stakeholders. However, the terms of reference document do not address the requirements set out in mandatory requirement 3 of the code of practice. It was noted that the CCC was established specifically for the mining operations and did not identify the location of the exploration areas, nor any additional stakeholders specific to the exploration activities. No evidence was sighted to indicate that Tritton had documented a community consultation strategy for its exploration programs as required by mandatory requirement 2. This is raised as **non-compliance no. 1** and is ranked NC3.

Community consultation reports have been submitted with the annual activity reports for both EL4962 and EL6126 for 2017 and 2018. The submission of these reports generally meets the requirements of mandatory requirement 4 of the code. The reports are all very brief (basically identical) despite significant exploration works being undertaken, particularly in EL6126 where 10 holes have been drilled with more planned. The report does not provide much detail on issues raised or responses but does state that no negative issues were raised.

All reports have been assessed and accepted as adequate.

4.6. Environmental management and rehabilitation

Condition 4 of each EL requires the licence holder to prevent or minimise so far as is reasonably practicable, any harm to the environment arising from the activities carried out under the licence. In addition, condition 2 of the activity approval for assessable prospecting operations requires the licence holder to comply with the requirements of Part B of the *Exploration code of practice: Environmental management*.

Given that no drilling was in progress at the time of the audit, it was not possible to verify the implementation of many of the environmental management controls identified in the activity approval application or required by the code of practice. Therefore, the focus of the audit was concentrated on the rehabilitation of exploration drilling sites.

Rehabilitation objectives and completion criteria were developed and submitted by Tritton, and accepted by the Regulator, for the most recent drilling programs on EL4962 and EL6126. It was noted that the most recent environmental rehabilitation and compliance report submitted by Tritton indicated that none of the holes drilled had rehabilitation signed off by the Regulator as satisfactory.

The two holes inspected on EL4962 had both had final rehabilitation completed, having been drilled in April 2018. Generally, no significant issues were identified. Figure 10 and Figure 11 show the sites of the two holes drilled on EL4962.

Figure 10 Exploration drill site TGHRC005



Figure 11 Exploration drill site TGHRC004



The sites of the holes inspected on EL6126 that were drilled in late 2018 and early 2019 were tidied up with wastes and aboveground sumps removed but had not had final rehabilitation undertaken. Generally, no significant issues were identified at these sites. Figure 12 and Figure 13 show examples of the preliminary rehabilitation on the holes drilled in early 2019.

Figure 12 Exploration drill site TKJD024



Figure 13 Exploration drill site TKJD017



During the inspection of holes drilled in 2019, an opportunity arose to inspect a drill site that was drilled and rehabilitated in 2013. This site was drilled using inground sumps rather than the aboveground sumps that are now used. As shown in Figure 14, the area of the inground sumps has sunk and remedial works may be required to achieve the completion criteria. This is raised as **observation of concern no. 8**.

Figure 14 Exploration drill site TKJD008 showing sumps have subsided



Mandatory requirement 6 of the code of practice requires the licence holder to maintain records related to the rehabilitation of exploration activities. The Exploration Manager has developed a rehabilitation protocol that includes an exploration drill pad rehabilitation form. This form collects some of the

information required by the code of practice. The auditors viewed electronically stored photographs that provided a record of baseline conditions, showed the disturbance caused by exploration activities, and showed the completed rehabilitation.

While evidence was provided to demonstrate that most of the mandatory records were being maintained, it was noted that there was no process for monitoring exploration rehabilitation. This is raised as **observation of concern no. 9**. Development of a process for periodic inspection or monitoring of exploration rehabilitation would be of value to assess the ability to meet the rehabilitation objectives and completion criteria.

4.7. Annual activity reporting

Condition 8 of EL4962 and EL6126 requires the licence holder to submit an annual activity report within one calendar month following grant anniversary date. Annual activity reports are required to be prepared in accordance with the *Exploration guideline: Annual activity reporting for prospecting titles*.

Three annual activity reports were prepared and submitted during the audit period - two for EL6216 and one for EL4962. All reports submitted included the four components as required and were generally prepared according to our guidelines.

A review of the systems EAMS and MEA showed that all reports have been accepted as satisfactory.

4.8. Core and sample storage

Clause 65 of the Mining Regulation requires the holder of an authority to, so far as is reasonably practicable, collect, retain and preserve:

- all drill cores remaining after sampling
- characteristic samples of the rock or strata encountered in any drill holes.

All core and samples collected are required to be labelled, stored and managed in a manner that preserves the integrity of the core or samples.

It was observed that both chip samples and core were collected from drilling programs conducted on EL4962 and EL6126. Core was observed to be maintained in modular plastic core trays (Figure 15) in a large core yard (Figure 16), while chip samples were observed to be stored in modular plastic chip trays (Figure 17) in shipping containers (Figure 18). All core and samples inspected were observed to be appropriately labelled.

Figure 15 Core stored in modular plastic core trays



Figure 16 The Tritton core yard



Figure 17 Chip samples stored in plastic chip trays



Figure 18 Chip tray storage in a shipping container



Generally, storage of core and samples was observed to be well managed. The location of core trays and chip samples within the core yard has been mapped so that locating particular samples is an easy process.

Tritton staff said no cores or samples had been disposed of during the audit period, and no cores or samples had been requested by the Regulator.

5. Compliance management

5.1. Identifying compliance obligations

Tritton has developed and implemented some rudimentary systems for compliance management. For example, Tritton has developed a basic compliance register using an Excel spreadsheet and has inputted some compliance obligations into the software system 'InControl'. A review of these systems by the auditor showed that these systems may not include all obligations. For example, it was noted that neither system included obligations from the MOP and management plans, nor did the systems include obligations from the Mining Act or Regulation.

Further development of these systems to include all compliance obligations may be beneficial. This is raised as **suggestion for improvement no. 2**.

5.2. Inspections, monitoring and evaluation

Tritton has established a monthly environmental inspection program that is documented on form TRL-ENV-FRM-007. Although this inspection program looks at a range of aspects of the mining operations, it does not address all the obligations under the MOP and the associated management plans.

Where issues are identified during monthly environmental inspections, there was no formal system to capture those issues, assign actions, track progress and close out. It was noted that Tritton was using the INX software system for safety-related issues and incidents, but this system was not used for environmental inspections. More effective use of the INX system for issues identified during environmental inspections would be beneficial. This is raised as **suggestion for improvement no. 3**.

5.3. Record keeping

Sections 163D and 163E of the Mining Act relate to the creation and maintenance of records required under the Act, the Regulations, or a condition of title. Records must be kept in a legible form for production to any inspector and must be maintained for a period of four years after the expiry or cancellation of the title. Further requirements for records to be maintained are contained in the exploration codes of practice applicable to the exploration activities on EL4962 and EL6126.

Generally, most records required to be maintained were available for review by the audit team. There were some mandatory records from the exploration codes of practice that were not being maintained, including the community consultation strategy, exploration rehabilitation monitoring records and

assessment of rehabilitation performance against the nominated rehabilitation objectives and completion criteria as identified in earlier sections of this report.

5.4. Titleholder response to draft audit findings

Tritton was provided with a copy of the draft audit report and invited to submit a response to the draft audit findings. A copy of the response is provided in Appendix 1.

As part of the response, Tritton provided additional evidence to demonstrate that a groundwater sampling procedure had been prepared and implemented. This addressed observation of concern no. 1 that was removed from the final report and the text in section 3.1.3 of the audit report was amended to reflect the evidence provided.

Evidence was also provided to demonstrate that the TARP response actions for the erosion on the western embankment of the TSF had been implemented. Accordingly, observation of concern no. 6 was removed from the final report and the text in section 3.2.2 of the audit report was amended to include the evidence provided.

Non-compliance no. 1 in the draft report was raised in relation to a failure to notify the Regulator of an environmental incident. Tritton provided evidence that verified that notification was provided to the Regulator in the timeframe required by condition 5 of the lease. As a result, there was no longer a non-compliance with the condition, non-compliance 1 was removed, and the text in section 3.3.3 of the audit report was amended to include the evidence provided.

Non-compliance no. 2 in the draft report was raised for a failure to prepare a community consultation strategy for exploration activities as required by mandatory requirement 2 of the code of practice. Although Tritton provided a copy of the terms of reference for the Tritton community consultative committee for its mining operations, a review of this document identified that it did not meet the mandatory requirements of the code. As such, the non-compliance stands.

6. Audit conclusions

From the evidence reviewed during the audit and observations made on site during the audit site inspections, it is concluded that Tritton Resources has achieved a moderate level of compliance with the requirements of the mining leases and MOP in relation to mining operations undertaken at Tritton Copper Mine, Murrawombie Copper Mine and North East Copper Mine. A moderate level of compliance has also been achieved in relation to exploration activities undertaken on EL4962 and EL6126.

Tritton has developed some rudimentary systems for compliance management but further development of these systems would be beneficial to promote a more active approach to compliance management on site.

One non-compliance ranked NC3, nine observations of concern and three suggestions for improvement were noted by the auditor as summarised in Table 7, Table 8 and Table 9. Regulatory action may be taken to address the non-compliances and observations of concern identified.

Table 7 Summary of non-compliances

NON-COMPLIANCE NO.	DESCRIPTION OF ISSUE	RECOMMENDATION
1 NC3	Mandatory requirement 2 of the <i>Exploration code of practice: Community consultation</i> requires the titleholder to prepare a community consultation strategy to manage the risks identified in the activity impact assessment. A documented consultation strategy is a required record identified in mandatory requirement 5. No evidence was sighted to indicate that Tritton has documented a community consultation strategy for its exploration programs as required by mandatory requirement 2.	Develop and implement a documented community consultation strategy as required by the exploration code of practice.

Table 8 Summary of observations of concern

OBSERVATION OF CONCERN NO.	DESCRIPTION OF ISSUE	RECOMMENDATION
1	Figure 1 shows an example of a topsoil stockpile on the northern side of the TSF that had generally been constructed in accordance with drawing SD4-1 in the plan. However, it was noted that no erosion and sediment controls were installed around the stockpile. Figure 2 shows another topsoil stockpile to the south of the TSF that has been established using a paddock dumping technique, which is not in accordance with the requirements of the ESCP.	Tritton should review the procedures for topsoil management having regard to the risks associated with topsoil stockpiling.
2	Page 6 of the ESCP describes a self-auditing program 'to be undertaken by the HSET manager or his delegate'. No evidence of such a self-audit program was observed during the audit and interviews with Tritton staff confirmed that the self-audit program has not been established. It was noted that a general environmental site inspection is undertaken and documented on form TRL-ENV-FRM-007, however this inspection does not address the requirements for a self-audit program outlined in the ESCP.	Tritton should develop the self-audit program as described in the ESCP.
3	There are risks associated with the stockpiling of topsoil that may not be fully understood by the site personnel. Section 3.2.6 of the MOP states that ' <i>soil resources are preserved through stockpiling within the mine site. Stockpiles are preserved for future use in rehabilitation. As a result, any risks associated with soil and its suitability are considered to be negligible.</i> ' Poor handling and stockpiling practices may result in a significant loss of viable seed and topsoil quality. Management and maintenance of topsoil stockpiles is	It was noted that Tritton is reviewing and updating the environmental risk assessments using the bowtie method. Work in progress was reviewed by the auditors and considered to be an improvement.

OBSERVATION OF CONCERN NO.	DESCRIPTION OF ISSUE	RECOMMENDATION
	<p>essential to prevent erosion and weed infestation, and to retain maximum soil reserves for use during rehabilitation works. These factors do not appear to have been considered in the risk assessment.</p>	
4	<p>It was noted that there is an emerging risk to rehabilitation success on the batters of the TSF due to adverse climatic conditions and soil fertility that have only been partially addressed. Topsoil quality is poorly understood and little in the way of testing has been done to ascertain different grades of topsoil. The lack of characterisation has resulted in sodic topsoil being placed on the TSF batters and erosion is evident on areas with this soil type.</p>	<p>Further investigation and testing should be undertaken to determine remedial actions to reduce the risk of further erosion of the embankment.</p>
5	<p>Trial plots to exclude grazing animals have been established on the TSF embankments but the plots appear to be undersized (Figure 4). These small plots are clearly showing signs of success suggesting grazing pressure is strong on the site. Given the outcome of trial results, it would be reasonable to expect some asset protection measures (i.e. fencing) but no exclusion zones were observed to have been established on rehabilitation areas at Tritton.</p>	<p>Tritton should review the trial plot results and establish controls to minimise the impact of grazing animals.</p>
6	<p>It was noted that revegetation outcomes are poor on the Murrawombie WRE and particularly on batters where soil development is poor and sparse groundcover has established. It is noted that the TARP contained in the MOP includes requirements to engage with relevant technical experts should revegetation outcomes not meet performance criteria.</p>	<p>Additional technical consultation and planning will be required before undertaking further revegetation work.</p>

OBSERVATION OF CONCERN NO.	DESCRIPTION OF ISSUE	RECOMMENDATION
7	Rehabilitation performance is also poor at the North East Mine WRE and issues include landform instability, inadequate growth medium development and poor revegetation outcomes. It is noted that the TARP contained in the MOP includes requirements to engage with relevant technical experts with regards to growth medium development and revegetation, however, no technical consultation has been undertaken to address these issues.	Additional technical consultation and planning will be required before undertaking further revegetation work.
8	During the inspection of holes drilled in 2019, an opportunity arose to inspect a drill site that had been drilled and rehabilitated in 2013. This site was drilled using inground sumps rather than the aboveground sumps which are now used. As shown in Figure 13, the area of the inground sumps has sunk and remedial works may be required to achieve the completion criteria.	Review the holes drilled using inground sumps and undertake remedial works as required.
9	While evidence was provided to demonstrate that most of the mandatory records required by the exploration code of practice are being maintained, it was noted that there was no process for monitoring of exploration rehabilitation.	Development of a process for periodic inspection or monitoring of exploration rehabilitation would be of value to assess the ability to meet the rehabilitation objectives and completion criteria.

Table 9 Summary of suggestions for improvement

SUGGESTIONS FOR IMPROVEMENT	DESCRIPTION OF ISSUE
1	Tritton may wish to consider the development of a tracking spreadsheet to record the drill holes by activity approval, identifying the drill hole number corresponding to the site identification number assigned to each site in the activity approval application. Such a tracking spreadsheet could also be used to identify when rehabilitation of each hole has been signed off as satisfactory, therefore allowing easy identification of outstanding rehabilitation liabilities.
2	Tritton has developed a basic compliance register using an excel spreadsheet and has inputted some compliance obligations into the software system 'InControl'. A review of these systems by the auditor showed that these systems may not include all obligations. For example, it was noted that neither system included obligations from the MOP and management plans, nor did the systems include obligations from Mining Act or Regulation. Further development of these systems to include all compliance obligations may be beneficial.
3	Where issues were identified during monthly environmental inspections, there is no formal system to capture those issues, assign actions, track progress and close out. It was noted that Tritton was using the INX software system for safety-related issues and incidents, but this system was not used for environmental inspections. More effective use of the INX system for issues identified during environmental inspections would be beneficial.



DOC19/614678

Mr John Miller
General Manager
Tritton Resources Pty Ltd
PO Box 386
Nyngan NSW 2825
By email: dwoods@tritton.com.au

Dear Mr Miller

Subject: Compliance Audit – Tritton Resources Pty Ltd

An audit of the mining operations and exploration activities associated with the Tritton Copper Mine, Murrawombie Copper Mine and the North East Copper Mine was undertaken between 21 May and 23 May 2019 as part of the compliance audit program undertaken by the Department of Planning, Industry & Environment (DPIE) – Resources Regulator (the Regulator).

We now offer you the opportunity to review the draft compliance audit report and submit any comments you may have regarding the content of the report to Jenny Ehmsen by 2 August 2019 so that they may be considered in finalising the report. We further advise that any comments provided by you will be attached to the final report as an Appendix. If, however, we have not received a response by the above date, we will assume that you are satisfied with the report and it will then be finalised. A copy of the final report will then be forwarded to you.

You should note that the Regulator will be publishing the final audit report on its website, which will include any response you provide to the draft audit report.

If you require further information or clarification on any matters regarding this audit, please do not hesitate to contact Jenny Ehmsen on 02 4063 6443.

Yours sincerely

Jenny Ehmsen
Principal Compliance Auditor

18 July 2019

Hi Jenny,

Thank you for the report and opportunity to review and make comment.

Please see attached draft audit report with comment, I have also sent supporting information via hightail, alternatively you may choose to use the below link to download the supporting information.

<https://spaces.hightail.com/receive/oR1CXtSWVT>

Kind regards,



Dean Woods

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8 comments

Page 14

Dwoods

This refers to placement of waste rock at the end of mine life. If any PAF material is identified in the WRE when used for rehabilitation activity (end of mine life) it will be deposited into the TSF rather than being used as a capping material. Therefore there is no requirement for a facility for placing PAF waste rock into the TSF.

Page 15

Dwoods

Please see groundwater monitoring procedure included in response.

Page 18

Dwoods

TARP 6 of the Tritton MOP was triggered. Tritton engaged its TSF engineer to develop erosion control procedures specific to the Tailings dam embankments in 2018, i have attached the plan in the response.

Page 23

Dwoods

This occurred 11 December 2017. I have provided correspondence showing notification and the written report.

The remediation identified was completed in response to a site spill which occurred in 2016. The 2017 incident was much less significant, had very minimal impact and hasn't required remediation.

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Dwoods

Please refer to previous comment.

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Please refer to previous comment.

Page 38

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Please refer to previous comment.