

Tarrawonga Coal Mine

Conditions of Approval Independent Environmental Audit Report

Whitehaven Coal Limited

September 2017

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Whitehaven Coal Limited

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EXECUTIVE SUMMARY

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned to perform an independent environmental audit (IEA), including an audit of biodiversity aspects, of the Tarrawonga Coal Mine located 15km northeast of Boggabri, NSW on behalf of Whitehaven Coal (herein referred to as WHC). The primary purpose of the audit was to satisfy the Department of Planning and Environment (DP&E) Ministers' Conditions of Approval (MCoA) number 10, Schedule 5 (IEA), and Condition 50 of Schedule 3 (Biodiversity) of the Tarrawonga Coal Mine Project Approval PA 11_0047 (Modification 3), which requires the commissioning of an independent audit by the end of June 2014, and every 3 years thereafter.

The audit included a review of:

- *DP&E, Ministers Conditions of Approval MCoA PA 11_0047 (Modification 3) approved May 2017, including Statement of Commitments;*
- *EPL 12365*
- *Mining Leases 1579, 1693 and 1685*
- *implementation of Management Plans developed as part of the Ministers Conditions of Approval.*

Overall, conformance was achieved with the audit documents that were reviewed. A qualitative risk assessment was also completed on the findings, consistent with AS/NZS 4360:2004 Risk management and HB 436:2004 Risk Management Guidelines Companion to AS/NZS 4360:2004 and as described in the DP&E publication "Independent Audit Guidelines" issued October 2015. The number of non-conformances with the statutory conditions and implementation of the management plans is summarised in Table below:

Summary of Audit Findings

Non conformances	Administrative Non - conformances	Observations	Total Conditions
<i>Statutory Instruments</i>			
19	22	6	415
High (0), Medium (3), Low (16)			
<i>Implementation of Plans</i>			
1	4	1	12

An action response table has been developed by Tarrawonga Coal Pty Ltd (TCPL) addressing all audit findings and will be submitted separately to this report.

ABBREVIATIONS AND GLOSSARY

Term	Description
AEMR (AR)	Annual Environmental Management Report (Annual Review)
ANC	Administrative Non Compliance – audit finding
C	Compliant - audit finding
CCC	Community Consultative Committee
CHPP	Coal handling and preparation plant
DP&E	Department of Planning and Environment (formerly Department of Planning & Infrastructure)
DP&I	Department of Planning and Infrastructure (now Department of Planning & Environment)
DPI (Water)	Department of Primary Industries (Water) formerly NSW Office of Water
DRE	Department of Industry (Division of Resources and Energy)
DSEWPaC (now DoEE)	Department of Sustainability, Environment, Water, Population and Communities (now Department of Environment and Energy)
EMS	Environment Management Strategy
EP&A Act	Environment & Planning Act
EPA	Environment Protection Authority
EPL	Environment Protection Licence
EPBC	Environment Protection and Biodiversity Conservation Act 1999
ERM	Environmental Resources Management Australia Pty Ltd
IEA	Independent Environmental Audit
MCoA	Ministers Conditions of Approval
mAHD	metres Above Height Datum
ML	Mining Lease
MOP	Mining Operations Plan
NC	Non-compliant - audit finding
NOW	New South Wales Office of Water
NT	Not triggered – audit finding
NV	Not Verified – audit finding
O	Observation – audit finding
RMP	Rehabilitation Monitoring Program
ROM	Run of Mine
SWL	Standing Water Level
TCPL	Tarrawonga Coal Pty Ltd (TCPL)

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- (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary of the DP&E;
- (b) include consultation with the relevant agencies;
- (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and
- (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.

Within six weeks of the completion of this audit, or as otherwise agreed by the Secretary of the DP&E (12 September 2017), the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

1.1**MINE HISTORY & APPROVALS**

Tarrawonga Coal Mine is a conventional open-cut operation originally approved by the former NSW Department of Planning (now Department of Planning and Environment) under Part 3A of the EP&A Act on the 11 March 2013 (Project Approval PA 11_0047). Subsequently Mining Lease (ML) 1579 (3 April 2006), ML1693 (14 October 2013) and ML1685 (18 July 2013) were issued to Whitehaven Coal Mining and Idemitsu Boggabri Coal Pty Ltd (together Tarrawonga Coal Pty Ltd or TCPL) by the Minister for Mineral Resources.

Mining commenced at Tarrawonga Coal Mine in 2006. The Project Approval (PA 11_0047) approves the extraction 3 million tonnes of run of mine (ROM) coal per year. The consent allows for the crushing and screening of ROM coal onsite prior to being transported by truck to the Whitehaven Siding Coal Handling and Preparation Plant (CHPP) near Gunnedah.

A modification to the original consent (DA-88-4-2005) was applied for and approved under Section 75W of the Environment Planning and Assessment Act on 15 October 2010. In 2011, TCPL sought approval to facilitate ROM coal production rate of up to 3 million tonnes per annum, and life of mine through to 2030. Notice of Modification for PA 11_0047 was approved 6 November 2014 which enabled the continuation and increased haulage from mine to Whitehaven CHPP up to 3 million tonnes may be transported. The most recent Modification (Mod 3) was approved May 2017 and stipulates that together with the owners of the Rocglen and Vickery coal mines ensure cumulative haulage of coal along the approved haulage route does not exceed 4 million tonnes during the calendar year 2017 and 3.5 million tonnes each year during all other calendar years.

The most recent independent audit was completed in December 2014 in accordance with Condition of Consent 10 (Schedule 5) of the Project Approval.

1.2 OVERVIEW OF OPERATIONS

Tarrawonga Coal Mine is located within Mining Lease 1579 (656.1 hectares), ML 1685 (409.8 hectares) and ML 1693 (165.1 hectares), which is issued to TCPL and is 1,231 hectares in size. Tarrawonga is wholly owned by TCPL, which is a joint venture between Whitehaven Coal Mining Pty Ltd (WCMPL) (70%) and Idemitsu Boggabri Coal Pty Ltd (IBC) (30%) a wholly owned subsidiary of Whitehaven Coal Limited (WCL) which is a publically listed company on the Australian Stock Exchange.

ERM understands coal within the Tarrawonga deposit can be described as a high volatility coal which will produce a very low sulphur, semi-soft coking/thermal coal, with typically <10% ash. It is expected that up to 65% of coal produced would be suitable for market without the requirement for further washing. The coal contains low percentage phosphorus and exhibits a high energy.

1.2.1 *Description of primary processes undertaken during the audit period*

Current activities at the site include the following:

Mining Operations

TCPL is restricted to extract less than 3 million tonnes of ROM coal from the site in a financial year, or together with the owners of the Rocglen and Vickery coal mines, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 4.0 million tonnes during calendar year does not exceed 3.5 million tonnes each year during all other calendar years.

Table 1.1 A summary of mining operations during the audit period.

<i>Period*</i>	<i>Limit</i>	2014-2015:	2015-2016:	2016-2017:
Waste Rock / Overburden (bcm)	N/A	19.27M	19.99M	12.96M
Extracted Coal (t)	3 M	2.2 M	2.2 M	2.43M
Coal Workings (t)	>2 M – 5M	2.28 M	2.1 M	2.23 M
Transported Coal (t)	3.5 M	3.43 M	3.32 M	3.35 M
Coarse reject (t)	0.7M	0	0	0.27M

* PA2-6-1 Production, Haulage and Sales Volumes

Construction

Operations used existing infrastructure and facilities with no significant upgrades or additional works completed during the audit period.

Land Preparation – Vegetation Clearing

83.1 ha of vegetation was cleared in the period May 2014-April 2015 (as reported in the AEMR this includes 29.6 ha from the preceding period that was unreported). Some vegetation clearing was undertaken in the Annual Review period May 2015-April 2016 although the Annual Review does not report the area. No vegetation clearing was conducted in 2016.

Land Preparation - Soil Stripping and Stockpiling

Soil stripping and stockpiling was reported as occurring in each of the three years' Annual Reviews / AEMRs during this audit period, although these are unquantified areas in those reports.

Maintenance/Workshop Area

The maintenance workshop area activities include maintenance of mining and earthmoving equipment as well as refuelling activities. The main work area are provided with hardstand (concrete), with drainage to an oil water separator for treatment of any runoff prior to reporting to the mines network of water storage dams.

The workshop areas are used to store waste oils and greases which are collected by a licensed waste recycling contractor as required.

Waste Management

Wastes produced at the site include:

- general domestic wastes from on-site buildings and routine maintenance;
- oils and other hydrocarbons;
- steel and scrap metal
- sewage; and
- coal rejects from any coal preparation undertaken.

Waste is segregated and stored at the Maintenance / Workshop area.

Rehabilitation

An adaptive management approach has been applied to rehabilitation activities. Monitoring of early rehabilitation efforts has provided opportunities for improvement and these have generally been adopted for recent rehabilitation. In general, rehabilitated areas provide excellent landform stability, with cover consistent in floristic composition to adjoining undisturbed vegetated areas. Early rehabilitation lacked structural diversity, however direct seeding from locally sourced seed has contributed to newly rehabilitated areas that contain a native grass dominated ground layer, shrub mid-storey and eucalypt dominated canopy.

The Annual Reviews report rehabilitation progress from the reporting periods 2014, 2015 and 2016 as shown in Table 1.1.

Table 1.1 *Land Areas Subject to Rehabilitation in Previous Two Reporting Periods
(taken from Table 38 in AEMR (2015))*

Landuse Type	2014 Reporting Period (ha)	2015 Reporting Period (ha)	2016 Reporting Period (ha)
Land prepared for rehabilitation	5	6	6
Land under active rehabilitation	63	55	61

1.3

AUDIT OBJECTIVES

The primary objectives of the audit included:

- assessment of the environmental performance of the site, and its effects on the surrounding environment and sensitive receivers;
- assessment of whether the site is complying with the requirements in the Project Approval, EPL 12365, Mining Lease 1579, 1693 and 1685 (including any assessment, plan or program required under these approvals);
- review of the adequacy of any approved strategy, plan, or program required under the abovementioned consents/approvals; and
- recommendation of measures or actions to improve the environmental performance of Tarrawonga, and/or any strategy/plan/program required under these consents/approvals.

1.4

AUDIT SCOPE

The scope of works in order to complete the Audit included the following:

- the audit is to be carried out in accordance with DP&E's Guidelines for Independent Audits;
- the audit will also be carried out in accordance with AS/NZS ISO 19011:2003: Guidelines for quality and/or environmental management systems auditing;
- review of compliance against the documentation identified in the MCoA (as it relates to the current activities of the Tarrawonga Mine) which will include:
- document review of compliance against the MCoA, statement of commitments, and any other relevant consents/approvals;
- site inspection to assess compliance against field implementation of active MCoA;
- review of supporting plans developed as part of the MCoA and assessment of their adequacy towards effective environmental performance;
- review of monitoring results and trends with comparison of monitoring results against regulatory limits and MCoA limits (where applicable);
- confirmation if any additional monitoring required for identified trends;
- community complaints with review completed for any trends and identifying the source of an established trend;

- review of any regulatory actions including any letters, penalty notices and prosecutions; and
- review of previous Independent Environment Report (issued December 2013) audit report to verify close-out of actions.
- consultation with the relevant agencies such as Department of Planning and Environment (DP&E), Environment Protection Agency (EPA), NSW Department of Industry (Division of Resource and Energy (DRE)) and DPI – Water and North West Local Land Service; Community Consultative Committee and Department of the Environment and Energy.
- draft report with results of compliance assessment to be issued for comment to Whitehaven Coal; and
- final report issued for submission to the DP&E.

The audit covers the period August 2014 to July 2017. The audit covers the period 31 August 2014 through 1 September 2017. The Site inspection was conducted Monday 10 to Wednesday 12 July 2017.

1.5

AUDIT CRITERIA

The audit covered the following specifications and standards, with a particular focus on activities associated with the current stages of operation. The documents relevant to this audit included:

- Conditions of consent PA11_0047 including Statement of Commitments
- EPL 12365
- Mining Leases 1579, 1693 and 1685
- Management plans - the commitments in the management plans developed as part of the MCoA have been implemented
 - Environment Management Strategy (Sch5 C1)
 - Noise Management Plan (Sch3 C12)
 - Blast Management Plan (Sch3 C21)
 - Air Quality and Greenhouse Gas Management Plan (Sch3 C29)
 - Water Management Plan (Sch3 C39)
 - Biodiversity Management (Sch3 C47)
 - Heritage Management Plan (Sch3 C52)
 - Traffic Management Plan (Sch3 C54A)
 - Rehabilitation Management Plan (Sch3 C64)

1.6

LIMITATIONS OF THIS REPORT

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2.1

METHODOLOGY AND PROCESS

The audit comprised a site inspection, interviews with key personnel and review of records and other related documentation over the period 10 - 12 July 2017. The audit process included the following primary components:

- development of a Terms of Reference developed which included:
 - audit scope and objectives;
 - date and location of audit;
 - members of audit team;
 - list of people to be audited; and
 - list of reference documents and audit criteria.
- a project inception meeting was held on 30 June 2017 to confirm details of the Terms of Reference, site inspection logistics and request for documentation required prior to the site inspection component of the audit;
- an opening meeting was held on 10 July 2017 at site to confirm the audit objectives and scope for the site inspection. Attendees included:
 - Oliver Moore (ERM Lead Auditor);
 - Tim Haydon (ERM Support Auditor and Water Specialist);
 - Matthew Flower (ERM Rehabilitation and Biodiversity)
 - Lachlan Johnson (WHC Environmental Officer)
 - Tony Dwyer (WHC Group Superintendent - Environment)
- site inspections were undertaken between 10 and 12 July 2017;
- any identified gaps/issues were documented and followed up with site personnel and additional information was requested as required;
- a closeout meeting was held on 12 July 2017 to discuss initial findings and recommendations. Attendees included the same participants as the opening meeting with the exception of Tony Dwyer and inclusion of Andrew Wright (WHC Biodiversity Offset Specialist);
- preparation of draft audit report (this report);
- response to comments developed by WHC Tarrawonga; and
- preparation of a final audit report.

As part of this audit, ERM and WHC consulted with the following agencies and stakeholders:

- NSW Department of Planning and Environment (DP&E);
- NSW Environment Protection Agency (EPA);
- NSW Department of Primary Industry (Division of Resource and Energy (DRE));
- NSW Department of the Environment and Energy
- North West Local Land Service; and
- Community Consultative Committee (CCC).

In each case an email was sent to representatives of each agency requesting feedback on those issues considered most relevant by their department at the time of the audit.

2.2.1

Summary of Consultation

The Terms of Reference were submitted to the above mentioned authorities on 30 June 2017, prior to the site inspection to obtain feedback and draw attention to any key issues, within the agreed scope of the audit.

At the time of reporting responses had been received from DP&E and DPI.

DP&E confirmed the audit team and Terms of Reference met the requirements of the IEA. DP&E also requested the scope include:

- Effectiveness and adequacy of environmental monitoring (air, blast and noise) locations, particularly in relation to the location of private receivers;
- Review of environmental monitoring (air, blast and noise) results for the audit period, identification of trends in monitoring data and comparison with EA predictions;
- Effectiveness and adequacy of the biodiversity offset strategy and management;
- Effectiveness and health of rehabilitation;
- Effectiveness of current measures to minimise visual impacts (including vegetation screening); and
- Effectiveness of transport management (including implementation of transport management plan).

DPI also requested the scope consider compliance with relevant water licencing requirements:

No response had been obtained from the other parties by the time that this report was completed.

The Community Consultative Committee (CCC) for Tarrawonga meets twice a year and last met in May 2017.

The CCC was consulted prior to this audit, although no specific requests were made it is recommended that the final audit report is tabled at the next Tarrawonga CCC.

Refer to *Annex D* for copies of correspondence completed as part of the consultation process.

2.3

CLASSIFICATION OF AUDIT FINDINGS

Findings resulting from an assessment of audit evidence were divided into six categories as follows:

- **Compliant (C):** the intent and all elements of the audit criteria requirements have been complied with within the scope of the audit.
- **Not Verified (NV):** insufficient verifiable evidence to demonstrate that the intent and all elements of the audit criteria have been complied with within the scope of the audit.
- **Non-compliant (NC):** the intent of one or more specific elements of the regulatory approval have not been complied with within the scope of the audit.
- **Administrative Non-compliance (ANC):** technical non-conformance with audit requirements that would not impact on performance and is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedence of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).
- **Observation (O):** Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance.
- **Not Triggered (NT)** – A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, and therefore a determination of compliance could not be made.
- **Note:** A statement or fact, where no assessment of compliance is required.

A qualitative risk assessment was also completed on the findings, consistent with AS/NZS 4360:2004 Risk management and HB 436:2004 Risk Management Guidelines Companion to AS/NZS 4360:2004 and as described in the DP&E publication “Independent Audit Guidelines” October 2015.

The overall level of risk was estimated by combining the likelihood of harm occurring with the estimated level of harm associated with each finding. Risk levels have been assigned as follows:

- **High:** Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence;
- **Medium:** Non-compliance with:
 - potential for serious environmental consequences, but is unlikely to occur; or
 - potential for moderate environmental consequences, but is likely to occur;
- **Low:** Non-compliance with:
 - potential for moderate environmental consequences, but is unlikely to occur; or
 - potential for low environmental consequences, but is likely to occur
- **Administrative non-compliance:** Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions).

An audit was completed in December 2014 with site inspection completed 8 – 10 September 2014. The 2014 audit reported on the audit actions from the audit completed in 2011 with no non-compliances being carried forward. A summary of the previous non-compliances and their status is summarised below in *Table 3.1 to Table 3.5*.

Table 3.1 Tarrawonga Coal Project - 2014 Independent Environmental Audit - Response to Recommendations - Update on Progress to DP&E

Management Area	IEA Recommendations	Response Action	Timing	Status 2015	Status 2017
Biodiversity Offsets	Table 5.2 and Table 5.3 in the WBOMP should be revised. These tables set out ecological attributes and the scale of measurement in vegetation condition monitoring plots.	TCPL accept recommendation. Biodiversity Management Plan will be amended to reflect recommendation.	1/04/2015	Stage 2 BMP submitted to DP&E for approval.	Complete
	The baseline surveys for threatened species in offset areas should be conducted in accordance with the department's Survey Guidelines for Australia's Threatened Birds and the Survey Guidelines for Australia's Threatened Bats. The annual monitoring reports should confirm compliance with the two stated methodologies	TCPL accept recommendation. Baseline threatened species surveys will be undertaken in accordance with, and reported with reference to, the relevant methodologies.	Ongoing	Implemented	Awaiting approval of Stage 2 Biodiversity Management Plan
	Given the sensitivity of the surrounding environment at TCPL, a more formal ground disturbance permitting system would be insurance against excessive clearing, unplanned impacts to flora and fauna or accidental disturbance of archaeological deposits.	TCPL accept recommendation. A Land Disturbance Protocol will form part of the sites revised Biodiversity Management Plan.	1/04/2015	Implemented	Complete
	Develop and implement a procedure for checking vehicles for weed vectors and cleaning them if necessary prior to entering the biodiversity offset area.	The revised Biodiversity Management Plan will provide weed management measures specific to the biodiversity offset area.	1/04/2015	Stage 2 BMP submitted to DP&E for approval.	Complete. Incorporated into the Plant Introduction to Site checklist.

Bushfire Management	Conduct fuel load and fire break inspections annually	TCPL accept recommendation. Bushfire Management Plan will be amended to reflect recommendation.	1/04/2015	Implemented. Incorporated into monthly fire inspection regime.	Complete
Heritage	The scar tree preservation procedure in the Heritage Management Plan requires revision to ensure it can be complied with. It is currently too prescriptive and does not allow for flexibility in on ground application.	TCPL accept recommendation. Heritage Management Plan will be amended to reflect recommendation.	1/04/2015	HMP to be amended prior to activity commencing under new MOP.	Complete
Public Safety	Traffic impacts associated with the Goonbri Road intersections and public road impacts were identified. This realignment has not yet occurred and has been postponed due to the sites financial situation. The residual risk to the public should be reassessed to establish if changes are still required to ensure public safety.	Any residual (existing) risks associated with Goonbri Road intersections and public road impacts are not related to the current Project. Responsibility for assessment of such risk rests with the relevant road authority. No action proposed.	Not Applicable		
Rehabilitation	Work be conducted to soften the visual impact of the unrehabilitated southern emplacement, reduce risk of impacts to Goonbri Creek and to lessen the levels of fugitive particulate emissions.	TCPL accept recommendation. A review will be undertaken to determine potential mitigation works for the relevant section of the emplacement.	1/04/2015	Aerial seeding of section of emplacement completed 16/07/2015.	Complete. Follow up seeding undertaken 18/5/2016.
	Site observations indicated that rejects are not placed on the pit floor as required by the MOP but are placed at higher elevations, as part of the backfilling process with suitable cover to prevent spon com. There is nothing unacceptable	TCPL accept recommendation. Wording within MOP will be amended.	Upon revision of MOP	Revised wording included in 2015 MOP submitted to	

	in this approach provided there is adequate separation for the surface of the final landform of the emplacement. To rectify, TCPL should consider changing the wording of the MOP at the next revision.			DRE.	
	Reference to the use of these protective methods (<i>tree guards and mulching</i>) should be reduced to a contingency should excessive grazing become an issue rather than a requirement.	TCPL accept recommendation. Protective measures will be referenced as contingencies rather than requirements in revisions of Mining Operations Plan and relevant environmental management plans.	Ongoing	Revised wording included in 2015 MOP submitted to DRE, and draft mine site rehabilitation management plan..	
	Seed collection should be conducted in the areas immediately surrounding the mine site to collect seed for rehabilitation.	TCPL accept recommendation. Seed collection will be undertaken as described in the sites Biodiversity and Rehabilitation Management Plans.	Ongoing	Implemented	
	No rehabilitation works were observed that did not comply with the rehabilitation management plan. However, revegetation is not of good quality, some trials have been conducted, further trials should be implemented to establish the most appropriate vegetation establishment methodologies.	Rehabilitation and revegetation methods are described in the sites Biodiversity and Rehabilitation Management Plans. These methods will be reviewed with reference to revegetation trials undertaken to date and on site/nearby mine field experience.	Ongoing	Implemented	

	Some topsoil at the site has been stored since the site inception. As soon as there is an opportunity to use this material it should be used. The longer topsoil is stored the less effective it is for vegetation establishment.	Tarrawonga's existing topsoil register will be progressively amended to include identification on plan areas to be stripped (including target depths), location/volume/type of soils stored and assignment of stockpiles to rehabilitation areas.	Ongoing	Implemented	
	Topsoil should be characterised prior to stripping to ensure stripping depths are suitable and that similar soil qualities are stored together allowing the application of suitable soil ameliorants when the topsoil is spread.	As above	As above	Implemented	
	Topsoils should be characterised prior to spreading to allow the application of suitable ameliorants (predominantly gypsum and lime).	As above	As above	Implemented	
Water Management	The water in dirty water dams is regularly tested and monitored. When salt levels in these dams exceed acceptable limits; the water will be pumped into PW2 or PW3 and recycled. TCPL does not define "acceptable limits", this should be quantified and included in the Water Management Plan.	TCPL accept recommendation. Water Management Plan will be amended to reflect recommendation	1/04/2015	Consultation complete. SLR to finalise WMP for submission to DP&E for approval. .	Complete. Internal resubmission of the WMP to DP&E, awaiting approval.
	Dirty water management needs review in consideration of the water from around the coal loader not going into the dirty water system.	TCPL are currently in discussions with the NSW Environment Protection Authority on this matter.	Ongoing	Ongoing discussions with NSW EPA..	Ongoing discussions with NSW EPA.

	The groundwater model is overdue for an update and review to be based on monitoring to date.	TCPL accept recommendation. Revision of the groundwater model, including comparison to monitoring results to date, will be undertaken.	30/06/2015	Consultation complete. SLR to finalise WMP for submission to DP&E for approval.	Complete. Internal resubmission of the WMP to DP&E, awaiting approval.
	To obtain groundwater samples that are representative of the water within the aquifer being sampled, groundwater wells should be purged (see Groundwater sampling guidelines, EPA Victoria 2000).	TCPL accept recommendation. Future groundwater monitoring will be undertaken in accordance with the relevant Guidelines.	Ongoing	TCPL have reminded groundwater monitoring consultants of requirement to sample in accordance with guidelines.	Not complete.
Management Plans	As a general comment, the management plans do not include enough information on the background data that was used to formulate them. Future revisions should consider ways to present this information to inform the measures described.	TCPL accept recommendation. Future revisions of management plans will include reference to source documents on which they have been developed.	Ongoing	Implemented	Complete
	Some of the management plans cross into areas that are not core to the reason for the management plan. They should instead reference other management plans rather than reproducing slabs of information.	TCPL accept recommendation. Future revisions of management plans will reference rather than reproduce related management plans.	Ongoing	Implemented	Complete

	In a number of cases, non-compliances have resulted from unnecessary wording in management plans (e.g. water samplers are currently required to be “suitably qualified professionals” when in most instances they are technicians without professional qualifications). TCPL should review the findings of the audit and revise wording to ensure compliance in the future.	TCPL accept recommendation. Future revisions of management plans will remove unnecessary wording.	Ongoing	Implemented	Complete
	The management plans all include requirements for review and it is apparent that these occur. The site however needs to document these reviews in order to demonstrate they have occurred particularly when no changes to the management plan eventuate from the review.	TCPL accept recommendation. Management plan reviews will be documented.	Ongoing	Implemented	Complete
Reporting	Life of mine monitoring data is reported in the AEMRs but commentary on trends and changes is not adequate to determine whether the site is trending towards compliance or out of compliance with requirements.	TCPL accept recommendation. AEMR commentary on life of mine monitoring data will be amended to include adequate detail on life of mine data to determine compliance trends	2015 AEMR	Implemented	Complete
	Include a description of the effectiveness of waste minimisation actions in the waste section of the AEMR.	TCPL accept recommendation.	2015 AEMR	Implemented	Complete

3.2

COMPLAINTS SUMMARY

Complaints received over the auditing period include:

2017: No complaints have been received to date in 2017.

2016: TCPL received two complaints regarding dust, one of which included a noise complaint. There were two complaints relating to blasts, one relating to flooding and one relating to damaged property.

2015: TCPL received 17 complaints during 2015, of which 15 related to dust and all but five were directed to the EPA Environment Line. There were a further two complaints relating to blast events.

2014: TCPL received 20 complaints during 2014, of which 16 related to dust. There were a further three complaints relating to blast events and one to noise.

TCPL respond to all complaints and where appropriate either the Operations Manager or Environmental Officer follow up directly with the complainant. The Environment Officer provided response to the EPA in the instances where they were contacted. No action has been taken by authorities in direct response to complaints during the audit period.

3.3

ENVIRONMENTAL MONITORING PERFORMANCE

3.3.1

Noise

TCPL has a number of conditions to meet regarding environmental noise. To meet the conditions TCPL has a number of noise monitors both attended and real time. During the audit period, there was an exceedance of noise criteria at an adjacent privately owned residence. The exceedance was 2dB above the 35dB criteria. As this is an isolated exceedance it was not considered to be sustained or systematic, as such this was not reported as non-compliance.

The monitoring requirement for road traffic noise is considered an administrative non-compliance as the condition states that monitoring will be completed over a 15 hour period, however only a one hour monitoring event is undertaken and the results extrapolated to meet the condition. The noise consultant that undertakes the works stated that for practical reasons it was not possible to undertake the monitoring for a fifteen hour period. TCPL should follow-up with the DP&E to discuss this condition and provide detail as to the reasoning for this condition not being met.

Sound power level testing was undertaken on-site to determine the requirement for attenuation of plant. Exceedances of recommended sound power levels of existing plant were identified, however it was demonstrated that there have been no non-compliances at sensitive receiver attended noise monitoring locations. TCPL have initiated the process of having the requirement to ameliorate machinery that exceeds recommended sound power levels removed from the approval requirements, based on no recorded non-compliance from attended noise monitoring at adjacent sensitive receivers.

The Environmental Protection Licence Condition M7.1 and M7.2 state specific units of measure to be recorded for noise monitoring locations including:

- LAeq (15 minute);
- LAmax;
- LA1;
- LA10;
- LA90; and
- LAmin.

The auditor review identified that LAeq (15 minute) is all that is displayed in reports prior to quarter four 2016. All other units of measurement were not provided prior to quarter 4 of 2016 and hence these reports are considered non-compliant. Since quarter 4 of 2016 this oversight has been rectified and all units of measurement are displayed.

Condition M7.4 of the Environmental Protection Licence also states that noise monitoring will be undertaken within '30m of the residence on the property Barbers Lagoon'. The auditor observed the noise monitoring locations in the field. The location of monitoring at Barbers Lagoon is on the property boundary however the residence is approximately 200m from the monitoring location. Hence this is considered to be non-compliant.

No exceedances have been recorded for cumulative noise by Tarrawonga and adjacent mines.

TCPL has a Noise Management Plan signed off by the Secretary of the DP&E, an updated plan has been submitted for approval. At this time the revised noise management plan has not been authorised as being to the satisfaction of the Secretary of the DP&E, in the absence of sign-off the existing plan is implemented at Site level for operational purposes.

3.3.2

Air Quality and Blasting

TCPL operates a network of deposited dust gauges, TEOM and High Volume Air Sampler (HVAS). The Air Quality Monitoring Data during the report period indicates deposited dust exceeding criteria on a number of occasions however the exceedences were recorded on project land. Recently submitted Air Quality and Greenhouse Gas Management Plan (AQGGMP) removes these locations with the exception of a deposited dust gauge at three locations. The AQGGMP submitted on 27 June 2017 to the DP&E and is awaiting approval.

The blast monitoring plan was reviewed as part of this audit, as was documentation demonstrating blast monitoring and overall compliance with conditions associated with the mine's blasting activities.

Review of evidence identified that no exceedances of ground vibration criteria of the most stringent criteria of 5 mm/s occurred during the reporting period. Exceedances of airblast overpressure were recorded in 2015 and 2016 at Tarrawonga and Matong however these locations are owned by the mine and are not private residences.

Alterations to blast monitoring locations have been proposed and are awaiting approval from the New South Wales Environment Protection Authority. TCPL are proposing to relocate the Tarrawonga monitoring point to 'Braymont' and the Matong monitoring location to 'Coomalgah'.

It was identified that the EPL will soon include the Coomalgalah property and the Tarrawonga monitoring point will be renamed.

All blasting events occurred during the approved blasting hours and frequency. Blast misfires occurred and required extra shots beyond one per day, however this was reported to the NSW EPA by email.

3.3.3

Water Management

Surface Water

The Site inspection identified sediment basins across the boundary of the site, these provide sediment control for site runoff and provide surface water for use in site activities such as dust suppression. Drainage lines, contour banks and rock-lined flumes were observed for management of water and conveyance across site. Sediment basin capacities were identified by survey pegs, with basins often being constructed as a series or chain of basins. No basins were at the point of overflow, with all observed having sufficient capacity, during the inspection.

Interview with the Environmental officer, and review of evidence provided, demonstrated that no overflows or discharges from licenced discharge points had occurred over the course of the audit period. Monitoring sheets were provided as evidence to demonstrate that basins had capacity. To provide additional evidence that basins were not discharging it was recommended that in larger rainfall events, or rainfall over consecutive days that generate volumes greater than 50mm, that photographs of the licenced discharge points, with reference to capacity marker pegs be taken to provide evidence that capacity remained, overflow did not occur and discharge was not required to restore capacity.

Several conditions of approval related to the following management measures were not triggered as mining had not progressed or was not planned to enter into the locations requiring the management measures, these included the:

- compensatory water supply;
- Goonbri Creek diversion;
- low permeability barrier and associated flood bund concept design; and
- Goonbri Creek and upper Namoi alluvial aquifer.

The concept design plan for the Goonbri Creek Diversion and Flood Bund were to be submitted to the Secretary of the DP&E for approval by December 2016 but the correspondence regarding the infrastructure was not provided prior to this date, as such this is considered an ANC.

An ANC was issued as the Water Management Plan has been submitted to the DP&E but has not yet been determined to the satisfaction of the Secretary.

The Department of Primary Industries – Water requested that the audit review compliance with items relating to water management as addressed in *Section 3.7*. The key findings of the auditor in reviewing the requested areas were:

- the 2015/2016 AEMR identifies compliance with the WAL 31084 available water volume. Compliance with the WAL was not discussed in AEMRs prior to the 2015/2016 report. The water management plan is still awaiting approval from the DP&E;
- Majority of water storage around site are sediment basins. Sediment basins are considered special dams that are not included in harvestable right calculations as they are for the purpose of preventing contamination of a water source and are required under best management practice; and
- The AEMR for 2015/2016 and 2016 to December state in Table 12 the active pumping that occurs under the WAL. AEMRs prepared prior to this date did not include water pumped in relation to the WAL. Evidence of active and passive take, such as pumping records, was not observed. The 2015/2016 AEMR references the SLR 2015 WMP site water balance that

concludes small quantities of externally sourced water will be required due to a deficit in water available on site during both dry and wet years.

Groundwater

Groundwater monitoring is detailed in the Water Management Plan which is awaiting approval to the satisfaction of the Secretary of the DP&E. An inspection was undertaken during the audit and the groundwater wells were observed. The requirement for compensatory water supply has not been triggered as no indication of direct loss from adjacent private land holders.

The groundwater monitoring locations outlined in Condition P1.2 of the Environmental Protection Licence were monitored.

Mining lease 1579 requires that during exploration drilling that any drill hole that meets an artesian or sub-artesian flow, is to be effectively sealed to prevent contamination of aquifers. Auditor review of the exploration reports could not identify discussion of interaction with artesian flow.

No groundwater monitoring within the mine void was undertaken to determine if acid rock drainage was occurring during the reporting period. All groundwater monitoring was at locations outside of the mine. Surface water monitoring within the void is being undertaken, and review of data demonstrated alkaline to neutral pH concentrations. AEMR 2016 states no acid rock drainage has occurred; noting however that more clear indication of how this conclusion was drawn would be beneficial.

3.3.4

Rehabilitation

Rehabilitation was observed during the site visit as being generally undertaken in accordance with the MOP. Small areas of what will be rehabilitated into woodland occur, which are currently at the MOP phase of 'ecosystem establishment'. This phase has completion criteria defined in the MOP - Table 16 as:

- weed and vertebrate pest species to be monitored and managed according to the Biodiversity Management Plan and (draft) Vertebrate Pest Management Plan;
- faunal exclusion fencing and tree guards to exclude vertebrate pest species;
- implementation of bushfire management measures according to the Bushfire Management Plan; and
- native vegetation associations are established.

Findings include:

- Weed monitoring is evident in monthly site inspection checklists, although quarterly vertebrate pest monitoring could not be verified. ;
- No fauna exclusion measures were observed in rehabilitated areas;
- No bushfire management plan is in place (confirmed as no longer required by the Site Environmental Manager), and
- Native species associations are being established in the most recent rehabilitation area, although amelioration measures will be required to enhance the native species presence in the older rehabilitation areas (southern emplacement and southern part of northern emplacement).

Notwithstanding, appraisal of rehabilitated woodland areas includes observations that when compared with completion criteria at relinquishment, areas predicted to fail without intervention (amelioration through infill planting presuming the soil chemistry is conducive to native species growth) are:

- west-facing slope of southern emplacement is designated as destined to be a rehabilitated woodland however currently is a pasture grass-covered slope with some planted native trees; and
- southern end of west-facing slope of northern extension area is designated as destined to be a rehabilitated woodland and is currently rows of trees with pasture grass understorey and very little native shrub, herb or grass diversity.

The northern end of west-facing slope of northern extension area is designated as destined to be rehabilitated woodland and young germination from the soil seed bank contains very good native species diversity (indicating good topsoil management and reuse), however management of weeds will be important to maintain native species integrity.

Notably there are no completion criteria in the MOP for woodland rehabilitation for relinquishment so therefore no predictions are possible to identify if rehabilitated woodlands are trending towards ultimate or relinquishment completion criteria.

A compliance check of the MCoA, EPL, and MLs conditions has been completed. Non-compliances and observations for each component are summarised in *Table 3.2*.

A full review and audit findings for each component are under the following Annexures:

- *Annex A* - MCoA PA 11_0047
- *Annex B* - Statement of Commitments (SoC)
- *Annex C* - EPL 12365
- *Annex D* - Mining Leases 1579, 1693 and 1685
- *Annex E* - EPBC Approval

As discussed in *Section 2.3*, a qualitative risk assessment was also completed on the findings as follows:

- non-compliance assessed as 'high' have been colour coded red;
- non-compliance assessed as 'moderate' have been colour coded orange;
- non-compliance assessed as 'low' have been colour coded yellow; and
- administrative non-conformances have been colour coded blue.

Table 3.2 Summary of Audit Findings

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action						
Minister's Conditions of Approval PA 11_0047										
2.14	<p>By the end of December 2013, or as otherwise agreed by the Secretary, the Proponent shall surrender the existing development consent (DA-88-4-2005) for the Tarrawonga Coal Mine in accordance with Section 104A of the EP&A Act.</p> <p>Prior to the surrender of this development consent, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of the development consent.</p>	<p>Auditor reviewed letter from Department of Planning and Environment confirming voluntary surrender of DA-88-4-2005.</p> <p>DA surrendered during the reporting period but not by December 2013.</p> <p>No further action required.</p>	ANC							
2.21	<p>By the end of March 2013, unless otherwise agreed by the Secretary, the Proponent shall enter into a planning agreement with Council in accordance with:</p> <p>(a) Division 6 of Part 4 of the EP&A Act; and</p> <p>(b) the terms of the Proponent's offer provided in Appendix 3.</p>	<p>Voluntary Planning Agreement between TPCL and Narrabri Shire Council dated 26 October 2016. Given the date of the agreement, the condition is considered an administrative non-compliance.</p> <p>No further action required.</p>	ANC							
3.8	<p>The Proponent, together with the owners of the Rocglen and Vickery coal mines, shall ensure that the noise generated on public roads by the Project and the other mines, does not exceed the criteria in Table 4 at any existing residence on privately-owned land.</p> <p>Table 4: Road traffic noise criteria dB(A)</p> <table><tr><td>Land</td><td>Day and Evening LAeq (15 hour)</td><td>Night LAeq (9 hour)</td></tr><tr><td>All privately-owned residences</td><td>60</td><td>55</td></tr></table> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner</p>	Land	Day and Evening LAeq (15 hour)	Night LAeq (9 hour)	All privately-owned residences	60	55	<p>No agreements are held with landowners adjacent to haul route.</p> <p>No coal haulage at night.</p> <p>Noise monitoring reports reviewed demonstrated no exceedence of criteria.</p> <p>Three monitoring locations (2 properties) – 2 residences on Brooklyn and Werona</p> <p>Report states that for practical reasons it is not possible to undertake monitoring for 15 hours (entire day period). The approach here is to monitor noise over a representative one hour period and utilise the results of this to theoretically</p>	ANC	
Land	Day and Evening LAeq (15 hour)	Night LAeq (9 hour)								
All privately-owned residences	60	55								

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action
	to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.	predict noise over the compliance period. TMCL should consider updating this condition to reflect the approach used to ensure 100% compliance.		
3.9	<p>The Proponent shall:</p> <p>(a) ensure that:</p> <ul style="list-style-type: none"> - all trucks, dozers, drills and excavators purchased for used on the site after the date of this approval are commissioned as noise suppressed (or attenuated) units; - improvements are made to existing noise suppression equipment as improved technology becomes available where reasonable and feasible; and <p>(b) monitor and report on the implementation of these requirements annually on its website.</p>	<p>(a) During the reporting period sound power level testing identified that three excavators and a drill had results greater than projected.</p> <p>(b) AEMR – authorisation date 28/2/2017 – demonstrates annual sound power level testing.</p>	NC	
3.11	<p>The Proponent shall:</p> <p>(a) implement best management practice to minimise all operational, low frequency, road and rail traffic noise levels associated with the project;</p> <p>(b) operate a comprehensive on-site noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval;</p> <p>(c) maintain the effectiveness of noise suppression equipment on plant at all times and ensure defective plant is not operationally used until fully repaired;</p> <p>(d) ensure that noise attenuated plant is deployed</p>	<p>The Noise Management Plan was approved by the Department 20 Jan 2015. NMP developed to address the operational aspects detailed. It is noted that the NMP did not have the Leard Forest Mining Precinct Noise Management Strategy included.</p> <p>(a) all roads are sealed that are used as haul roads by the mine, monitoring of road traffic noise is undertaken, though is undertaken at one hour intervals and extrapolated rather than for an entire 15 hour period as required by the condition;</p> <p>(b) meeting minutes observed with reference to noise conditions and compliance. Real time noise monitoring records were observed, which displayed</p>	ANC	

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action
	<p>preferentially in locations near to sensitive receivers;</p> <p>(e) minimise the noise impacts of the project during meteorological conditions under which the noise limits in this approval do not apply (see condition 13);</p> <p>(f) ensure that project related trains on the Boggabri spur line only use locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);</p> <p>(g) use its best endeavours to ensure that project-related rolling stock supplied by service providers on the Boggabri rail spur line is designed, constructed and maintained to minimise noise; and</p> <p>(h) co-ordinate the noise management on site with the noise management at other mines within the Leard Forest Mining Precinct, to minimise the cumulative noise impacts of these mines,</p> <p>to the satisfaction of the Secretary.</p>	<p>wind speed data. Proactive and reactive noise mitigation measures were observed on a site toolbox talk discussion board.</p> <p>(c) there were exceedences noted in the report above – the report outlines a drill that was taken out of service due to SPL exceedences. Also outlines proposed works for 2xTerex RH170 excavators and Hitachi 1900 Excavator</p> <p>Exc 530 Timing Letter_28020217 – demonstrates attenuation modifications</p> <p>Environment Officer indicated in interview that some plant continues to operate even though an exceedence of sound power level has been recorded. The justification given was that it is reasonable and feasible for plant to still to operate based on the evidence that exceedences of criteria at sensitive receiver monitoring locations has occurred only once in the reporting period. The commitment states that 'defective plant is not used until fully repaired'. Hence this is considered an ANC.</p> <p>(d) only attenuated plant are excavators, so no preferential requirement. No trucks within the fleet are noise attenuated.</p> <p>(f) Rail spur is not triggered because road is only method of transportation.</p> <p>(g) Rail spur is not triggered because road is only method of transportation.</p> <p>(h) The NMP states that the Leard Forest</p>		

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action
		Mining Precinct Noise Management Strategy has been developed and is awaiting approval from the DP&E. No evidence was sited that approval has been received, hence this is an Administrative Non Compliance (ANC)		
3.30	<p>For the life of the project, the Proponent shall ensure that there is a meteorological station in the vicinity of the site that:</p> <p>(a) complies with the requirements in the <i>Approved Methods for Sampling of Air Pollutants</i> in New South Wales guideline; and</p> <p>(b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the <i>NSW Industrial Noise Policy</i>, unless a suitable alternative is approved by the Secretary following consultation with the EPA.</p>	<p>The weather station is capable of continuous monitoring but has intermittent periods where continuous recording is not achieved due to signal drop out, as such this is considered an ANC.</p> <p>Calibration reports for the weather station were provided and reviewed.</p>	ANC	
3.35	<p>The Proponent shall prepare and implement a Goonbri Creek Diversion and Flood Bund Concept Design Plan, to the satisfaction of the Secretary. The plan must:</p> <p>(a) be prepared in consultation with DPI, OEH and the LLS;</p> <p>(b) be submitted to the Secretary for approval by December 2016;</p> <p>(c) set out the vision statement for the creek diversion;</p> <p>(d) assess the surface water and groundwater quality, ecology, hydrological (including flooding) and geomorphic baseline conditions within the creek;</p> <p>(e) set out the construction program for the creek diversion and LPB, describing how the work would be staged, and integrated with mining operations;</p> <p>(f) describe the revegetation program for the creek</p>	<p>Auditor reviewed a response to DP&E regarding Goonbri Creek Diversion Design Plan. The letter states that correspondence was not received by December 2016.</p>	ANC	

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action
	<p>diversion and the use of a range of suitable native species;</p> <p>(g) establish the water quality, ecology, hydrological (including flooding) and geomorphic performance and completion criteria for the creek diversion and LPB based on the assessment of baseline conditions; and</p> <p>(h) be revised in consultation with DPI, OEH and the LLS, and resubmitted for approval by the Secretary in response to the findings of the detailed technical design required in condition 36 and the Monitoring and Management Plan in condition 38.</p>			
3.41	<p>The Proponent shall contribute to the funding and preparation of the Leard Forest Mining Precinct Regional Biodiversity Strategy, as required under the approvals for the Boggabri coal mine and Maules Creek coal mine, to the satisfaction of the Secretary.</p>	<p>Group Superintendent - Environment (Compliance), Site Environment Officer and Specialist-Offsets interview stated that the responsibility for the LFMPRBS was taken over by the DP&E, although no evidence of the removal of Whitehaven's responsibility to contribute to the preparation of the plan is available.</p> <p>A spreadsheet reviewed by the auditor identified the breakdown of relative financial responsibility for some plans between the three projects, however it contains no dollar values for the LFMPRBS.</p> <p>ERM considers a non-compliance on the basis of:</p> <ul style="list-style-type: none"> • No evidence of reports meeting each of the timings for Stages 1, 2 & 3. • No evidence of Whitehaven financial contribution to the strategy. 	ANC	

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action
		No evidence of Whitehaven contribution to the preparation of the LFMPRBS (or in the case that the DP&E took this over, evidence of that agreement).		
3.49	<p>By the end of May 2013, the Proponent shall lodge a Conservation and Biodiversity Bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by:</p> <p>(a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and</p> <p>(b) employing a suitably qualified quantity surveyor to verify the calculated costs, to the satisfaction of the Secretary.</p> <p>If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.</p> <p>If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.</p> <p>With the agreement of the Secretary, this bond may be combined with rehabilitation security deposit administered by DRE.</p>	<p>Predates this audit period. The previous IEA (SMEC 2014) stated against this condition: "Biodiversity Management Plan not approved, not able to calculate bond amount, not compliant with deadline stated" and adjudged as "Not Compliant Administrative".</p> <p>No evidence of a conservation bond exists which appears to have been required by May 2013 (or if not, then following the BMP preparation (ELA April 2015).</p>	ANC	
3.51	The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the project and the Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This Strategy must	An Aboriginal Heritage Conservation Strategy (AHCS) has been prepared in consultation with OEH and submitted to the Secretary, within an approved	ANC	

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action
	<p>enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long-term protection and management. The Strategy must:</p> <p>(a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with OEH, the local Aboriginal community and other mines within the Leard Forest Mining Precinct, and submitted to the Secretary for approval within 12 months from the date of project approval;</p> <p>(c) identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas;</p> <p>(d) identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct;</p> <p>(e) identify a range of options for enhancing and conserving Aboriginal cultural heritage values, with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy areas or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and</p> <p>(f) consider cumulative impacts and potential for developing joint initiatives with other mines within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values.</p>	extension period. However the Strategy is yet to be approved by the Secretary and is awaiting approval.		

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action										
3.61	<p>The Proponent shall rehabilitate the site to the satisfaction of DRE. This rehabilitation must be generally consistent with the proposed Rehabilitation Strategy described in the EA (and depicted conceptually in Appendix 8) and comply with the objectives in Table 15.</p> <p>Table 14: Rehabilitation objectives</p> <table><tr><th>Feature</th><th>Objective</th></tr><tr><td>Mine site (as a whole)</td><td>Safe, stable and non-polluting; Constructed landforms drain to the natural environment; Landforms fully integrated with the final landform for the Boggabri coal mine/</td></tr><tr><td>Final void</td><td>Minimise the size and depth of the final void as far as is reasonable and feasible; Minimise the drainage catchment of the final void as far as is reasonable and feasible; Negligible high wall instability risk; Minimise risk of flood interaction for all flood events up to and including the Probable Maximum Flood level.</td></tr><tr><td>Surface infrastructure</td><td>To be decommissioned and removed, unless DRE agrees otherwise</td></tr><tr><td>Agricultural land</td><td>Establish a minimum of 210 hectares of Class 3 agricultural suitability land, including 160 hectares with cropping capability</td></tr></table>	Feature	Objective	Mine site (as a whole)	Safe, stable and non-polluting; Constructed landforms drain to the natural environment; Landforms fully integrated with the final landform for the Boggabri coal mine/	Final void	Minimise the size and depth of the final void as far as is reasonable and feasible; Minimise the drainage catchment of the final void as far as is reasonable and feasible; Negligible high wall instability risk; Minimise risk of flood interaction for all flood events up to and including the Probable Maximum Flood level.	Surface infrastructure	To be decommissioned and removed, unless DRE agrees otherwise	Agricultural land	Establish a minimum of 210 hectares of Class 3 agricultural suitability land, including 160 hectares with cropping capability	<p>Field inspection observed rehabilitation on the northern and southern emplacements. Refer MCoA 50 and Section 8.2 for appraisal.</p> <p>The MOP (2015-2020) (SLR 2016) details the procedure to meet these conditions, (specifically sections 5 and 6) and plans showing the annual progress of site land areas during the MOP (Plan 3), trending towards the final land use (Plan 4). It identifies Domains including the final void, surface infrastructure, agricultural land and remaining land and sets out the actions to meet the condition's requirements. No agricultural land will be established during this MOP term (MOP section 7, Table 21) therefore trajectory towards the 210ha of agricultural land is not assessable. MOP section 7, Table 20 states that during the term of the MOP 78.93ha of woodland areas will be rehabilitated.</p> <p>The MOP section 7, Table 20 shows cumulative rehabilitation will be at 64.9ha at end of calendar year 2016). The AR (2016) states that active rehabilitation area is 59ha and area being prepared for rehabilitation is 9.9ha (totalling 68.9ha). Those numbers for 2017 are 70.76ha (MOP Table 20) and 68.9ha active rehabilitation and 5.8 in preparation for rehabilitation (totalling 74.7ha).</p> <p>Goonbri Creek diversion requirements are not triggered.</p>	O	
Feature	Objective													
Mine site (as a whole)	Safe, stable and non-polluting; Constructed landforms drain to the natural environment; Landforms fully integrated with the final landform for the Boggabri coal mine/													
Final void	Minimise the size and depth of the final void as far as is reasonable and feasible; Minimise the drainage catchment of the final void as far as is reasonable and feasible; Negligible high wall instability risk; Minimise risk of flood interaction for all flood events up to and including the Probable Maximum Flood level.													
Surface infrastructure	To be decommissioned and removed, unless DRE agrees otherwise													
Agricultural land	Establish a minimum of 210 hectares of Class 3 agricultural suitability land, including 160 hectares with cropping capability													

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action
	<p>All land - excluding the 210 ha of agricultural land and the final void</p> <p>Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of:</p> <ul style="list-style-type: none"> - local native plant species (particularly Box Gum Woodland EEC); and - a landform consistent with the surrounding environment 	<p>Notable site observations regarding features:</p> <p>Mine site (as a whole) - rehabilitated areas appear to be of slope angles to manage erosion. Drainage structures observed on northern and southern emplacements to direct water off the rehabilitated slopes.</p> <p>Final void - objectives not triggered.</p> <p>Agricultural land - no areas have been rehabilitated yet (nor are required by the MOP), therefore not triggered.</p> <p>Woodland areas - refer field inspection comment above.</p> <p>Community - Site Environment Officer stated that public safety is managed by maintaining a secure site. Assessing performance to manage adverse socio-economic consequences is not triggered as planned closure is outside the scope of this audit and the current MOP period (2015-2020).</p>		
	Goonbri Creek diversion and LPB	See Table 13		
	Community	<p>Ensure public safety;</p> <p>Minimise the adverse socio-economic effects associated with mine closure.</p>		
5.2	<p>The Proponent must assess and manage project-related risks to ensure that there are no exceedences of the criteria and/or performance measures in schedule 3. Any exceedence of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedence of these criteria and/or performance measures has occurred, the Proponent must at the earliest opportunity:</p> <p>(a) take all reasonable and feasible steps to ensure that the exceedence ceases and does not reoccur;</p>	<p>These documents demonstrated a non-compliance with regards to plant sound power levels and avoiding the requirement to stop using the equipment, on the basis that attended noise monitoring at residences has identified no noise exceedences since March 2015. TCPL are attempting to manage this by removing the criteria to cease using SPL exceeding material at the site. No evidence that this has been accepted to the satisfaction of the</p>	ANC	

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	(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other courses of action; and (c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.	Secretary.		
<i>Statement of Commitments</i>				
1.2.30	The Project final landform and revegetation program will provide for a combination of approximately 752 ha of native woodland/forest and some 210 ha of Class 3 agricultural suitability land.	<p>MOP (2015-2020) (SLR 2016) sets out rehabilitation actions to achieve commitment (specifically sections 5-7, with monitoring in section 8), and plans showing annual progress through the years of the MOP (Plan 3) and final land use (Plan 4).</p> <p>Annual review reports rehabilitation progress for 2016 (which is largely in accordance with the MOP with a reported greater area of actual rehabilitation vs predicted).</p> <p>No verification of the areas contained in the final landform areas is available.</p> <p>MOP and Annual Reports should include table showing progress towards final landform areas.</p>	O	
1.2.31	The agricultural land will be capable of being used for pasture production for grazing and occasional cropping. Revegetation of woodland/forest areas will include the planting of species characteristic of the local vegetation communities, including species from the Box-Gum Woodland endangered ecological community.	<p>MOP (2015-2020) (SLR 2016) Plan 4 shows post mining land use containing agricultural land, and section 5.2, Table 10 includes commitment for rehabilitation to agricultural land to that class.</p> <p>MOP (2015-2020) (SLR 2016) identifies no rehabilitation to agricultural land is planned during this MOP period (Plan</p>	O	

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		<p>3).</p> <p>Field inspection identified tree species characteristic of the BGW EEC. Youngest rehabilitation (the farthest north) contains tree and shrub species of the BGW EEC although the ground layer germination appears of questionable species composition when compared with the BGW EEC list. Older rehabilitation areas will require species augmentation to enhance values to be more closely aligned to the BGW EEC (from the very poor quality southern emplacement slopes which will require significant rehabilitation rework to the western slope of the northern emplacement which has tree species however will require infill plantings or seed spreading).</p> <p>Rehabilitation areas are not currently non-compliant however work will be required to maintain integrity of germinating areas (the youngest) and enhance the native species diversity and value in the older areas</p>		
1.2.33	A Rehabilitation Management Plan will be developed and implemented for the Project, including a rehabilitation monitoring program designed to track the progress of rehabilitation and revegetation.	<p>The auditor understands there is not RMP for the project. Site Environmental Officer in site interview stated that the BMP (ELA April 2015) and the MOP (2015-2020) (SLR 2016) together form the RMP. Those documents together include the relevant detail as cross referenced below.</p> <p>MOP (2015-2020) (SLR 2016) details rehabilitation monitoring (section 8).</p>	O	

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		<p>BMP (ELA April 2015) details rehabilitation monitoring requirements for flora and fauna (including monitoring weeds and feral species).</p> <p>Implementation of the measures identified in (e), (f) and (g) is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself it is not fully implementing MOP Section 8.1.3 with no monitoring occurring in the regenerating native vegetation in the north east corner of ML1579.</p> <p>No evidence available of implementation of parameters stated in section 5 of the BMP (ELA April 2015) including: weeds, feral animal monitoring and nest box monitoring.</p> <p>The MOP (2015-2020) (SLR 2016) section 3.2.4 states that vertebrate pests will be monitored on an as needs basis (not seasonal) and this appears to be done in an ad hoc manner. That section states weeds will be monitored monthly in areas including rehabilitation areas. No evidence exists of this occurring.</p> <p>TCPL to develop a clear, one-page annual monitoring schedule that integrates all requirements from all plans to make it clear what needs to be monitored and when.</p> <p>Evidence of regular monitoring of</p>		

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		rehabilitation ecological risks and performance is piecemeal or absent (beyond only the woodland rehabilitation monitoring undertaken annually in spring).		
EPL 12365				
L4.4	<u>Determining Compliance</u> To determine compliance: a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located: i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or ii) within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve. b) with the LA1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling façade. c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located: i) at the most affected point at a location where there is no dwelling at the location; or ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.	Monitoring locations are stated in the NMP and in quarterly monitoring report. Site inspection demonstrated where noise monitoring is undertaken. The location of monitoring at Barbers Lagoon is on the property boundary however the residence is approximately 200m from the monitoring location. Hence this is considered a non-compliance.	NC	
O1.1	Licensed activities must be carried out in a competent manner.	Emplacement, topsoil and timber reuse observed. Training matrix documents training	O	

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	<p>This includes:</p> <p>a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and</p> <p>b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</p>	<p>needs for all employees.</p> <p>TCPL has well developed waste management strategies for all liquid and solid wastes.</p> <p>The identified non-compliances recorded against EPL limits as discussed against other relevant conditions is not considered reflective of a lack of competence or effort with regard to environmental management.</p> <p>The auditor observed an area for improvement in relation to housekeeping and storage of chemicals and hydrocarbons at the maintenance yard and laydown. One example included compatibility of stored Class 2 and Class 3 chemicals in same cabinet in Boiler Workshop. It is recommended that all chemicals are stored and appropriately segregated in cabinets.</p>										
O4.2	<p>The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The PIRMP must document systems and procedures to deal with all types of incidents (e.g. spills, explosions, fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment.</p>	<p>PIRMP updated annually however online PIRMP dated August 2015.</p> <p>Update the website with up to date PIRMP.</p>	O									
M2.2	<p>Air Monitoring Requirements</p> <p><u>Point 28</u></p> <table><tr><td>Pollutant</td><td>Unit of measure</td><td>Frequency</td><td>Sampling method</td></tr><tr><td>PM10</td><td>Micrograms</td><td>Continuous</td><td>AM-22</td></tr></table>	Pollutant	Unit of measure	Frequency	Sampling method	PM10	Micrograms	Continuous	AM-22	<p>Technical non-compliance as continuous monitoring not able to be achieved due to periodic connection failure and maintenance.</p> <p>Does not require notification of NC as</p>	NC	
Pollutant	Unit of measure	Frequency	Sampling method									
PM10	Micrograms	Continuous	AM-22									

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		per cubic metre			impact negligible.																											
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.				Real time air quality monitor does not meet AM-22 as required by EPL. Note: Dual monitoring system measures two different particulates; one result is calculated rather than measured which does not meet AM-22.	NC																										
M4.1	For each monitoring point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns. <u>Point W1</u> <table><tr><td>Parameter</td><td>Unit of measure</td><td>Frequency</td><td>Averaging period</td><td>Sampling method</td></tr><tr><td>Temperature @ 2 metres</td><td>°C</td><td>Continuous</td><td>15 minute</td><td>AM-4</td></tr><tr><td>Wind direction @ 10 metres</td><td>°</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr><tr><td>Wind speed @ 10 metres</td><td>m/s</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr><tr><td>Sigma theta @ 10 metres</td><td>°</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr></table>				Parameter	Unit of measure	Frequency	Averaging period	Sampling method	Temperature @ 2 metres	°C	Continuous	15 minute	AM-4	Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4	Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	The requirement for continuous monitoring is not met due to temporary outages as a result of technical issues such as internet drop out or temporary instrument failure Maintenance of accuracy and proper functioning of the monitor was demonstrated by the calibration report provided for weather station.	NC	
Parameter	Unit of measure	Frequency	Averaging period	Sampling method																												
Temperature @ 2 metres	°C	Continuous	15 minute	AM-4																												
Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4																												
Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4																												
Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4																												

Item No	Assessment Requirement					Comment	Audit Classification	TCPL Response / Action
	Rainfall	Mm/h	Continuous	1 hour	AM-4			
	Solar radiation	W/m2	Continuous	15 minute	AM-4			
	Temperature @ 10 metres	°C	Continuous	15 minute	AM-4			
	Additional requirements - Siting - Measurement		Continuous		AM-1 & AM-4 AM-2 & AM-4			
M7.1	For each monitoring point specified below, the Licensee must monitor the noise or vibration parameter specified in Column 1. The Licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns. <u>Point TN2, TN3, TN4</u>					Auditor review identified that LAeq (15 minute) is all that is displayed in reports prior to quarter four 2016. All other units of measurement were not provided prior to quarter 4 2016 and hence these reports are considered non-compliant. Since quarter four 2016 this oversight has been rectified and all units of measurement are displayed.	NC	
	<i>Parameter</i>	<i>Unit of measure</i>	<i>Frequency</i>	<i>Sampling method</i>				
	Ambient noise	LAeq (15 minute) LAmax LA1 LA10 LA90 LAmin	Quarterly	As detailed in the most recently approved "Noise Management Plan" for the premises.				
M7.4	For the purpose of conditions M7.1, M7.2 and M7.3 the monitoring locations are described as:					The auditor observed the noise monitoring locations in the field. Monitoring locations are stated in the NMP and in quarterly monitoring report. Site inspection demonstrated where noise monitoring is undertaken. The location of monitoring at Barbers Lagoon is on the property boundary however the residence is approximately 200m from the monitoring location. Hence this is	NC	
	<i>EPA ID number</i>	<i>Description of location</i>						
	N2	Portable monitor						
	TN2	Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).						

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	<div>TN3</div> <div>Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).</div> <div>TN4</div> <div>Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).</div>	considered a non-compliance. New EPL includes TB1.		
<p><i>Note: Point N2 is a portable monitor enabling the monitor to be relocated to areas of potential greatest impact. The licensee is responsible to ensure that it is located at the most suitable location.</i></p> <p><i>Note: The location, frequency of monitoring and the parameters to be monitored may be varied by the EPA once the variability of the noise impact is established.</i></p>				
Mining Lease 1579				
2.1 (b)	The Mining Operations Plan together with environmental conditions of development consent and other approvals will form ongoing monitoring of the project.	<p>Implementation of monitoring as required in the MOP is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself is not fully implementing MOP section 8.1.3 with no monitoring occurring in the regenerating native vegetation in the north east corner of ML1579.</p> <p>The MOP (2015-2020) (SLR 2016) section 3.2.4 states that vertebrate pests will be monitored on an as needs basis however this was not verified during the audit. That section states weeds will be monitored monthly in areas including</p>	NV	

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		rehabilitation areas (monthly inspection checklists were sighted containing a question regarding weeds in rehabilitation areas).		
4a	The Plan must present a schedule of proposed mine development for a period of up to seven (7) years and contain diagrams and documentation which identify:- area(s) proposed to the disturbed under the Plan;	MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse). Section 2.3.10 contains a table showing the material production schedule for six years. Plans are only for 5 years and material production schedule is only for 6 years, as such this is considered to be an ANC.	ANC	
4e	The Plan must present a schedule of proposed mine development for a period of up to seven (7) years and contain diagrams and documentation which identify:- existing flora and fauna on site	BMP (ELA April 2015) describes and demonstrates the flora and fauna on the site (especially shown in Figures 3.1, 3.2 and 3.3). Not contained in MOP.	ANC	
4g	The Plan must present a schedule of proposed mine development for a period of up to seven (7) years and contain diagrams and documentation which identify:- areas of particular environmental, ecological and cultural sensitivity and measures to protect these areas	BMP (ELA April 2015) describes and demonstrates the flora and fauna on the site (especially shown in Figures 3.1, 3.2 and 3.3). Not contained in MOP.	ANC	
11b	Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120dB (linear) and does not exceed 115dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of	A number of exceedences of blast overpressure on project related land - (January 2015 was the item observed by auditor). These have previously been reported to the EPA but no longer reported as they are on project land. Review of records available for property purchased and blasting records	NC	

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	Environment and Conservation.	demonstrated no exceedences prior to the properties being purchased by TCPL. The AEMR of the 2015/2016 reporting period outlined that a blast on 19 August 2016 generated a Blast overpressure greater than the 120dB limit and exceeded limit of 5% of blasting above 115dB over a period of 12 months.		
15.1	At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.	It could not be demonstrated that the notification occurred 28 days prior to the commencement of drilling operations. Email demonstrated that the notification had taken place (but could not be determined if 28 days prior to drilling commencement.	ANC	
15.2d	If the lease holder drills exploratory drill holes he must satisfy the Director-General that:- if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape	Auditor review of the 2016 Exploration report states that 'Selected seams were tested for gas desorption and composition' - but clear evidence of noxious gas testing could not be identified. If not currently being undertaken, noxious gas testing needs to be conducted and clearly stated in report	NC	
15.2e	If the lease holder drills exploratory drill holes he must satisfy the Director-General that:- if any drill hole meets an artesian or sub artesian flow it is effectively sealed to prevent contamination of aquifers	Auditor review of the exploration reports could not identify discussion of interaction with artesian flow.	ANC	
15.2g	If the lease holder drills exploratory drill holes he must satisfy the Director-General that:- once any drill hole ceases to the used the land and its	Auditor review of the exploration report could not identify a clear statement on the final condition of the drill hole	ANC	

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	immediate vicinity is left clean, tidy and stable condition.	(tidiness or cleanliness) other than the fact that the holes were grouted. Provide indication of final condition of drill hole on completion to address this condition.		
<i>Mining Lease 1693</i>				
5a	The lease holder must report any environmental incidents. The report must: (i) be prepared according to any relevant Departmental guidelines; (ii) be submitted within 24 hours of the environment incident occurring;	Auditor document review and interview with the Environmental Officer identified that no environmental incidents occurred on this mining lease. Other incidents have occurred and evidence of reporting has been observed. The incident report referenced was not submitted within 24 hours. Report all environmental incidents within 24 hours of the incident occurring.	NC	
<i>Mining Lease 1685</i>				
3f	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii) be submitted annually on the grant anniversary date (or at other such times as agreed by the Minister); and (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resources.nsw.gov.au/environment . <i>Note: the Rehabilitation Report replaces the AEMR</i>	There is no standalone <i>Rehabilitation Report</i> and the contents are contained within the Annual Review (2016). (i) Annual Review (2016) section 8 does not contain a detailed comparison of landscape performance against completion criteria and is qualitative in nature. NC: no detailed review of progress against completion criteria. (ii) ML conditions dated 18 July 2013. Annual Review (2016) dated 28 February 2017 reporting for the period 1 May 2016 to 31 December 2016. ANC: dates are misaligned. (iii) Annual Review (2016) generally in accordance with guidelines.	NC	

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4c	The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining licence.	<p>Environmental Officer interview identified that reports have been submitted in conjunction with ML1579 reporting timeframes.</p> <p>AEMR/ER may provide demonstration that the methodology to provide all on the same date as the 1579 is satisfied – though likely was outside of the reporting period for this audit. Dates of submission did seem varied and inconsistent.</p> <p>Consolidated report summarises all leases areas and is provided at one time, corresponding to the reporting period for one of the leases. This eliminates the requirement to provide similar report at three different times. Evidence for approval of this approach from Secretary to be provided. If not available such approval is to be obtained.</p>	ANC	
5a	<p>The lease holder must notify the Department of all:</p> <p>(i) breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and</p> <p>(ii) breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the <i>Protection of the Environment Administration Act 1991</i>) arising in connection with significant surface disturbing activities, including mining operations, mining purposes and prospecting operations, under this mining lease. The notification must be given</p>	<p>No environmental incidents occurred on this mining lease.</p> <p>Incidents against other conditions have occurred as detailed in this report and evidence of reporting has been observed. However, the incident report referenced was not submitted within 24 hours.</p> <p>Report all environmental incidents within 24 hours of the incident occurring as this is the most stringent criteria at the site.</p>	NC	

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	immediately after the lease holder becomes aware of the breach.			
5b	<p>The lease holder must submit an Environmental Incident report to the Department within seven (7) days of all breaches referred to in condition 5(a) (i) and (ii). The Environmental Incident report must include:</p> <ul style="list-style-type: none"> (i) The details of the mining lease; (ii) Contact details for the lease holder; (iii) A map identifying the location of the incident and where material harm to the environment has or is likely to occur; (iv) A description of the nature of the incident or breach, likely causes and consequences; (v) A timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in 5(a). (vi) A summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface disturbing activities, including mining operations, mining purposes and prospecting operations under this mining lease. <p><i>Note: the lease holder should have regard to any relevant Director-general's guidelines in the preparation of an Environmental Incident Report. Refer to www.resources.nsw.gov.au/environment for further details.</i></p>	<p>No environmental incidents occurred on this mining lease.</p> <p>Incidents against other conditions have occurred as detailed in this report and evidence of reporting has been observed. However, the incident report referenced was not submitted within 24 hours.</p> <p>Report all environmental incidents within 24 hours of the incident occurring as this is the most stringent criteria at the site.</p>	NC	
EPBC Approval (2011/5923)				
3	<p>Disturbance Areas</p> <p>The person taking the action must submit to the Minister for approval, by 30th June 2016, an approach that:</p> <ul style="list-style-type: none"> (a) limits the maximum disturbance (in hectares) specified for each of the years 5, 10, 15, and 17 from the 	<p>TCPL submitted Disturbance Limits Assessments and Approach in accordance with this condition at 7:19am on 1 July 2017.</p>	ANC	

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	<p>date of this approval of the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community and the habitat or potential habitat for the Regent Honeyeater, Swift Parrot and Greater Long-eared Bat;</p> <p>(b) incorporates an analysis, undertaken by independent ecological experts approved by the Department, that demonstrates the maximum disturbance limits which will minimise any impact on relevant Matters of National Environmental Significance;</p> <p>(c) demonstrates collaboration with the person taking the action to develop and operate the Boggabri Coal Project (EPBC 2009/5256) and the person taking the action to develop and operate the Maules Creek Coal Project (EPBC 2010/5566), in order to minimise progressive disturbance limits across all three sites. The progressive disturbance limits are to be reflected in the development of the Leard Forest Mining Precinct Biodiversity Strategy.</p>			
7	<p>Direct Offsets</p> <p>The person taking the action must verify through independent review the quantity and condition class of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community and the quantity and quality of habitat for the regent honeyeater, swift parrot and greater long-eared bat within all proposed offset areas including those proposed in the Environmental Assessment and any additional offsets as required at condition 8.</p> <p>Details of all independently verified offset areas must be submitted to the Minister for approval by 31 January 2014.</p> <p>The findings of the independent review must be</p>	Offset review completed by Eco Logical Australia 2013 Review submitted 5 December 2013. TCPL will publish the findings of the independent review once approved.	ANC	

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	published on the proponent's website.			
13	<p>Offset Management Plan</p> <p>The <i>Offset management plan</i> must include, but not be limited to, the following:</p> <p>(a) a text description and map which clearly defines the location and boundaries of the offset areas. This must be accompanied by the offset attributed and shapefiles</p> <p>(b) a description of the methodology and results of surveys measuring the baseline ecological conditions in the offset areas. This must be consistent with the State and Transition Model and include but not be limited to:</p> <p>(i) the extent and condition of all vegetation communities, including a description of the structure, floristics and tree age class representation of each community</p> <p>(ii) the extent and condition class of all areas of the White Box-Yellow Box-Blakely's Red Gum and Derived Native Grassland ecological community</p> <p>(iii) surveys targeting the regent honeyeater, swift parrot and greater long-eared bat</p> <p>(iv) the extent and quality of all areas of habitat for the regent honeyeater, swift parrot and greater long-eared bat</p> <p>(v) the location of all survey sites (including co-ordinated)</p> <p>(vi) photo reference points at survey sites</p>	<p>Brief detail partially addressing this condition contained in BMP (ELA April 2015) section 3.2. Not compliant because detail not in plan currently in force.</p> <p>In interview, Specialist-Offsets stated that more details will be contained in the forthcoming Willeroi Offsets Area (Stage 2) Plan (currently in draft form).</p>	NC	
13c	clearly defined ecological management objectives for the offset area	See above	NC	
13d	detailed description of all ecological management activities proposed to be undertaken, including maps and/or diagrams showing areas to be managed and the timing of the proposed activities	See above	NC	

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13e	<p>details of ongoing ecological monitoring programs, performance criteria, targets and provisions for adaptive management, including but not limited to:</p> <p>(i) a set of measurable ecological indicators for detecting changes to the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community, including those that may be ascribed to ongoing water stress</p> <p>(ii) a monitoring plan to assess the success of the management activities measured against the baseline condition. The monitoring must be statistically robust and able to quantify change in the condition of the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community and habitat for the regent honeyeater, swift parrot and greater long-eared bat. This should include the use of control sites and periodic ecological surveys to be undertaken by a qualified ecologist</p> <p>(iii) a list of performance criteria based on the ecological management objectives for the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community and habitat for the regent honeyeater, swift parrot and greater long-eared bat</p> <p>(iv) measures to exclude weeds from all offset areas for the period covered by this approval</p> <p>(v) a description of the potential risks to successful management against the performance criteria, and a description of the contingency measures that would be implemented to mitigate against these risks</p> <p>(vi) a process by which to report to the Department to progress of management activities undertaken in the offset areas and the outcome of those activities,</p>	See above	NC	

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	including identifying any need for improved management and activities to undertake such improvement			
13f	details of all parties responsible for management, monitoring and implementing the management activities, including their position or status as a separate contractor	See above	NC	
13g	details of the funding requirements for the ongoing management activities, including an estimate of the costs of the activities and details of the parties responsible for funding the activities.	See above	NC	
26	Mine Site Rehabilitation The <i>Mine Site Rehabilitation Plan</i> must be subject to an Independent review by a qualified ecologist. The findings of the Independent review must be published on the website of the person taking the action at the same time as the approved <i>Mine Site Rehabilitation Plan</i> is published.	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) Appendix A contains independent review. It is not published on the TMCL website.	ANC	
32	Reporting and Auditing Within three months of every 12 month anniversary of Commencement of construction, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. The person taking the action must continue to comply with this condition until such time as approved in writing by the Minister.	2016 Annual Compliance Report issued 9 June 2017 to DoEE as required. 2015 Annual Compliance Report published 30 September 2016, non-compliance as due 12 June 2016. Letter received from DoEE warning of contravention of the EPBC Act. No further action taken or required following late submission of 2015 report.	ANC	

Item No	Assessment Requirement	Comment	Audit Classification	TCPL Response / Action
37	<p>Publication of plans</p> <p>The person taking the action must maintain accurate records substantiating all activities and outcomes associated with or relevant to the above conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the Department.</p> <p>The person taking the action must maintain accurate records. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the Environment Protection and Biodiversity Conservation Act 1999, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.</p>	Although a request has not been made by the Department accurate records substantiating said activities are not maintained. .	ANC	

A review of commitments made in the management plans developed as part of the statutory instruments for the site was completed. Non-conformances and observations for each commitment in the plans are summarised by exception in *Table 3.3*.

As discussed in *Section 2.3*, a qualitative risk assessment was also completed on the findings as follows:

- non-compliance assessed as 'high' have been colour coded red;
- non-compliance assessed as 'moderate' have been colour coded orange;
- non-compliance assessed as 'low' have been colour coded yellow; and
- administrative non-conformances have been colour coded blue.

Table 4.3 Summary of Plan Implementation Review Findings

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
<i>Environment Management Strategy</i>				
5.1	<p>The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. The strategy must:</p> <p>(a) be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) provide the strategic framework for environmental management of the project;</p> <p>(c) identify the statutory approvals that apply to the project;</p> <p>(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;</p> <p>(e) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> - keep the local community and relevant agencies informed about the operation and environmental performance of the project; - receive, record, handle, and respond to complaints; - resolve any disputes that may arise during the course of the project; - respond to any non-compliance; - respond to emergencies; and <p>(f) include:</p> <ul style="list-style-type: none"> - copies of any strategies, plans and programs approved under the conditions of this approval; and - a clear plan depicting all the monitoring to be carried out in relation to the project. 	<p>EMS available online is dated 2009, developed under DA and current EMS not yet approved. It is required to be updated following each IEA to the satisfaction of the Secretary if necessary.</p> <p>a) Initially submitted to the Secretary for 27 May 2013 and subsequently 29 June 2017. Currently awaiting Secretary Approval.</p> <p>b) Compliant Section 5</p> <p>c) Refers to DA 88-4-2005 as opposed to PA 11_0047, only ML 1579. Approved EMS developed under DA and current EMS not yet approved.</p> <p>d) Compliant Section 4</p> <p>e) Compliant Section 6, 7 and 8</p> <p>Supporting individual Plans and standalone Environmental Monitoring Plan provided online.</p> <p>The EMS is currently not approved to the Satisfaction of the Secretary.</p>	ANC	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
<i>Noise Management Plan</i>				
3.12	<p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA, and be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> - best management practice is being employed; - the noise impacts of the project are minimised during meteorological conditions under which the noise limits in this approval do not apply; and - compliance with the relevant conditions of this approval; <p>(c) describe the proposed noise management system in detail;</p> <p>(d) include a risk/response matrix to codify operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p> <p>(e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from noise monitoring;</p> <p>(f) describe the measures that would be implemented to ensure the noise impacts from the operation of the Kamilaroi Highway overpass are minimised as far as practicable;</p> <p>(g) include a monitoring program that:</p> <ul style="list-style-type: none"> - uses attended monitoring to evaluate the performance of the project against all noise criteria in this approval, including a minimum of four days attended monitoring per quarter at locations agreed to by the Secretary, or more regularly where required; - uses real-time monitoring to support the proactive and reactive noise management system on site; - includes monitoring of inversion strength at an appropriate sampling rate to determine compliance with noise limits; - evaluates and reports on the effectiveness of the noise 	<p>NMP available online is dated 2014, in place and presented on website which meets criteria.</p> <ul style="list-style-type: none"> a) Initial document developed 27 May 2013, most recently updated following 2014 IEA. Secretary Approval dated 1 Jan 2015. b) Compliant Section 2.4, 3.1 c) Compliant Section 3 d) Compliant Section 3.3 e) Compliant Section 5.2 f) Refers to Road Noise Management Plan g) Compliant Section 3.1, 3.3, and Section 4 h) Compliant Section 2.6 with reference to <i>Leard Forest Precinct Noise Management Strategy, approved June 2017 to be appended to the updated NMP (see below).</i> <p>An updated NMP was submitted to DP&E 1 Feb 2017 and is awaiting approval.</p>	C	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>management system on site;</p> <ul style="list-style-type: none"> - provides for the annual validation of the noise model for the project (including the tenth percentile methodology); and (h) includes a Leard Forest Mining Precinct Noise Management Strategy, that has been prepared in consultation with other coal mines in the Precinct, to minimise the cumulative noise impacts of all mines within the Precinct, and includes: <ul style="list-style-type: none"> - a description of the measures that would be implemented to ensure that the noise management of the mines is properly co-ordinated to ensure compliance with the relevant noise criteria; - a suitable monitoring network for the precinct; - protocols for data sharing; and - procedures for identifying and apportioning the source/s and contribution/s to cumulative noise impacts for the operating mines and other sources, using the noise and meteorological monitoring network and appropriate investigative tools. 			
<i>Blast Management Plan</i>				
3.21	<p>The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> (a) be submitted to the Secretary for approval by the end of May 2013; (b) be prepared in consultation with the EPA and interested members of the local community who would potentially be affected by blasting; (c) propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site; (d) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> - best management practice is being employed; and - compliance with the relevant conditions of this approval; 	<p>BMP available online is dated December 2014, in place and presented on website which meets criteria.</p> <ul style="list-style-type: none"> a) Initial document developed Jan 2006, most recently updated following 2014 IEA. Secretary Approval dated 18 August 2015. b) Section 1 of BMP c) No alternative ground vibration limits proposed. d) Section 3 of BMP e) Section 3.4 of BMP f) Section 3.7 and appendix 3 of the 	C	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>(e) include a road closure protocol for blasting within 500 metres of a public road, that has been prepared in consultation with Council;</p> <p>(f) include a specific blast fume management protocol to demonstrate how emissions will be minimised, including risk management strategies if blast fumes are generated;</p> <p>(g) include a monitoring program for evaluating blasting performance, which includes:</p> <ul style="list-style-type: none"> - compliance with the applicable criteria; and - minimising blast fume emissions; and <p>(h) include a Leard Forest Mining Precinct Blast Management Strategy, that has been prepared in consultation with other mines within the Leard Forest Mining Precinct, to minimise cumulative blasting impacts.</p>	<p>BMP</p> <p>g) Section 5 of BMP</p> <p>h) Compliant Appendix 4 <i>Leard Forest Precinct Blast Management Strategy</i></p>		
<i>Air Quality and Greenhouse Gas Management Plan</i>				
3.29	<p>The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA and be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> - best practice management is being employed; - the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events; and - compliance with the relevant conditions of this approval; <p>(c) describe the proposed air quality management system;</p> <p>(d) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p> <p>(e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;</p>	<p>AQGGMP available online is dated January 2015, in place and presented on website which meets criteria.</p> <p>a) Section 1 of AQGGMP. Initial document developed Dec 2005, most recently updated following 2014 IEA. Submitted 27 May 2013. Secretary Approval dated 30 March 2015.</p> <p>b) Section 3 of AQGGMP</p> <p>c) Section 3 and 5 of AQGGMP</p> <p>d) Section 4.1 of AQGGMP</p> <p>e) Section 4.3 of AQGGMP</p> <p>f) Section 4.2 of AQGGMP</p> <p>a) Leard Forest AQMS dated 6 June 2017 to be attached to AQGGMP</p>	C	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>(f) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the project; - adequately supports the proactive and reactive air quality management system; - includes PM2.5 monitoring; - includes monitoring of occupied mine-owned residences and residences on the air quality affected land in Table 1, subject to the agreement of the tenant and/or landowner; - evaluates and reports on the effectiveness of the air quality management system; - includes sufficient random audits of operating responses to real time air quality management systems to determine the ongoing effectiveness of these responses in maintaining the project within the relevant criteria in this Schedule and the requirements of conditions 24 and 25, above; - includes a protocol for determining any exceedences of the relevant conditions in this approval; and <p>(g) includes a Leard Forest Mining Precinct Air Quality Management Strategy that has been prepared in consultation with other coal mines in the Precinct to minimise the cumulative air quality impacts of all mines within the Precinct, that includes:</p> <ul style="list-style-type: none"> - systems and processes to ensure that all mines are managed to achieve their air quality criteria; - a shared environmental monitoring network and data sharing protocol; - control monitoring site(s) to provide real time data on background air quality levels (i.e. not influenced by mining in the Leard Forest Mining Precinct and representative of regional air quality); - a shared predictive and real time air dispersion model covering the Leard Forest Mining Precinct to be used for assessment of cumulative impacts, optimising location of the shared real time 			

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>monitoring network, validation of air predictions and optimising mitigation measures; and</p> <p>- procedures for identifying and apportioning the source/s and contribution/s to cumulative air impacts for both mines and other sources, using the air quality and meteorological monitoring network and appropriate investigative tools such as modelling of post incident plume dispersion, dual synchronised monitors and chemical methods of source apportionment (where possible).</p>			
	<i>Goonbri Creek Diversion and Low Permeability Barrier – Monitoring and Management Plan</i>			
3.38	<p>The Proponent shall prepare and implement a Goonbri Creek Diversion and Low Permeability Barrier Monitoring and Management Plan to the satisfaction of the DPI and the Secretary. The plan must:</p> <p>(a) be prepared by a suitably qualified and experienced expert/s;</p> <p>(b) be endorsed by the DPI and approved to the Secretary prior to commencement of any works or construction on the Goonbri Creek diversion and LPB;</p> <p>(c) describe the monitoring and maintenance procedures to be implemented and the scheduling of these procedures;</p> <p>(d) demonstrate the monitoring system would be capable of timely detection of any failure or deficiency in the LPB and any impacts on Goonbri Creek and its associated alluvium;</p> <p>(e) describe the contingency measures that would be implemented in the event of a failure or deficiency in the LPB, or other impact on Goonbri Creek and its associated alluvium; and</p> <p>(f) identify the entity that would take responsibility for the future liabilities and costs associated with the long-term monitoring and maintenance of the LPB, flood bund, void and pit lake, and demonstrate that this entity's security and finances would be assured in the long term.</p>	<p>The Goonbri Creek Diversion and Low Permeability Barrier are yet to commence and therefore works have yet to be implemented.</p> <p>Environment Officer indicated that there is mine planning software that demonstrates extents of Goonbri Creek and alluvial deposits.</p>	NT	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
<i>Water Management Plan</i>				
3.39	<p>The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH, DPI and LLS, by suitably qualified and experienced person/s whose appointment has been approved by the Secretary,</p> <p>(b) be submitted to the Secretary for approval by the end of May 2013; and</p> <p>(c) in addition to the standard requirements for management plans (see condition 3 of schedule 5), include a:</p> <p>(i) <u>Site Water Balance</u>, that includes:</p> <ul style="list-style-type: none"> - details of: <ul style="list-style-type: none"> • sources and security of water supply, including contingency for future reporting periods; • water use and management on site; • any off-site water discharges; • reporting procedures, including the preparation of a site water balance for each calendar year; • a program to validate the surface water model, including monitoring discharge volumes from the site and comparison of monitoring results with modelled predictions; and • describes the measures that would be implemented to minimise clean water use on site; <p>(ii) <u>Surface Water Management Plan</u>, that includes:</p> <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in the water-bodies that could potentially be affected by the project; • detailed baseline data on soils within the irrigation area; • detailed baseline data on hydrology across the downstream drainage system of the Namoi River floodplain from the 	<p>The WMP generally addresses the requirements of this condition in the following sections.</p> <p>(a) PA3-39-4 WMP Submission letter and PA3-39-2 Tarrawonga - Approval Person Water Management Plan.pdf</p> <p>(b) PA3-39-4 WMP Submission letter</p> <p>(c) (i) Section 4 of WMP</p> <p>(ii) Section 2, 3, 4, 6 of the report. (exact locations are outlined in Table 1 of the WMP)</p> <p>(iii) Section 2.4, 7, 8 of the WMP</p> <p>(iv) Section 2.2</p> <p>Basins and groundwater wells were observed on the site.</p> <p>SLR prepared water management Plan) outstanding with DoPE (on-going correspondence has been undertaken throughout this period while it remains unapproved.</p> <p>Leard WMP has been prepared but has not been approved to the satisfaction of the Secretary.</p>	ANC	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>mine site to the Namoi River, including Barbers Lagoon and The Slush Holes;</p> <ul style="list-style-type: none"> a detailed description of the water management system on site, including the: <ul style="list-style-type: none"> clean water diversion systems; erosion and sediment controls (mine water system); mine water management systems including irrigation areas; discharge limits in accordance with EPL requirements; and water storages; detailed plans, including design objectives and performance criteria for: <ul style="list-style-type: none"> design and management of final voids; design and management for the emplacement of reject materials, sodic and dispersible soils and acid or sulphate generating materials; the Goonbri Creek diversion and low permeability barrier; reinstatement of drainage lines on the rehabilitated areas of the site; and control of any potential water pollution from the rehabilitated areas of the site; performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the project: <ul style="list-style-type: none"> the water management system; soils within the irrigation area; downstream surface water quality; downstream flooding impacts, including flood impacts due to the flood bunds required for the project; and stream and riparian vegetation health, including the Namoi River and its tributaries including 			

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>Barbers Lagoon and The Slush Holes;</p> <ul style="list-style-type: none"> a program to monitor and assess: <ul style="list-style-type: none"> the effectiveness of the water management system; soils within the irrigation area; the effectiveness of the Goonbri Creek diversion and flood bunds (see conditions 34-38); surface water flows and quality in the watercourses that could be affected by the project; and downstream flooding impacts; reporting procedures for the results of the monitoring program; and a plan to respond to any exceedences of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; <p>(iii) <u>Groundwater Management Plan</u>, that includes:</p> <ul style="list-style-type: none"> detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores including a detailed survey/schedule of groundwater dependent ecosystems (including stygo-fauna), that could be affected by the project; detailed plans, including design objectives and performance criteria, for the design and management of: <ul style="list-style-type: none"> the proposed final void; and coal reject and potential acid forming material emplacement; groundwater assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts; a program to monitor and assess: <ul style="list-style-type: none"> groundwater inflows to the open cut mining operations; the effectiveness of the LPB; the seepage/leachate from the LPB, water storages, emplacements and the final void; 			

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<ul style="list-style-type: none"> ○ interconnectivity between the alluvial and bedrock aquifers; ○ background changes in groundwater yield/quality against mine-induced changes; ○ the impacts of the project on: <ul style="list-style-type: none"> ▪ regional and local (including alluvial) aquifers; ▪ groundwater supply of potentially affected landowners; ▪ groundwater dependent ecosystems (including potential impacts on stygo-fauna) and riparian vegetation; • a program to validate the groundwater model for the project, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and • a plan to respond to any exceedences of the performance criteria; and <p>(iv) <u>Leard Forest Mining Precinct Water Management Strategy</u>, that has been prepared in consultation with other mines within the precinct to:</p> <ul style="list-style-type: none"> • minimise the cumulative water quality impacts of the mines; • review opportunities for water sharing/water transfers between mines; • co-ordinate water quality monitoring programs as far as practicable; • undertake joint investigations/studies in relation to complaints/exceedences of trigger levels where cumulative impacts are considered likely; and • co-ordinate modelling programs for validation, re-calibration and re-running of the groundwater and surface water models using approved mine operation plans. 			

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
<i>Biodiversity Management Plan</i>				
3.47	<p>The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH, DoEE, Forests NSW, the CCC, DPI Catchments and Lands and the LLS, and be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) describe the short, medium, and long term measures that would be implemented to:</p> <ul style="list-style-type: none"> - manage the remnant vegetation and habitat on the site and in the offset area; and - implement the biodiversity offset strategy, including detailed performance and completion criteria; <p>(c) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);</p> <p>(d) include a detailed description of the measures that would be implemented for:</p> <ul style="list-style-type: none"> - enhancing the quality of existing vegetation and fauna habitat; - restoring native vegetation and fauna habitat on the biodiversity offset area and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features; - maximising the salvage of resources within the approved disturbance area – including vegetative, top and sub soils and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity offset area or rehabilitation area; - collecting and propagating seed; - minimising the impacts on fauna on site, including undertaking pre-clearance surveys; - managing any potential conflicts between the proposed restoration 	<p>(a) BMP (ELA April 2015) section 1.4, Table 1-3</p> <p>(b) BMP (ELA April 2015) section 4 details management of vegetation and habitat on the site.</p> <p>The Willeroi BOS in draft and therefore not assessable.</p> <p>The BOMP (ELA August 2013) details offset management actions at the BioBank Site and performance criteria (section 5, Table 12).</p> <p>(c) BMP (ELA April 2015) section 4 details management strategies and performance / completion criteria to achieve the aims of the condition. Whilst that plan contains some references to the Willeroi Offset Area, it is understood that the management plan for the Willeroi Offset Area is in preparation and not assessable.</p> <p>The BOMP (ELA August 2013) details offset management actions at the BioBank Site and performance criteria (section 5, Table 12).</p> <p>(d) BMP (ELA April 2015) sections 4.1-4.10 (with exception of managing heritage and biodiversity conflicts which will be included in the Willeroi Offsets Area (Stage 2) Plan. Specialist-Offsets identified that heritage is managed as internal due diligence prior to any activity and via HMP (section 4.5). The BMP is</p>	<p>(d) ANC:</p> <p>(e) O:</p>	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>works in the biodiversity offset area and any Aboriginal heritage values (both cultural and archaeological);</p> <ul style="list-style-type: none"> - managing salinity; - controlling weeds and feral pests; - controlling erosion; - controlling access; and - managing bushfire risk; <p>(e) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;</p> <p>(f) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and</p> <p>(g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p>	<p>currently not approved to the Satisfaction of the Secretary.</p> <p>Conflict between heritage and biodiversity matters not detailed in the BMP (although contained in the HMP)</p> <p>(e) BMP (ELA April 2015) section 5 includes statements that other plans will contain specific monitoring methods. These include reference to a Rehabilitation Management Plan which Site Environment Officer in interview stated is the MOP. The MOP (2015-2020) (SLR 2016) contains seasonally-based monitoring for flora (including weeds) and fauna (including feral animals and nest box use) in rehabilitation areas.</p> <p>Evidence exists that woodland rehabilitation is being monitored as described in Rehabilitation Monitoring Reports for the years 2014-2016.</p> <p>The Rehabilitation Monitoring Report – Spring 2014 (ELA 12 February 2015) references the Tarrawonga Rehabilitation Monitoring Plan (2011) which contains the monitoring parameters and frequency (Table 3.1). Site Environment Officer in interview stated that the RMP (ELA 2011) is no longer applicable and that the Rehabilitation Monitoring is detailed in the BMP (ELA April 2015) and MOP.</p> <p>The three monitoring reports contain annual monitoring in rehabilitation areas of native flora and fauna species presence,</p>		

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
		<p>abundance and statistical analyses of changes through time.</p> <p>No clear schedule is available for monitoring required triggered by time or progress actions. Develop a clear, one-page annual monitoring schedule that integrates all requirements from all plans to make it clear what needs to be monitored and when.</p> <p>(f) BMP (ELA April 2015) section 6 details risks to implementation of the rehabilitation and offsets strategy, however more applicable to onsite rehabilitation. The sections detailing offsets risks and contingencies are minimal and it would be expected that the Willeroi Offsets Area strategy (Stage 2) will be far more detailed.</p> <p>(g) BMP (ELA April 2015) section 8 details roles and responsibilities.</p>		
<i>Final Void Design and Closure</i>				
3.65	<p>The Proponent shall prepare and implement an updated Final Void and Mine Closure Plan (as a component of the overall Rehabilitation Management Plan required under condition 64 of schedule 3) to the satisfaction of DRE, following consultation with the Secretary. A draft plan must be prepared and submitted to DRE by the end of December 2019, and a final plan must be prepared and submitted to DRE by the end of December 2024. Each version of the plan must:</p> <p>(a) be subject to independent review and verification by suitably qualified, experienced and independent person/s (including a groundwater expert) whose appointment has been approved by the</p>	<p>The current life of mine extends through to 2030. This condition is currently not triggered in MOP until 2019.</p>	NT	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>Secretary;</p> <p>(b) identify and consider:</p> <ul style="list-style-type: none"> - options for continued mining beyond current project life; - interactions with the final landform of adjoining mines (including any direct or indirect interaction between final voids); - opportunities for integrated mine planning with adjoining mines to minimise environmental impacts of the mines' final landforms; - all reasonable and feasible landform options for the final void (including filling); - predicted stability of the proposed landforms; and - predicted hydrochemistry and hydrogeology (including long-term groundwater recovery and void groundwater quality); <p>(c) include a detailed proposed landform design; and</p> <p>(d) demonstrate that the proposed final landform:</p> <ul style="list-style-type: none"> - satisfies the relevant objectives in Table 15; - minimises the extent of any resulting pit lake; - avoids salt scalding; - maximises the capacity of emplaced spoil to drain to the natural environment; and - ensures that drained waters do not adversely affect the downstream environment. 			
<i>Aboriginal Heritage Conservation Strategy</i>				
3.51	<p>The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the project and the Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This Strategy must enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long-term protection and management. The Strategy must:</p> <p>(a) be prepared by suitably qualified and experienced person/s</p>	<p>An Aboriginal Heritage Conservation Strategy (AHCS) has been prepared in consultation with OEH and submitted to the Secretary, within an approved extension period. However the Strategy is yet to be approved by the Secretary and is awaiting approval.</p>	C	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with OEH, the local Aboriginal community and other mines within the Leard Forest Mining Precinct, and submitted to the Secretary for approval within 12 months from the date of project approval;</p> <p>(c) identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas;</p> <p>(d) identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct;</p> <p>(e) identify a range of options for enhancing and conserving Aboriginal cultural heritage values, with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy areas or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and</p> <p>(f) consider cumulative impacts and potential for developing joint initiatives with other mines within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values.</p>			
<i>Heritage Management Plan</i>				
3.52	<p>The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with OEH and local Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);</p> <p>(c) be submitted to the Secretary for approval prior to undertaking any activities that may impact heritage items or sites, unless the Secretary agrees otherwise;</p>	<p>The HMP was initially submitted 27 May 2013 and most recently updated in June 2015 to reflect conditions of PA 11_0047 and generally addresses the requirements of this condition in the following sections.</p> <p>a) Section 1 of HMP</p> <p>b) Section 1 and 1.1 of HMP</p> <p>c) Approval received 29 March 2016</p> <p>d) Section 2 and 4 of HMP</p>	C	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>(d) include the following for the management of Aboriginal cultural heritage:</p> <ul style="list-style-type: none"> • a detailed archaeological salvage program for Aboriginal sites/objects within the project disturbance area, including methodology and procedures/protocols for: <ul style="list-style-type: none"> ○ sub-surface testing; ○ staged salvage, based on anticipated mine planning; ○ pre-disturbance monitoring; ○ site assessment and reporting; ○ research objectives to inform knowledge of Aboriginal occupation; ○ protection, storage and management of salvaged Aboriginal objects; ○ addressing relevant statutory requirements under the National Parks and Wildlife Act 1974; and ○ long term protection of salvaged Aboriginal objects; • a description of the measures that would be implemented for: <ul style="list-style-type: none"> ○ protecting, monitoring and managing Aboriginal sites outside the project disturbance area; ○ maintaining and managing reasonable access for Aboriginal stakeholders to cultural heritage items on site and in the biodiversity offset area; ○ managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols; ○ ongoing consultation with the local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and in the biodiversity offset area; ○ ensuring any workers on site receive suitable heritage inductions prior to carrying out any 			

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions;</p> <ul style="list-style-type: none"> include the following for the management of historic heritage: <ul style="list-style-type: none"> managing the discovery of human remains or previously unidentified historic heritage items at the site, including (in the case of human remains) stop work provisions and notification protocols; and ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and ensure that suitable records of these inductions are kept. 			
<i>Traffic Management Plan</i>				
3.54 A	<p>The Proponent shall prepare and implement a revised Traffic Management Plan for the Project, to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with RMS, Gunnedah Shire Council, Narrabri Shire Council and the owners of the Rocglen and Vickery coal mines;</p> <p>(b) be submitted to the Secretary for approval by 31 March 2017;</p> <p>(c) include a program for implementing Whitehaven's commitments in the EA;</p> <p>(d) include transport protocols that describe control measures for coal haulage:</p> <ul style="list-style-type: none"> - during school bus hours; - on the Kamilaroi Highway; and - during seasonal and event based peak traffic periods. <p>(e) include a driver's Code of Conduct to include but not limited to:</p> <ul style="list-style-type: none"> - behavioural safety practices and initiatives used by drivers to implement the transport protocols; - induction process for vehicle operators and regular toolbox 	<p>The TMP available online was most recently updated in May 2016 to reflect conditions of PA 11_0047 and generally addresses the requirements of this condition in the following sections.</p> <ul style="list-style-type: none"> a) 1506- Comments regarding Draft TMP - RMS Response.pdf NSC Response.pdf Tarrawonga Coal Mine - Traffic Management Plan.msg b) document was first submitted on 30/6/15. On 28/3/17 the plan was resubmitted (hasn't been approved since submission) hence is classified as an ANC c) Section 6 of TMP d) Section 2 of TMP outlines 	NC	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>meetings; and</p> <p>- complaint resolution and disciplinary procedures;</p> <p>(f) describe measures to minimise dust from roads that may be used for access to the mine site;</p> <p>(g) arrangements to comply with cumulative coal haulage limits from the project and the Rocglen and Vickery coal mines; and</p> <p>(h) a monitoring program to audit vehicle movements, including the origin and destination of employees, against predictions in the EA.</p>	<p>statutory requirements of the operating until the Kamilaroi Highway is constructed. No discussion of peak traffic conditions</p> <p>e) Section 3.5 identifies inductions and toolbox talks but doesn't specifically detail a driver Code of Conduct with behavioural safety practices.</p> <p>f) Section 3.2 of TMP</p> <p>g) Section 3.3 of TMP</p> <p>Site observations demonstrated sealed haul/access routes.</p>		
<i>Rehabilitation Management Plan</i>				
3.64	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan to the satisfaction of DRE. This plan must:</p> <p>(a) be prepared in consultation with the Department, Forests NSW, DPI, OEH, LLS and Council;</p> <p>(b) be submitted to the DRE for approval by the end of May 2013;</p> <p>(c) be prepared in accordance with any relevant DRE guideline;</p> <p>(d) describe how the rehabilitation of the site would be integrated with:</p> <p>- the implementation of the biodiversity offset strategy; and</p> <p>- the final landform for the Boggabri coal mine;</p> <p>(e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);</p> <p>(f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval and</p>	<p>The auditor understands there is not RMP for the project. Site Environment Officer in site interview stated that the BMP (ELA April 2015) and the MOP (2015-2020) (SLR 2016) together form the RMP. Those documents together include the relevant detail as cross referenced below.</p> <p>(a) BMP (ELA April 2015) (section 1.4) prepared in consultation with all named parties except Council. MOP (2015-2020) (SLR 2016) (section 1.5.1) prepared in consultation with all parties except DPI.</p> <p>(b) condition predates this audit period.</p> <p>(c) MOP Table 3 indicates the MOP as was prepared in 2013 (forming the basis of the current MOP) was prepared to meet the</p>	ANC	

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
	<p>address all aspects of rehabilitation including mine closure, final landform and final land use;</p> <p>(g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;</p> <p>(h) include a program to monitor, independently audit and report on the effectiveness of the rehabilitation measures, and progress against the detailed performance and completion criteria;</p> <p>(i) include a coal rejects disposal procedure and monitoring program for potential acid generation; and</p> <p>(j) build to the maximum extent practicable on the other management plans required under this approval.</p>	<p>ESG3 Guidelines. Review indicates the heading are consistent with the ESG3 guideline.</p> <p>(d) Integration with the Boggabri coal mine is contained in MOP section 1.2 including a commitment to prepare (in conjunction with the Boggabri proponent and DRE) an Overburden Emplacement Integration Management Plan.</p> <p>(e) MOP (2015-2020) (SLR 2016) includes performance criteria (section 6).</p> <p>(f) MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).</p> <p>(g) refer MCoA 63.</p> <p>(h) MOP (2015-2020) (SLR 2016) details rehabilitation monitoring (section 8). BMP (ELA April 2015) details rehabilitation monitoring requirements for flora and fauna (including monitoring weeds and feral species).</p> <p>TMPL should develop a clear, one-page annual monitoring schedule that integrates all requirements from all plans to make it clear what needs to be monitored and when.</p> <p>(i) MOP (2015-2020) (SLR 2016) section 2.3.7 details coal reject procedure and section 3.2.8 details acid mine drainage management. No groundwater monitoring within the mine was</p>		

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
		<p>undertaken to determine if acid rock drainage was occurring during the reporting period, all groundwater monitoring was at locations outside of the mine. Surface water monitoring within the void is being undertaken, and review of data demonstrated alkaline to neutral pH concentrations. AEMR 2016 states no acid rock drainage has occurred – more clear indication of how this conclusion was drawn would be beneficial.</p> <p>(j) not assessable</p> <p>The auditor did not sight any evidence that the implementation is to the satisfaction of the DRE, except that Annual Reviews are submitted to the DRE.</p> <p>Implementation of the measures identified in (e), (f) and (g) is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself is not fully implementing MOP section 8.1.3 with no monitoring occurring in the regenerating native vegetation in the north east corner of ML1579.</p> <p>Evidence sighted of monthly weed monitoring in rehabilitation areas, however no evidence available of implementation of parameters stated in Section 5 of the BMP (ELA April 2015)</p>		

Section	Assessment Requirement	Comment	Audit Classification	TCPL Action
		including: feral animal monitoring and nest box monitoring (pest species monitoring is also required by the MOP (2015-2020) (SLR 2016) section 3.2.4). Limited Implementation: Evidence of implementation, results and responses to results and management strategies is piecemeal or absent (beyond cursory checklist monitoring).		

By the end of June 2014 and every 3 years thereafter, unless both the Secretary and OEH agree to a different timeframe, TCPL is required to commission a suitably qualified, experienced and independent person/s, whose appointment has been approved by the Secretary, to undertake an audit of the revegetation of the rehabilitation area, and management and restoration within the Biodiversity Offset Strategy areas, to the satisfaction of the Secretary.

This section of the Independent Environmental Audit details the progress against this commitment.

The areas considered in the scope of this condition (and therefore the Independent Biodiversity Audit) were:

- the onsite rehabilitation areas;
- the BioBank (Yararri and Belah Offset Site); and
- the Willeroi Offset Area.

This assessment has been undertaken in consultation with these agencies (refer Annex E). Responses of specific focal areas were received from the DRG and DRE.

5.1.1 *The audit is required to assess the performance of the revegetation in the rehabilitation area completed to date (and the Goonbri Creek Diversion, once commenced) against the completion criteria in the Rehabilitation Management Plan.*

The Goonbri Creek diversion has yet to be triggered. No agricultural rehabilitation areas are yet established. The rehabilitation performance has been considered against the completion criteria for current MOP domains, of which are progressed no further in the rehabilitation process than 'ecosystem establishment'. The only primary rehabilitation domains in progress are woodlands.

This phase has completion criteria defined in the MOP Table 16 as:

- weed and vertebrate pest species to be monitored and managed according to the Biodiversity Management Plan and (draft) Vertebrate Pest Management Plan;
- faunal exclusion fencing and tree guards to exclude vertebrate pest species;
- implementation of bushfire management measures according to the Bushfire Management Plan; and
- native vegetation associations are established.

Weed monitoring is evident in monthly site inspection checklists, although quarterly vertebrate pest monitoring could not be verified.

No fauna exclusion measures were observed in rehabilitated areas.

No bushfire management plan is in place (confirmed as no longer required by the Site Environmental Manager).

Native species associations are being established in the newest of rehabilitation, although amelioration measures will be required to enhance the native species presence in the older rehabilitation areas (southern emplacement and southern part of northern emplacement).

Notwithstanding, appraisal of rehabilitated woodland areas includes observations that when compared with completion criteria at relinquishment, areas predicted to fail without intervention (amelioration through infill planting presuming the soil chemistry is conducive to native species growth) are:

- west-facing slope of southern emplacement is designated as destined to be a rehabilitated woodland however currently is a pasture grass-covered slope with some planted native trees.
- southern end of west-facing slope of northern extension area is designated as destined to be a rehabilitated woodland and is currently rows of trees with pasture grass understorey and very little native shrub, herb or grass diversity.

The northern end of west-facing slope of northern extension area is designated as destined to be a rehabilitated woodland and young germination from the soil seed bank contains very good native species diversity (indicating good topsoil management and reuse), however management of weeds will be important to maintain native species integrity.

Notably there are no completion criteria in the MOP for woodland rehabilitation for relinquishment so therefore no predictions are possible to identify if rehabilitated woodlands are trending towards ultimate or relinquishment completion criteria.

5.1.2 *The audit is required to assess the performance of management and restoration in the off-site Biodiversity Offset Strategy areas completed to date against the completion criteria in the Biodiversity Management Plan;*

The BioBank site is managed according to a registered BioBanking Agreement. Performance at the BioBank site is measured and reported on according to the processes in management plans for that registered agreement. A review of management measures and performance indicates that performance is generally in accordance with the performance criteria.

Site interviews regarding the Willeroi Offset Area indicated there was no Willeroi Offset Area Plan to audit against (although the auditor notes there is a management plan for the site which is in draft form). Site audit inspected both the Willeroi Offset Area (although no plan or completion criteria were available against which to assess performance because the management plan is in draft form). Interview and site inspection with Specialist-Offsets indicated that biodiversity values are currently being managed on generally in accordance with the draft management plan for the land. They were observed to be sufficient in the interim prior to the implementation of the Willeroi Offsets Area Plan.

5.1.3 *The audit is required to identify any measures that should be implemented to improve the performance of rehabilitation, management and restoration within the rehabilitation and biodiversity offset areas;*

Native vegetation measures to enhance the native species diversity, and ultimately to trend towards a reasonably expected woodland for relinquishment (although the MOP contains no such criteria), will be required in the 'older rehabilitation areas' (the southern part of the west-facing northern emplacement and the west-facing side of the southern emplacement).

The southern emplacement woodland rehabilitation areas are currently dominated by pasture grasses with very few native tree or shrub species (a small portion of planted native tree rows occurs on the lower part of the slope) and actions will include (but not limited to):

- identify soils are suitable for native woodland establishment;
- undertake tubestock planting of establishment species;
- manage pasture grass weeds; and
- with reduced pasture grass cover enhance native grass and herb species potential to germinate through seed spreading.

The southern part of the northern emplacement rehabilitation areas are currently rows of mature trees with nil native shrub or understorey species. Actions to enhance native woodland conditions will include (but not be limited to):

- control weedy grasses and herbs; and
- undertake infill planting (or seed spreading) of native shrub, herb and grass species.

The most recently rehabilitated area will require monitoring of weed presence relative to native species persistence (although the MOP indicates this is occurring monthly the audit identified no evidence of this) and actions carried out to address any concerning trends.

- 5.1.4 *This audit is required to identify any additional measures that should be applied in the establishment of native vegetation, including riparian vegetation around the realigned Goonbri Creek, both before and after the realignment is undertaken;*

The Goonbri Creek diversion has not yet been triggered.

- 5.1.5 *This audit is required to if the completion criteria have not been met, or are not adequately trending towards being met, determine the likely ecological value of the rehabilitation and restoration once completed, and recommend additional measures to augment the Biodiversity Offset Strategy to ensure that it adequately offsets the project's impacts on biodiversity.*

Actions required to address immediate concerns include weed monitoring, weed management, vertebrate pest monitoring and management. Future actions include infill planting, seed spread and tubestock planting.

Table 6.4 contains the audit response to the NSW Government Agency s (DRE and OEH) requested focal areas.

Table 6.4 *NSW Government Agency Requested Audit Focal Areas*

Agency and Method Requested	Agency-Requested Audit Focal Area	Audit Response
NSW Department of Planning and Environment - Division of Resources and Geoscience (DRG)		
Desktop Review	<p>Is there a current Mining Operations Plan (MOP) in place and has it been approved by DRG?</p> <p>Has the MOP been prepared in consultation with the relevant agencies as outlined in the Project Approval?</p> <p>Is the rehabilitation strategy as outlined in the MOP consistent with the Project Approval in terms of progressive rehabilitation schedule; and proposed final land use(s)?</p> <p>Has the rehabilitation objectives and completion criteria as outlined in the MOP been developed in accordance with the proposed final land(s) as outlined in the Project Approval?</p> <p>Has a rehabilitation monitoring program been developed and implemented to assess performance against the nominated objectives and completion criteria? – verified by reviewing monitoring reports and rehabilitation inspection records.</p>	<p>MOP current at time of audit was Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016). Evidence of DRG approval reviewed.</p> <p>MOP (2015-2020) (SLR 2016) (Amendment A) prepared in consultation with all parties except DPI.</p> <p>MOP (2015-2020) (SLR 2016) (Amendment A) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse). This is consistent with the Project Approval.</p> <p>MOP (2015-2020) (SLR 2016) (Amendment A) contains objectives and completion criteria generally in accordance with the proposed final landforms in the Project Approval. This is illustrated spatially by MOP Plans 3a-3f and Plan 4.</p> <p>MOP (2015-2020) (SLR 2016) (Amendment A) details rehabilitation monitoring (section 8). Implementation of the monitoring measures is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself is not fully implementing MOP section 8.1.3 with no monitoring occurring in the regenerating native vegetation in the north east corner of ML1579.</p> <p>The MOP (2015-2020) (SLR 2016) section 3.2.4 states that vertebrate pests will be monitored on an as needs basis (not seasonal) and this appears to be done in an ad hoc manner. That section states weeds will be monitored monthly in areas including rehabilitation areas. No evidence exists of this occurring. Limited Implementation: Evidence of regular monitoring of rehabilitation ecological risks and performance is piecemeal or absent (beyond only the</p>

Agency and Method Requested	Agency-Requested Audit Focal Area	Audit Response
	Has a rehabilitation care and maintenance program been developed and implemented based on the outcomes of monitoring program? – verified by reviewing Annual Rehabilitation Programs or similar documentation.	woodland rehabilitation monitoring undertaken annually in spring). There is limited evidence available of any rehabilitation care and maintenance program with no inspection forms for rehabilitation areas periodically (or episodically) identifying risks (e.g. erosion, weeds, fuel loads, evidence of feral animals) and required remedial actions.
Site Inspection	<p>Are mining operations being conducted in accordance with the approved MOP (production, mining sequence etc.), including within the designated MOP approval boundary? – to be verified by site plans and site inspection.</p> <p>Is rehabilitation progress consistent with the approved MOP as verified by site plans and a site inspection? This should include an evaluation against rehabilitation targets and whether the final landform is being developed in accordance with conceptual final landform in Project Approval.</p>	<p>MOP Plans 3a-3f and site inspection indicated that operations were generally consistent with plans.</p> <p>No areas of completed rehabilitation were present in the MOP plans or in the field. Areas exist of what is referred to as 'older rehabilitation' which have been established with goals different to current standards and comprise rows of planted native trees. These are shown as destined to be rehabilitated woodlands upon completion although through the period of the current MOP (2015-2020) are shown as not progressing beyond the phase 'ecosystem establishment' which is generally defined in the MOP Table 11 as "The process of seeding, planting and transplanting plant species. Incorporates management actions such as weed and feral pest control to achieve species establishment and growth to juvenile communities, and habitat augmentation".</p> <p>This phase has targets defined in the MOP Table 16 as:</p> <ul style="list-style-type: none"> - weed and vertebrate pest species to be monitored and managed according to the Biodiversity Management Plan and (draft) Vertebrate Pest Management Plan - faunal exclusion fencing and tree guards to exclude vertebrate pest species - implementation of bushfire management measures according to the Bushfire Management Plan - native vegetation associations are established. <p>Weed and vertebrate pest monitoring and management are not being undertaken across all rehabilitation areas as required by the BMP (ELA April 2015) or the MOP (which requires monthly weed monitoring).</p>

Agency and Method Requested	Agency-Requested Audit Focal Area	Audit Response
Based on a visual inspection, are there any rehabilitation areas that appear to have failed or that have incurred an issue that may result in a delay in achieving the successful rehabilitation?		<p>No fauna exclusion measures were observed in rehabilitated areas. No bushfire management plan is in place (confirmed as no longer required by the Site Environmental Manager). Native species associations are being established in the newest of rehabilitation, although amelioration measures will be required to enhance the native species presence in the older rehabilitation areas (southern emplacement and southern part of northern emplacement).</p> <p>When compared with completion criteria at relinquishment, areas predicted to fail without intervention (amelioration through infill planting presuming the soil chemistry is conducive to native species growth) are:</p> <ul style="list-style-type: none"> - west-facing slope of southern emplacement is designated as destined to be a rehabilitated woodland however currently is a pasture grass-covered slope with some planted native trees. - southern end of west-facing slope of southern emplacement is designated as destined to be a rehabilitated woodland and is currently rows of trees with pasture grass understorey and very little native shrub, herb or grass diversity. The northern end of west-facing slope of southern emplacement is designated as destined to be a rehabilitated woodland and young germination from the soil seed bank contains very good native species diversity (indicating good topsoil management and reuse), however management of weeds will be important to maintain native species integrity. <p>The MOP does not contain relinquishment criteria for the woodland areas and it is therefore not possible to predict the trajectory of rehabilitation likely to achieve (or fail to meet) these criteria.</p>
DP&E		
	Effectiveness and adequacy of environmental monitoring (air, blast and noise) locations, particularly in relation to the location of private receivers	Exceedences of airblast overpressure were recorded in 2015 and 2016 at Tarrawonga and Matong however these locations are owned by the mine and are not private residences. The blast monitoring locations are within locations owned by the mine and not on private land due to the acquisition of the properties that the monitors are located on. Alterations to blast monitoring locations have been proposed and are awaiting approval from the New South Wales Environment Protection Authority.

Agency and Method Requested	Agency-Requested Audit Focal Area	Audit Response
<p>Review of environmental monitoring (air, blast and noise) results for the audit period, identification of trends in monitoring data and comparison with EA predictions</p>	<p>TCP are proposing to relocate the Tarrawonga monitoring point to 'Braymont' and the Matong monitoring location to 'Coomalgah'. Noise monitoring occurred at locations as required in the conditions of approval and the Environmental Protection Licence. The locations are the nearest private residences so are appropriate.</p>	<p>Noise monitoring reports observed demonstrated no exceedence of road traffic noise criteria. Three monitoring locations (2 properties) - 2 residences on Brooklyn and Werona Road traffic noise reports state that for practical reasons it is not possible to undertake monitoring for 15 hours (entire day period). The approach here is to monitor noise over a representative one hour period and utilise the results of this to theoretically predict noise over the compliance period. Potentially alter this to condition to the strategy used to ensure 100% compliance Monitoring locations are stated in the NMP and in quarterly monitoring report. Site inspection demonstrated where noise monitoring is undertaken. The location of monitoring at Barbers Lagoon is on the property boundary however the residence is approximately 200m from the monitoring location. Hence the Auditor considers this to represent non-compliance.</p>
	<p>Auditor reviewed Air Quality Monitoring Data and AMER/AR for the audit period. Although results have been identified in excess of criteria, these were recorded on project land. Recently submitted AQGGMP removes these locations with the exception of a deposited dust gauge at three locations. AQGGMP submitted 27 June 2017 to Department awaiting approval.</p>	<p>Review of evidence identified that no exceedences of ground vibration criteria of the most stringent criteria of 5 millimetres/second (mm/s) occurred during the reporting period. Exceedences of airblast overpressure were recorded in 2015 and 2016 at Tarrawonga and Matong however these locations are owned by the mine and are not private residences. Exceedence of noise criteria occurred once at one location of 2dB but was not considered to be sustained or systematic, as</p>

Agency and Method Requested	Agency-Requested Audit Focal Area	Audit Response
		<p>such this was not reported as a non-compliance by TCP. 04095_6702_Rpt_Sep16.docx states ‘...an exceedence of less than 2 dB (A) above a statutory noise limit specified in a licence condition is not considered to be a non-compliance as per the discussion in Section 11.1.3 of the NSW Industrial Noise Policy’. However it is a technical exceedence and in the context of this audit a non-compliance. Auditor reviewed Air Quality Monitoring Data and AMER/AR for the audit period. Although results have been identified in excess of criteria, these were recorded on project land. Recently submitted AQGGMP removes these locations with the exception of a deposited dust gauge at three locations. AQGGMP submitted 27 June 2017 to Department awaiting approval.</p>
	Effectiveness and adequacy of the biodiversity offset strategy and management	<p>Group Superintendent - Environment (Compliance) and Specialist-Offsets interview indicated Willeroi Offset Area plan (‘Stage 2’) was in draft and therefore could not be audited against. The Willeroi Offsets Site was visited and observation indicates it to be a good offset option with its landscape position and proximity to the Mount Kaputar National Park. Although only a brief and limited visit, the biodiversity management issues appear to be achievable (most notably weed control) and a successfully managed offset should achieve good environmental outcomes. Offsets for the Project have been obtained through a credit purchase using the BioBanking Scheme. The BioBank site (Yarara and Belah Offset properties), although managed under the BioBanking Scheme, were visited and observation indicates very good biodiversity management with the removal of problematic pasture grasses appearing successful (thus far). Management actions including seed spreading (with soil ameliorant) and tree planting were occurring during the site visit.</p>
	Effectiveness of transport management (including implementation of transport management plan)	Demonstrated through detailed review.
DPI Water		
	Assessment as to whether the project holds the required water entitlements and licences under	interview of the Environmental officer identified that the site is subject to Water Access Licence WAL 31084. A large share

Agency and Method Requested	Agency-Requested Audit Focal Area	Audit Response
	the Water Management Act 2000 or Water Act 1912 (as applicable);	of the projects water demand is serviced by the sites sediment basins, which do not need to be licenced or do not fall under harvestable right requirements.
	Compliance with the conditions of any water licences/approvals held;	The 2015/2016 AEMR identifies compliance with the WAL 31084 available water volume. Compliance with the WAL was not discussed in AEMRs prior to the 2015/2016 report. The water management plan is still awaiting approval from the Department of Planning and Environment
	Identification of all water storages for the mine and identification of their licensing status being either exempt, subject to harvestable rights or regulated via a Water Access Licence;	Majority of water storage around site are sediment basins. Sediment basins are considered special dams that are not included in harvestable right calculations as they are for the purpose of preventing contamination of a water source and are required under best management practice. The water management plan states that the proposed dams that are not exempt are well below the harvestable right. Water licence WAL 31084 is also held for the site.
	Quantification of both active and passive take by the project from each relevant water source and a comparison against previous predictions;	The AEMR for 2015/2016 and 2016 to December state in Table 12 the active pumping that occurs under the WAL. AEMRs prepared prior to this date did not include water pumped in relation to the WAL. Evidence of active and passive take, such as pumping records, was not observed. The 2015/2016 AEMR references the SLR 2015 WMP site water balance that concludes small quantities of externally sourced water will be required due to a deficit in water available on site during both dry and wet years. Compliance with the management, monitoring and contingency requirements in following plans for the site: o Water Management Plan o Goonbri Creek Diversion and Flood Bund Concept Design Plan o Goonbri Creek Diversion and Low Permeability Barrier- Design and Construction o Goonbri Creek Diversion and Low Permeability Barrier- Monitoring and Management Plan o Rehabilitation Management Plan.

CONCLUSION

An audit of MCoA conditions has been completed as well as a check against commitments made in the management plans developed as part of MCoA conditions for the site.

Overall, conformance was achieved with the audit documents that were reviewed. The number of non-conformances with the statutory conditions and implementation of the management plans is summarised in *Table 7.1* below:

Table 7.1 *Summary of Audit Findings*

Non conformances	Administrative Non - conformances	Observations	Total Conditions
<i>Statutory Instruments</i>			
19	22	6	415
High (0), Medium (3), Low (16)			
<i>Implementation of Plans</i>			
1	4	1	12

An action response table has been developed by TCPL addressing all audit findings and will be submitted separately to this report.

Annex A

Audit Table A.1 – Conditions of Approval

Table A.1: Compliance with Ministers Conditions of Approval PA11_0047 (Modification 1 issued 3 November 2015)

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
SCHEDULE 2 – ADMINISTRATIVE CONDITIONS					
Obligation to Minimise Harm to the Environment					
1	In addition to meeting the specific performance criteria established under this approval, the Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the project.	Note	Noted – Refer to detailed compliance review.	Note	
Terms of Approval					
<i>Notes: The general layout of the project is shown in Appendix 2; and The statement of commitments is reproduced in Appendix 4.</i>					
2	The Proponent shall carry out the project: (a) generally in accordance with the EA; (b) in accordance with the statement of commitments; and (c) in accordance with the conditions of this approval.	Note	Noted – Refer to detailed compliance review.	Note	
3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Note	Noted	Note	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
4	<p>The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:</p> <p>(a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this approval (including any stages of these documents);</p> <p>(b) any review, reports or audits commissioned by the Department regarding compliance with this consent; and</p> <p>(c) the implementation of any actions or measures contained in these documents.</p>	<p>Letters of Approval</p> <p>Tarrawonga – Approval BMP 18082015</p> <p>Interview with Environment Officer</p>	<p>Auditor reviewed letters of approval for the management plans including blast management plans (18 August 2015). Approval granted following satisfactory response to Department requests. All Department requests met.</p>	C	
Limits On Approval <ul style="list-style-type: none"> Mining Operations <p><i>Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Secretary and DRE. Consequently, this approval will continue to apply in all other respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.</i></p>					
5	The Proponent may carry out mining operations on the site until the end of December 2030.	Note	Noted	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Coal Extraction					
6	The Proponent shall not extract more than 3 million tonnes of ROM coal from the site in any calendar year.	PA2-6-1 Production, Haulage and Sales Volumes EPL1-A1.1-1 Annual Return Statement of Compliance 2016-2017 2015-2016 2014-2015	Auditor reviewed production tonnages. Extracted: FY14-15: 2.2 million tonnes FY15-16: 2.2 million tonnes FY16-17: 2.43 million tonnes Coal Workings FY14-15: 2.28 million tonnes FY15-16: 2.1 million tonnes FY16-17: 2.23 million tonnes	C	
Coal Transport					
<i>Note: For the avoidance of doubt, the total amount of coal permitted to be transported from the site by road in any calendar year is 3 million tonnes.</i>					
7	For the period up until the commissioning of the Kamilaroi Highway overpass, the Proponent: (a) shall not transport more than 3 million tonnes of ROM coal from the site in any calendar year; (b) may transport up to 150,000 tonnes of this ROM coal from the site in any calendar year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway; (c) shall transport all remaining coal from the site to the Whitehaven CHPP via the approved haulage route; (d) shall, together with the owners of the Rocglen and Vickery coal mines,	PA2-6-1 Production, Haulage and Sales Volumes PA3-9-2 Annual Review AEMR Tarrawonga AMER 2014-15, AMER 2015-16. Rocglen AMER 2014-2016 Tarrawonga Domestic Coal Figures	Auditor reviewed coal movements and production tonnages for Tarrawonga and Rocglen. Vickery Colliery was non-operational during audit period. Tarrawonga Coal Movements: 2014: 2.276 million tonnes 2015: 2.177 million tonnes 2016: 2.09 million tonnes Tarrawonga Domestic Coal (1 May - 30 April) 2014: 54,809 tonnes 2015: 54,872 tonnes 2016: 67,553 tonnes 2017: 35,728 (to 11 July 2017)	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>ensure that the cumulative haulage of coal along the approved haulage route does not exceed 4.0 million tonnes during calendar year 2017; and</p> <p>(e) shall, together with the owners of the Rocglen and Vickery coal mines, ensure that the cumulative haulage of coal along the approved haulage route does not exceed 3.5 million tonnes each year during all other calendar years.</p>		<p>Combined Tarrawonga and Rocglen Transported Coal on haulage route:</p> <p>2014: 3.43 million tonnes</p> <p>2015: 3..32 million tonnes</p> <p>2016: 3.35 million tonnes</p>		
8	<p>For the period following the commissioning of the Kamilaroi Highway overpass, the Proponent:</p> <p>(a) shall not transport more than 3 million tonnes of ROM coal from the site in any calendar year;</p> <p>(b) may transport up to 150,000 tonnes of this ROM coal from the site in any calendar year for direct distribution to domestic markets via the approved haulage route to the Kamilaroi Highway;</p> <p>(c) shall transport all remaining coal from the site to the Whitehaven CHPP via the approved haulage route and the Kamilaroi Highway overpass; and</p> <p>(d) shall, together with the owners of the Rocglen and Vickery coal mines, ensure that the cumulative haulage of coal along the approved haulage</p>	Interview with Environment Officer	Kamilaroi Highway overpass not commissioned.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	route does not exceed 4.5 million tonnes.				
<i>Notes: For the avoidance of doubt, the total amount of coal permitted to be transported from the site by road in any calendar year is 3 million tonnes. For the avoidance of doubt, while any ROM coal transported from the site to the Whitehaven CHPP must use the Kamilaroi Highway overpass (once commissioned), this requirement does not apply to the transport of ROM coal directly to domestic markets or the transport of gravel off site.</i>					
9	<p>The Proponent shall only transport coal from the site or receive coal reject from the Whitehaven CHPP by truck between the hours of:</p> <p>(a) 6 am to 9.15 pm Monday to Friday;</p> <p>(b) 7 am to 5.15 pm Saturday; and</p> <p>(c) at no time on Sundays or public holidays.</p>	<p>PA 2-9-1 30626 Interaction with other public road movement (Code of Conduct)</p> <p>PA2-7-1 Traffic Management Plan</p> <p>PA 3-54A-3 TMP Approval Letter</p>	ERM reviewed Interaction with other public road movement procedure (Code of Conduct), the Bis (haulage company) operating procedure and approved traffic management plan outlining requirements.	C	
10	<p>Within 6 months of the Boggabri rail spur line and Boggabri CHPP being commissioned, and every 2 years thereafter, the Proponent shall use all reasonable efforts to reach an agreement with the owners of the Boggabri coal mine to use this infrastructure to process and transport coal from the site, to the satisfaction of the Secretary.</p> <p>If an agreement is reached to transport coal via the Boggabri rail spur line, the Proponent:</p> <p>(a) shall not transport more than 3 million tonnes of ROM coal from the site in any calendar year;</p> <p>(b) may transport up to 150,000 tonnes of this ROM coal from the site in any calendar year for direct</p>	<p>Interview with Environment Officer</p> <p>PA2-6-1 Production, Haulage and Sales Volumes</p> <p>Tarrawonga Domestic Coal Figures</p>	<p>Boggabri rail spur line not utilised by Tarrawonga</p> <p>Tarrawonga Domestic Coal (1 May - 30 April)</p> <p>2014: 54,809 tonnes</p> <p>2015: 54,872 tonnes</p> <p>2016: 67,553 tonnes</p> <p>2017: 35,728 (to 11 July 2017)</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	distribution to domestic markets by road via the approved haulage route to the Kamilaroi Highway; and (c) shall transport all remaining coal from the site via the Boggabri rail spur line.				
Coal Rejects					
10 A	The Proponent shall not receive more than 700,000 tonnes of coal rejects on the site in any calendar year.	TARRAWONGA JV OPERATING COMMITTEE Minutes Dec 1 2016	Auditor reviewed Joint Venture minutes, these state reject was not emplaced until revision to the MOP was approved. TCM has received rejects since November 2016. Auditor reviewed inbound reject tonnages for this period. 2016: 67,553 tonnes 2017: 35,728 (to 11 July 2017)	C	
10 B	The Proponent shall ensure all coal rejects transported to the site from the Whitehaven CHPP are transported via the approved haulage route.	PA 2-9-1 30626 Interaction with other public road movement (Code of Conduct)	ERM reviewed Interaction with other public road movement procedure (Bis operating procedure) and approved traffic management plan outlining requirements.	C	
Gravel Extraction and Transport					
11	The Proponent shall not extract more than 90,000m3 of gravel from the site for distribution off-site in any calendar year.	Tarrawonga Coal Transport and Truck Movements 2014 - 2016	No gravel extracted and hauled off site during audit period.	NT	
12	The Proponent may transport up to 90,000m3 of gravel from the site by truck in any calendar year. This gravel is to be transported from the site to the Kamilaroi Highway via the approved haulage route.	Tarrawonga Coal Transport and Truck Movements 2014 - 2016	No gravel extracted and hauled off site during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
13	The Proponent shall only transport gravel from the site by truck between 7 am and 6 pm Monday to Saturday.	Tarrawonga Coal Transport and Truck Movements 2014 - 2016	No gravel extracted and hauled off site during audit period.	NT	
SURRENDER OF EXISTING DEVELOPMENT CONSENT					
14	By the end of December 2013, or as otherwise agreed by the Secretary, the Proponent shall surrender the existing development consent (DA-88-4-2005) for the Tarrawonga Coal Mine in accordance with Section 104A of the EP&A Act. Prior to the surrender of this development consent, the conditions of this approval shall prevail to the extent of any inconsistency with the conditions of the development consent.	151125 Letter to Tarrawonga - surrender consent 25-11-15 DPE re Tarrawonga Surrender of DA-88-4-2005	Auditor reviewed letter from Department of Planning and Environment confirming voluntary surrender of DA-88-4-2005. DA surrendered during the reporting period but not by December 2013. No further action required.	ANC	
STRUCTURAL ADEQUACY					
<i>Notes: Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.</i>					
15	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.	Interview with Environment Officer	No construction requiring approval during audit period.	NT	
Demolition					
16	The Proponent shall ensure that all demolition work on site is carried out in accordance with Australian	Interview with Environment Officer	No demolition during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Standard AS 2601-2001: The Demolition of Structures, or its latest version.				
PROTECTION OF PUBLIC INFRASTRUCTURE					
<i>Note: This condition does not apply to any damage to roads caused as a result of general road usage.</i>					
17	Unless the Proponent and the applicable authority agree otherwise, the Proponent shall: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.	Interview with Environment Officer Service agreement between WHC and Gunnedahshire and Road Maintenance Agreement with Narrabri Council (Dec 2015)	During the audit period there has been no requirement to relocate public infrastructure. Service agreement between WHC and Gunnedahshire and Road Maintenance Agreement with Narrabri Council (Dec 2015) with respect to road maintenance. This condition is outside of the agreement and has not been triggered during audit period.	NT	
OPERATION OF PLANT AND EQUIPMENT					
18	The Proponent shall ensure that all the plant and equipment used on site, or to transport coal from the site, is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Pulse - work planning and scheduling system and outputs. Service Sheets reviewed. Interview - Workshop personnel	Review of the maintenance work planning and scheduling process, and information management system. This included tracking a sample of maintenance activities for scheduled vehicle maintenance. During the site inspection no observations were made of unmaintained or inappropriately operated equipment.	C	
UPDATING & STAGING STRATEGIES, PLANS OR PROGRAMS					
<i>Notes: While any strategy, plan or program may be submitted on a progressive basis, the Proponent must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the</i>					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<i>strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.</i>					
19	With the approval of the Secretary, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis. To ensure the strategies, plans or programs under the conditions of this approval are updated on a regular basis, the Proponent may at any time submit revised strategies, plans or programs to the Secretary for approval. With the agreement of the Secretary, the Proponent may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this approval.	Note	Noted	Note	
20	The Proponent shall continue to implement the existing strategies, plans or programs that apply to any development on site under project approval DA-88-4-2005, until they are replaced by an equivalent strategy, plan or program approved under this approval.	Note	Noted	Note	
COMMUNITY ENHANCEMENT					
21	By the end of March 2013, unless otherwise agreed by the Secretary, the Proponent shall enter into a planning agreement with Council in	PA2-21-2 Signed VPA NSC	Voluntary Planning Agreement between TPCL and Narrabri Shire Council dated 26 October 2016. Given the date of the agreement, the condition is considered an	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	accordance with: (a) Division 6 of Part 4 of the EP&A Act; and (b) the terms of the Proponent's offer provided in Appendix 3.		administrative non-compliance. No further action required.		
SCHEDULE 3					
ENVIRONMENTAL PERFORMANCE CONDITIONS					
Acquisition On Request					
<p><i>Notes: To interpret the locations referred to in Table 1 see the applicable figure(s) in Appendix 5. Properties 43, 44 and 45 also have acquisition rights under the approval for the Boggabri coal mine, and/or the existing consent (DA 88-4-2005) for the Tarrawonga mine. The Proponent may acquire these properties on an equitable basis with the owner of the Boggabri mine. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.</i></p>					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations	
1	Upon receiving a written request for acquisition from an owner of the privately-owned land listed in Table 1, the Proponent shall acquire the land in accordance with the procedures in conditions 8 and 9 of schedule 4. <i>Table 1: Land subject to acquisition upon request</i>	2015-08-06 Property Search.pdf – 6046 Rangari Rd (Tarrawonga Pty Ltd Property) – settlement date – 20/12/2013 (Property ID – 45) 2015-08-06 Property Search - Kyalla Northam.pdf 2015-08-06 Property Search_tarrawonga.pdf Interview with Environment Officer	Interview with Environment Officer indicated that land already purchased, with details provide for Kyalla and Tarrawonga. Refer to: <ul style="list-style-type: none">• Northam• Kyalla• Tarrawonga• Laird Property – no property name (lairds is not owned by Whitehaven) Property ID 49 – No request for purchase.	NT		
	Acquisition Basis					Property ID
	Noise & Air					44, 45, 49
	Noise					43, 47
ADDITIONAL NOISE AND/OR AIR QUALITY MITIGATION ON REQUEST						
2	Upon receiving a written request from the owner of any residence on the land listed in Table 1, the Proponent shall implement additional noise and/or air quality mitigation measures (such as double glazing, insulation, air filters, a first flush roof water drainage system and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible and directed towards reducing the noise and/or air quality impacts of the project on the residence. If within 3 months of receiving this request from the owner, the Proponent and he owner cannot agree on the measures to be implemented, or there is a dispute	Interview with Environment Officer	No request from land owner	NT		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations						
	about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.										
NOISE AND VIBRATION											
Noise Criteria											
Notes: Operational noise includes noise from the mining operations and the use of private roads (excluding the Kamilaroi Highway overpass) and rail spurs. Noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions (also see condition 13)), of the NSW Industrial Noise Policy.											
3	Except for the noise-affected land in Table 1, the Proponent shall ensure that operational noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land. Table 2: Noise criteria dB(A)	10081552-june-2017.pdf Tarrawonga Coal Mine – Environmental Noise Monitoring Quarter 2 2017.pdf 04095_6702_Rpt_Sep16.docx	Exceedance of criteria occurred once at one location of 2dB but was not considered to be sustained or systematic, as such this was not reported as a non-compliance 04095_6702_Rpt_Sep16.docx states ‘...an exceedance of less than 2 dB (A) above a statutory noise limit specified in a licence condition is not considered to be a non-compliance as per the discussion in Section 11.1.3 of the NSW Industrial Noise Policy’. No separate agreements are held with land owners.	C							
	<table><tr><td>Land</td><td>Day, Evening & Night LAeq(15 min)</td><td>Night LA1 (1 min)</td></tr><tr><td>All other privately-owned residences</td><td>35</td><td>45</td></tr></table>					Land	Day, Evening & Night LAeq(15 min)	Night LA1 (1 min)	All other privately-owned residences	35	45
	Land					Day, Evening & Night LAeq(15 min)	Night LA1 (1 min)				
All other privately-owned residences	35	45									
However, these noise criteria do not apply if the Proponent has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the											

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Proponent has advised the Department in writing of the terms of this agreement.				
Noise Acquisition Requirements – Residences					
<p>Notes:</p> <p>1. For the purposes of this condition a privately-owned residence is defined as a residence not owned by a mining company that: is regularly occupied; or is an existing residence that is not regularly occupied but for which a valid development consent exists; or is a proposed residence for which a development application has been lodged with the relevant authority prior to the date of this approval.</p> <p>2. For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise should be included as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree on whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary's decision as to the lands to be included for acquisition under the procedures in conditions 8 and 9 of Schedule 4 shall be final.</p> <p>3. The noise assessment must be undertaken by a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary and include either:</p> <p>a. sufficient monitoring at the affected residence to allow for assessment of the impacts under a range of meteorological conditions (including adverse conditions) likely to be experienced at the residence; or</p> <p>b. sufficient monitoring to allow reliable prediction of the likely impacts under the range of meteorological conditions (including adverse conditions) likely to be experienced at the residence.</p> <p>4. Monitoring should be conducted in accordance with the requirements of the NSW Industrial Noise Policy.</p> <p>5. Where predictions of likely impacts is to be used, either in substitution for, or in conjunction with, direct measurement of noise impacts at the residence, it must be based on sufficient monitoring data to provide a reliable estimate of the impacts (including under adverse meteorological conditions) and be derived using standard noise modelling techniques accepted by the EPA.</p> <p>6. The Proponent shall ensure that the requested noise impact assessment is submitted to the Secretary within 3 months of the Secretary's decision that the assessment was warranted. The Proponent shall also provide a copy of the assessment to the owner(s) of the residence at the same time it is submitted to the Secretary.</p>					
4	If the owner(s) of a privately-owned residence, that is not listed in Table 1, have reason to believe that operational noise from the project is causing the criteria in Table 2 to be exceeded at the residence, the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.	Interview with Environment Officer	Interview with Environment Officer indicated that no requests for an independent noise assessment were made to the secretary.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the criteria in Table 2, the owner(s) can make a written request to the Proponent for one of the following:</p> <p>(a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3 months of receiving this request from the owner(s), the Proponent and owner(s) cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution; or</p> <p>(b) acquisition of the residence and land in accordance with the procedures in conditions 8 and 9 of Schedule 4.</p> <p>Upon receiving a written request from the owner(s), the Proponent must undertake whichever option has been requested by the owner(s).</p> <p>However, this condition does not</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.				
Noise Acquisition Requirements – Land					
<i>Note: The notes to condition 4 of this Schedule also apply to this condition.</i>					
5	<p>If the owner(s) of land containing a privately owned residence, which is not listed in Table 1, have reason to believe that operational noise from the project is causing noise levels to exceed 40 dB(A) LAeq(15 min) over more than 25% of that land, the owner(s) can request an independent noise impact assessment for the land. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.</p> <p>If the noise impact assessment determines that the noise generated by the project causes sustained exceedances, or is likely to cause sustained exceedances, of the 40 dBA criteria, the owner(s) can make a written request to the Proponent for acquisition of the residence and land in accordance with the procedures in conditions 8 and 9 of Schedule 4.</p>	Quarterly noise monitoring reports – Tarrawonga Coal Mine – Environmental Noise Monitoring Quarter 2 2017.pdf	There has been no request from privately owned residences for an independent noise assessment. The auditor also reviewed quarterly noise monitoring reports and monitoring records. The reviewed noise data demonstrated that there has been no exceedance of 40dB (A) LAeq (15 min) noise levels at the monitoring locations.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations				
	<p>Upon receiving a written request from the owner(s), the Proponent must purchase the residence and land in accordance with the procedures in conditions 8 and 9 of Schedule 4.</p> <p>However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p>								
Cumulative Noise Criteria									
Notes: Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions(also see condition 13)), of the NSW Industrial Noise Policy. Operational noise includes noise from the mining operations and the use of private roads (excluding the Kamilaroi Highway overpass) and rail spurs.									
6	<p>Except for the land listed in Table 1, the Proponent shall ensure that the operational noise generated by the project combined with the noise generated by other mines does not exceed the criteria in Table 3 at any residence on privately-owned land.</p> <p>Table 3: Cumulative noise criteria dB(A) L_{Aeq} (period)</p> <table><tr><td>Land</td><td>Day/Evening/Night L_{Aeq} (period)</td></tr><tr><td>All privately-owned land</td><td>40</td></tr></table>	Land	Day/Evening/Night L_{Aeq} (period)	All privately-owned land	40	<p>Quarterly noise monitoring reports – Tarrawonga Coal Mine – Environmental Noise Monitoring Quarter 2 2017.pdf</p> <p>RE: TCM Quarterly Attended Monitoring_1.msg</p>	<p>Auditor review of quarterly noise monitoring reports confirmed no noise generated greater than 40dB.</p>	C	
Land	Day/Evening/Night L_{Aeq} (period)								
All privately-owned land	40								
Cumulative Noise Acquisition Requirements									
Notes: 1. The notes to condition 4 of this Schedule also apply to this condition. 2. The noise impact assessment shall include assessment of the relative contribution of the mines to the impact at the residence.									

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
7	<p>If the owner(s) of a privately-owned residence, which is not listed in Table 1, reasonably believes that the noise limits in Table 3 are being exceeded at the residence and that the exceedance is caused by operational noise from the project and one or more other mines (including use of private roads or rail spurs), the owner(s) can request an independent noise impact assessment for the residence. The request shall be made in writing to the Secretary. If the Secretary considers that a noise impact assessment is warranted, then the Proponent shall commission the assessment.</p> <p>Where the noise impact assessment determines that the cumulative noise generated by the project combined with the noise from the other mine(s) causes, or is likely to cause, sustained exceedances of the criteria in Table 3, then the owner(s) can make a written request to the Proponent for one of the following:</p> <p>(a) mitigation (such as double glazing, insulation and air conditioning) at the residence in consultation with the owner(s). These measures must be reasonable and feasible and directed towards reducing the noise impacts of the project on the residence. If within 3</p>	Interview with Environment Officer	No requests for noise impact study from privately owned residences	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>months of receiving this request from the owner(s), the Proponent and owner(s) cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution; or</p> <p>(b) acquisition of the residence and land in accordance with the procedures in conditions 8 and 9 of Schedule 4.</p> <p>Upon receiving a written request from the owner(s), the Proponent must undertake whichever option has been requested by the owner(s).</p> <p>However, this condition does not apply if the Proponent has an agreement with the owner(s) of the relevant residence to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p>The Proponent may seek to recover an equitable share of the costs incurred from the other mines contributing to the cumulative impact. Unless otherwise agreed between the mines, the proportional contributions should be based on expert analysis of the monitoring results to assess relative contribution to the impact. In the event of a</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations						
	dispute between the mines the Proponent, or one of the contributing mines, may submit the matter to the Secretary for resolution. The Secretary’s decision shall be final.										
Road Traffic Noise Criteria											
Note: Traffic noise generated by the Project is to be measured in accordance with the relevant procedures in the NSW Road Noise Policy.											
8	<p>The Proponent, together with the owners of the Rocglen and Vickery coal mines, shall ensure that the noise generated on public roads by the Project and the other mines, does not exceed the criteria in Table 4 at any existing residence on privately-owned land.</p> <p>Table 4: Road traffic noise criteria dB(A)</p> <table><tr><td>Land</td><td>Day and Evening LAeq (15 hour)</td><td>Night LAeq (15 hour)</td></tr><tr><td>All privately-owned residences</td><td>60</td><td>55</td></tr></table> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Land	Day and Evening LAeq (15 hour)	Night LAeq (15 hour)	All privately-owned residences	60	55	<p>06259_6226_LtrRpt_8Dec15.doc – Spectrum</p> <p>06259_6921_LtrRpt_13Dec16.pdf</p>	<p>No agreements are held with landowners adjacent to haul route.</p> <p>No coal haulage at night.</p> <p>Noise monitoring reports reviewed demonstrated no exceedance of criteria.</p> <p>Three monitoring locations (2 properties) – 2 residences on Brooklyn and Werona</p> <p>Report states that for practical reasons it is not possible to undertake monitoring for 15 hours (entire day period). The approach here is to monitor noise over a representative one hour period and utilise the results of this to theoretically predict noise over the compliance period.</p> <p>TMCL should consider updating this condition to reflect the approach used to ensure 100% compliance.</p>	ANC	
Land	Day and Evening LAeq (15 hour)	Night LAeq (15 hour)									
All privately-owned residences	60	55									

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Attenuation of Plant					
9	The Proponent shall: (a) ensure that: - all trucks, dozers, drills and excavators purchased for used on the site after the date of this approval are commissioned as noise suppressed (or attenuated) units; - improvements are made to existing noise suppression equipment as improved technology becomes available where reasonable and feasible; and (b) monitor and report on the implementation of these requirements annually on its website.	Interview with Environment Officer 21135302-annual-review-2016.pdf - AEMR - authorisation date 28/2/2017	(a) During the reporting period sound power level testing identified that three excavators and a drill had results greater than projected (b) AEMR - authorisation date 28/2/2017 - demonstrates annual sound power level testing. The document was sourced from the Whitehaven website www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm	NC	
10	The Proponent shall: (a) conduct an annual testing program of the plant on site; (b) restore the effectiveness of any attenuation if it is found to be defective; and (c) report on the results of any testing and/or attenuation work within the Annual Review.	21135302-annual-review-2016.pdf AEMR - authorisation dated 28/2/2017 Exc 530 Timing Letter_28020217	(a) AEMR demonstrates annual sound power level testing. (b) there were exceedances noted in the report above - the report outlines a drill that was taken out of service due to SPL exceedances. Also outlines proposed works for 2xTerex RH170 excavators and Hitachi 1900 Excavator (c) Exc 530 Timing Letter_28020217 - demonstrates attenuation modifications	C	
Operating Conditions					
11	The Proponent shall: (a) implement best management	PA3-12-13 NMP Approval Letter Interview with Environment Officer	The Noise Management Plan was approved by the Department 20 Jan 2015. NMP developed to address the	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>practice to minimise all operational, low frequency, road and rail traffic noise levels associated with the project;</p> <p>(b) operate a comprehensive on-site noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval;</p> <p>(c) maintain the effectiveness of noise suppression equipment on plant at all times and ensure defective plant is not operationally used until fully repaired;</p> <p>(d) ensure that noise attenuated plant is deployed preferentially in locations near to sensitive receivers;</p> <p>(e) minimise the noise impacts of the project during meteorological conditions under which the noise limits in this approval do not apply (see condition 13);</p> <p>(f) ensure that project related trains on the Boggabri spur line only use locomotives that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);</p>	<p>21135302-annual-review-2016.pdf - AEMR - authorisation date 28/2/2017</p> <p>Exc 530 Timing Letter_28020217</p> <p>2016_01_BTM Environmental Monthly Meeting Minutes January 2016</p> <p>SX96-G1-noisemetchart-20150202.pdf</p>	<p>operational aspects detailed. It is noted that the NMP did not have the Leard Forest Mining Precinct Noise Management Strategy included.</p> <p>(a) all roads are sealed that are used as haul roads by the mine, monitoring of road traffic noise is undertaken, though is undertaken at one hour intervals and extrapolated rather than for an entire 15 hour period as required by the condition;</p> <p>(b) meeting minutes observed with reference to noise conditions and compliance. Real time noise monitoring records were observed, which displayed wind speed data. Proactive and reactive noise mitigation measures were observed on a site toolbox talk discussion board.</p> <p>(c) there were exceedances noted in the report above – the report outlines a drill that was taken out of service due to SPL exceedances. Also outlines proposed works for 2xTerex RH170 excavators and Hitachi 1900 Excavator</p> <p>Exc 530 Timing Letter_28020217 – demonstrates attenuation modifications</p> <p>Environment Officer indicated in interview that some plant continues to operate even though an exceedance of sound power level has been recorded. The justification given was that it is reasonable and feasible for plant to still to operate based on the evidence that exceedances of criteria at sensitive receiver monitoring locations has</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(g) use its best endeavours to ensure that project-related rolling stock supplied by service providers on the Boggabri rail spur line is designed, constructed and maintained to minimise noise; and</p> <p>(h) co-ordinate the noise management on site with the noise management at other mines within the Leard Forest Mining Precinct, to minimise the cumulative noise impacts of these mines, to the satisfaction of the Secretary.</p>		<p>occurred only once in the reporting period. The commitment states that 'defective plant is not used until fully repaired'. Hence this is considered an ANC.</p> <p>(d) only attenuated plant are excavators, so no preferential requirement. No trucks within the fleet are noise attenuated.</p> <p>(f) Rail spur is not triggered because road is only method of transportation.</p> <p>(g) Rail spur is not triggered because road is only method of transportation.</p> <p>(h) The NMP states that the Leard Forest Mining Precinct Noise Management Strategy has been developed and is awaiting approval from the Department of Planning and Environment. No evidence was sited that approval has been received, hence this is an Administrative Non Compliance (ANC)</p>		
Noise Management Plan					
<i>Note: The Leard Forest Mining Precinct Noise Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination and commencement of other mining projects in the area.</i>					
12	<p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA, and be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) describe the measures that would</p>	<p>PA3-12-1 Noise MP Submission Letter</p> <p>Tarrawonga Coal Mine - Noise Management Plan Submission</p> <p>https://www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm</p>	<p>NMP available online is dated 2014, in place and presented on website which meets criteria.</p> <p>a) Initial document developed 27 May 2013, most recently updated following 2014 IEA. Secretary Approval dated 1 Jan 2015.</p> <p>b) Compliant Section 2.4, 3.1</p> <p>c) Compliant Section 3</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>be implemented to ensure:</p> <ul style="list-style-type: none"> - best management practice is being employed; - the noise impacts of the project are minimised during meteorological conditions under which the noise limits in this approval do not apply; and - compliance with the relevant conditions of this approval; <p>(c) describe the proposed noise management system in detail;</p> <p>(d) include a risk/response matrix to codify operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p> <p>(e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from noise monitoring;</p> <p>(f) describe the measures that would be implemented to ensure the noise impacts from the operation of the Kamlaro Highway overpass are minimised as far as practicable;</p> <p>(g) include a monitoring program that:</p> <ul style="list-style-type: none"> - uses attended monitoring to evaluate the performance of the project against all noise criteria in this approval, including a minimum of four days attended monitoring per 		<p>d) Compliant Section 3.3</p> <p>e) Compliant Section 5.2</p> <p>f) Refers to Road Noise Management Plan</p> <p>g) Compliant Section 3.1, 3.3, and Section 4</p> <p>h) Compliant Section 2.6 with reference to <i>Leard Forest Precinct Noise Management Strategy, approved June 2017 to be appended to the updated NMP (see below)</i>.</p> <p>An updated NMP was submitted to DP&E 1 Feb 2017 and is awaiting approval.</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>quarter at locations agreed to by the Secretary, or more regularly where required;</p> <ul style="list-style-type: none"> - uses real-time monitoring to support the proactive and reactive noise management system on site; - includes monitoring of inversion strength at an appropriate sampling rate to determine compliance with noise limits; - evaluates and reports on the effectiveness of the noise management system on site; - provides for the annual validation of the noise model for the project (including the tenth percentile methodology); and <p>(h) includes a Leard Forest Mining Precinct Noise Management Strategy, that has been prepared in consultation with other coal mines in the Precinct, to minimise the cumulative noise impacts of all mines within the Precinct, and includes:</p> <ul style="list-style-type: none"> - a description of the measures that would be implemented to ensure that the noise management of the mines is properly co-ordinated to ensure compliance with the relevant noise criteria; - a suitable monitoring network for the precinct; 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> - protocols for data sharing; and - procedures for identifying and apportioning the source/s and contribution/s to cumulative noise impacts for the operating mines and other sources, using the noise and meteorological monitoring network and appropriate investigative tools. 				
Noise Measurement					
13	<p>Where conditions in this approval refer to measurement of noise within the context of the NSW Industrial Noise Policy the inversion class to be applied to the project is Class G.</p> <p>However, the Proponent may undertake an investigation to determine whether a proposal for change in this classification could be considered for approval by the Secretary. Any such investigation must be conducted in consultation with the EPA and be conducted by a suitably qualified person whose appointment has been endorsed by the EPA and approved by the Secretary. The report and recommendation must be submitted to the EPA for endorsement prior to submission to the Secretary. If the Secretary is satisfied that the recommendation is reasonable, then the Secretary may amend the inversion class applying to the project under this approval.</p>	Interview with Environment Officer	No proposal for change has been requested by the proponent.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations															
BLASTING																				
Blasting Criteria																				
14	<div>The Proponent shall ensure that blasting does not cause any exceedance of the criteria in Table 5.</div> <div>Table 4: Blasting criteria</div> <table><tr><th>Location</th><th>Airblast overpressure (dB(Lin Peak))</th><th>Ground vibration (mm/s)</th><th>Allowable exceedance</th></tr><tr><td rowspan="2">Residence on privately-owned land</td><td>120</td><td>10</td><td>0%</td></tr><tr><td>115</td><td>5</td><td>5% of the total number of blasts over a period of 12 months</td></tr><tr><td>All public infrastructure</td><td>-</td><td>50 (or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest</td><td>0%</td></tr></table>	Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance	Residence on privately-owned land	120	10	0%	115	5	5% of the total number of blasts over a period of 12 months	All public infrastructure	-	50 (or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest	0%	<div>Environmental Blast Monitoring 2015.xlsx.</div> <div>Environmental Blast Monitoring 2016.xlsx.</div>	<div>Auditor reviewed blast monitoring records. No exceedances of ground vibration of 10mm/s.</div> <div>A number of blast overpressure exceedances on project related land – (January 2015 was the item observed by auditor). These have previously been reported to the EPA but no longer reported as they are on project land. Review of records available for property purchased and blasting records demonstrated no exceedances prior to the properties being purchased by TCP.</div>	C	
Location	Airblast overpressure (dB(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance																	
Residence on privately-owned land	120	10	0%																	
	115	5	5% of the total number of blasts over a period of 12 months																	
All public infrastructure	-	50 (or a limit determined by the structural design methodology in AS 2187.2-2006, or its latest	0%																	

No	Assessment Requirement				Reference/ Evidence	Comments	Compliance Status	Recommendations
			version, to the satisfaction of the Secretary)					
However, these criteria do not apply if the Proponent has a written agreement with the relevant owner or infrastructure provider/owner to exceed the limits in Table 5, and the Proponent has advised the Department in writing of the terms of this agreement.								
Blasting Hours								
15	The Proponent shall only carry out blasting on the site between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Secretary.				Environmental Blast Monitoring 2015.xlsx. Environmental Blast Monitoring 2016.xlsx. Dynamaster (captured events - table view) provided by gotech	Auditor reviewed blast monitoring data, no blasting has occurred on a Sunday and all blasts within defined timeframes during the audit period.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Blasting Frequency					
<i>Note: For the purposes of this condition a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the mine.</i>					
16	<p>The Proponent may carry out a maximum of:</p> <p>(a) 1 blast a day; unless an additional blast is required following a blast misfire; and</p> <p>(b) 4 blasts a week, averaged over a calendar year, for the project.</p> <p>This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blasts required to ensure the safety of the mine or its workers.</p>	<p>Environmental Blast Monitoring 2015.xlsx.</p> <p>Environmental Blast Monitoring 2016.xlsx.</p> <p>Tarrawonga Shot today – 24/3/2016.msg</p>	<p>Auditor reviewed blast monitoring data, there are a number of instances where two shots have occurred due to misfire. Consultation occurred with EPA via email when the misfires have occurred. Data review indicates on average 7-8 blasts per month with fewer than 4 blasts per week.</p>	C	
Property Inspections					
17	<p>If the Proponent receives a written request from the owner of any privately-owned land within 2 kilometres of the approved open-cut pit on site, for a property inspection to establish the baseline condition of any buildings and/or structures on his/her land, or to have a previous property inspection report updated, then within 2 months of receiving this request the Proponent shall:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties, to:</p> <p>(b) establish the baseline condition of</p>	<p>Interview with Environment Officer</p>	<p>No requests received during audit period.</p>	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>any buildings and/or structures on the land, or update the previous property inspection report; and</p> <p>(c) identify any measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/or structures; and</p> <p>(d) give the landowner a copy of the new or updated property inspection report.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.</p>				
Property Investigations					
18	<p>If any owner of privately-owned land within 2 kilometres of blasting operations, or any other landowner nominated by the Secretary, claims that the buildings and/or structures on his/her land have been damaged as a result of blasting on site, then within 2 months of receiving this claim in writing from the landowner, the Proponent shall:</p> <p>(a) commission a suitably qualified, experienced and independent person, whose appointment is</p>	Interview with Environment Officer	No requests received during audit period	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>acceptable to both parties, to investigate the claim; and</p> <p>(b) give the landowner a copy of the property investigation report.</p> <p>If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damages to the satisfaction of the Secretary.</p> <p>If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Secretary for resolution.</p>				
Operating Conditions					
19	<p>During mining operations on site, the Proponent shall:</p> <p>(a) implement best practice blasting management to:</p> <ul style="list-style-type: none"> - protect the safety of people and livestock in the surrounding area; - protect public or private infrastructure/property in the surrounding area from any damage; - minimise the dust and fume emissions of any blasting; and - minimise blasting impacts on 	<p>PA3-19-5 Blast Management Plan</p> <p>PA3-19-1 WHC-CHK-OC- Shotfirers check</p> <p>PA3-19-2 Drill and Blast Design Checklist</p> <p>PA3-19-14 WHC-PRO-OC-Blast clearing and firing</p>	<p>Auditor reviewed standard operating procedures referenced that detail requirements for operations for blasting in accordance with this condition.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>heritage items in the vicinity of the site;</p> <p>(b) co-ordinate the timing of blasting on site with the timing of blasting at other mines within the Leard Forest Mining Precinct to minimise the cumulative blasting impacts of the mines; and</p> <p>(c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Secretary.</p>				
20	<p>The Proponent shall not undertake blasting on-site within 500 metres of:</p> <p>(a) any public road without the approval of Council; or</p> <p>(b) any land outside of the site not owned by the Proponent, unless:</p> <p>the Proponent has a written agreement with the relevant landowner to allow blasting to be carried out closer to the land, and the Proponent has advised the Department in writing of the terms of this agreement; or</p> <p>the Proponent has:</p> <ul style="list-style-type: none"> - demonstrated that the blasting can be carried out closer to the land without compromising the safety of the people or livestock on the land, or damaging the buildings and/or 	PA3-19-5 Blast Management Plan	<p>Auditor reviewed standard operating procedures referenced that detail requirements for operations for blasting in accordance with this condition.</p> <p>Road closure management plan contained within BMP.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	structures on the land; and - updated the Blast Management Plan to include the specific measures that would be implemented while blasting is being carried out within 500 metres of the land, to the satisfaction of the Secretary.				
Blast Management Plan					
<i>Note: The Leard Forest Mining Precinct Blast Management Strategy can be developed in stages, and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.</i>					
21	<p>The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) be prepared in consultation with the EPA and interested members of the local community who would potentially be affected by blasting;</p> <p>(c) propose and justify any alternative ground vibration limits for public infrastructure in the vicinity of the site;</p> <p>(d) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> - best management practice is being employed; and - compliance with the relevant conditions of this approval; 	Blast Management Plan (2014)	<p>BMP available online is dated December 2014, in place and presented on website which meets criteria.</p> <ul style="list-style-type: none"> a) Initial document developed Jan 2006, most recently updated following 2014 IEA. Secretary Approval dated 18 August 2015. b) Section 1 of BMP c) No alternative ground vibration limits proposed. d) Section 3 of BMP e) Section 3.4 of BMP f) Section 3.7 and appendix 3 of the BMP g) Section 5 of BMP h) Compliant Appendix 4 <i>Leard Forest Precinct Blast Management Strategy</i> 	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(e) include a road closure protocol for blasting within 500 metres of a public road, that has been prepared in consultation with Council;</p> <p>(f) include a specific blast fume management protocol to demonstrate how emissions will be minimised, including risk management strategies if blast fumes are generated;</p> <p>(g) include a monitoring program for evaluating blasting performance, which includes:</p> <ul style="list-style-type: none"> - compliance with the applicable criteria; and - minimising blast fume emissions; and <p>(h) include a Leard Forest Mining Precinct Blast Management Strategy, that has been prepared in consultation with other mines within the Leard Forest Mining Precinct, to minimise cumulative blasting impacts.</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
AIR QUALITY & GREENHOUSE GAS					
Odour					
22	Unless otherwise authorised by an EPL, the Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.	https://www.whitehavencoal.com.au/environment/docs/2014-complaints-20-complaints.pdf https://www.whitehavencoal.com.au/environment/docs/2015-complaints.pdf https://www.whitehavencoal.com.au/environment/docs/04102818-2016-complaints.pdf 2017 - No Complaints to date	No odour complaints during audit period.	C	
Greenhouse Gas Emissions					
23	The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Secretary.	PA3-9-2 Annual ReviewAEMR PA3-23-1 NGERS PA3-28-4 Air Quality Monitoring	TCM considers acceptance of annual reviews and approval of AQGGMP as satisfying the intent of this condition. In addition TCM issues annual NGERS reports.	C	
Air Quality Criteria					
<p><i>Notes to Table 6, Table 7 and Table 8:</i></p> <p><i>a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);</i></p> <p><i>b Incremental impact (ie incremental increase in concentrations due to the project on its own);</i></p> <p><i>c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.</i></p> <p><i>d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.</i></p> <p><i>"Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in conditions 28 and 29 to develop and implement a real-time air quality management system that ensures operational responses to the risks of exceedance of the criteria.</i></p>					
24	The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are implemented so that particulate matter emissions generated by the	PA3-28-4 Air Quality Monitoring	Auditor reviewed Air Quality Monitoring Data and AMER/AR for the audit period. Although results have been identified in excess of criteria, these were recorded on project land. Recently submitted	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations												
	<p>project do not cause exceedances of the criteria in Table 6, Table 7 and Table 8 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.</p> <p>The assessment acknowledges that it may not be reasonable and feasible to prevent exceedance of the PM10 criteria in Table 6 at property 45 and exceedance of the criteria in Table 7 in year 16 at property 49. (To interpret the property locations referred to see the applicable figure(s) in Appendix 5.)</p> <p><i>Table 5: Long-term criteria for particulate matter</i></p> <table><tr><td>Pollutant</td><td>Averaging Period</td><td>^d Criterion</td></tr><tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td>^a 90 µg/m³</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>Annual</td><td>^a 30 µg/m³</td></tr></table> <p><i>Table 6: Short-term criteria for particulate matter</i></p> <table><tr><td>Pollutant</td><td>Averaging</td><td>^d Criterion</td></tr></table>	Pollutant	Averaging Period	^d Criterion	Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	Pollutant	Averaging	^d Criterion		AQGGMP removes these locations with the exception of a deposited dust gauge at three locations. AQGGMP submitted 27 June 2017 to Department awaiting approval.		
Pollutant	Averaging Period	^d Criterion															
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³															
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³															
Pollutant	Averaging	^d Criterion															

No	Assessment Requirement				Reference/ Evidence	Comments	Compliance Status	Recommendations
		Period						
	Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³					
	Table 7: Long-term criteria for deposited dust							
	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level				
	Deposited dust	Annual	^b 2g/m ² /month	^b 4g/m ² /month				
Mine-Specific Air Quality Criteria								
Note: As provided by the EP&A Act, the criterion in Table 8 may be amended to a more stringent criterion in an EPL, after the first review of the EPL under section 78 of the POEO Act.								
25	The Proponent shall ensure that particulate matter emissions generated by the project do not				PA3-28-4 Air Quality Monitoring	Auditor reviewed Air Quality Monitoring Data and AMER/AR for the audit period. No exceedance identified.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations						
	<div>exceed the criteria listed in Table 9 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, except on property 49 in year 16.</div> <div>Table 8: Short-term criteria for particulate matter</div> <table><tr><td>Pollutant</td><td>Averaging Period</td><td>Criterion</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>24 hour</td><td>50 µg/m³</td></tr></table>	Pollutant	Averaging Period	Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³				
Pollutant	Averaging Period	Criterion									
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³									
Air Quality Acquisition Criteria											
<div>Notes to Table 10, Table 11 and Table 12:</div> <div>a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources);</div> <div>b Incremental impact (ie incremental increase in concentrations due to the project on its own);</div> <div>c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method;</div> <div>d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed by the Secretary.</div>											
26	If particulate matter emissions generated by the project exceed the criteria, or contribute to an exceedance of the relevant cumulative criteria, in Table 10, Table 11 or Table 12, at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner the Proponent shall acquire the land in	Interview with Environment Officer	No written requests for acquisition	NT							

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations																		
	<p>accordance with the procedures in conditions 8 and 9 of schedule 4.</p> <p><i>Table 9: Long term land acquisition criteria for particulate matter</i></p> <table><tr><td><i>Pollutant</i></td><td><i>Averaging Period</i></td><td><i>^d Criterion</i></td></tr><tr><td>Total suspended particulate (TSP) matter</td><td>Annual</td><td>^a 90 µg/m³</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>Annual</td><td>^a 30 µg/m³</td></tr></table> <p><i>Table 10: Short term land acquisition criteria for particulate matter</i></p> <table><tr><td><i>Pollutant</i></td><td><i>Averaging Period</i></td><td><i>^d Criterion</i></td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>24 hour</td><td>^a 150 µg/m³</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>24 hour</td><td>^b 50 µg/m³</td></tr></table> <p><i>Table 11: Long term land acquisition criteria for deposited dust Pollutant Averaging period Maximum</i></p>	<i>Pollutant</i>	<i>Averaging Period</i>	<i>^d Criterion</i>	Total suspended particulate (TSP) matter	Annual	^a 90 µg/m³	Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m³	<i>Pollutant</i>	<i>Averaging Period</i>	<i>^d Criterion</i>	Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 150 µg/m³	Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m³				
<i>Pollutant</i>	<i>Averaging Period</i>	<i>^d Criterion</i>																					
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m³																					
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m³																					
<i>Pollutant</i>	<i>Averaging Period</i>	<i>^d Criterion</i>																					
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 150 µg/m³																					
Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m³																					

No	Assessment Requirement				Reference/ Evidence	Comments	Compliance Status	Recommendations
	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level				
	Deposited dust	Annual	^b 2g/m ² /month	^a 4g/m ² /month				
Mine-owned Land								
27	<p>The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are implemented so that particulate matter emissions generated by the project do not exceed the criteria in Table 6, Table 7 and Table 8 at any occupied residence on any mine-owned land (including land owned by adjacent mines), unless:</p> <p>(a) the tenant and/or landowner has been notified of any health risks in accordance with the notification requirements under schedule 4 of this approval;</p> <p>(b) the tenant on project-related land can terminate the tenancy agreement without penalty, subject to giving reasonable notice, and the Proponent uses its best endeavours to provide assistance with relocation and sourcing of</p>				<p>PA3-27-2 Satisfaction of Secretary Response</p> <p>PA3-27-3 Example Licensing Whitehaven Property Letter</p>	<p>Letter from Secretary confirms condition satisfied.</p> <p>Lease agreements in place with notifying letter to tenants including monitoring data.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>alternative accommodation;</p> <p>(c) air mitigation measures such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant and landowner (where owned by another mine other than the Proponent);</p> <p>(d) particulate matter air quality monitoring is undertaken to inform the tenant and landowner of potential health risks; and</p> <p>(e) monitoring data is presented to the tenant in an appropriate format, for a medical practitioner to assist the tenant in making an informed decision on the health risks associated with occupying the property, to the satisfaction of the Secretary.</p>				
Operating Conditions					
28	<p>The Proponent shall:</p> <p>(a) implement best practice air quality management practices on site, including all reasonable and feasible measures to minimise odour, fume and dust emissions of the project;</p> <p>(b) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting,</p>	<p>Envirosuite Real Time Air Monitoring</p> <p>PA3-28-5 Flixton TEOM</p> <p>PA3-28-1 Wilgai TEOM</p> <p>Site observations</p> <p>PA3-28-6 Response to show cause submission</p>	<p>Auditor reviewed Envirosuite Real Time Air Monitoring software including dispersion and predictive data as well as TEOM data.</p> <p>Reduction in complaints relating to visual dust. Dust carts for dust suppression observed.</p> <p>Show Cause received with regard to dust 26 August 2016, follow-up received from EPA on 17 February 2017 closing the issue with no further action required.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>predictive and real time air dispersion modelling and real-time air quality monitoring data to guide the day-to-day planning of mining operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this approval;</p> <p>(c) manage PM2.5 levels in accordance with any requirements of an EPL;</p> <p>(d) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 8);</p> <p>(e) minimise any visible air pollution generated by the project;</p> <p>(f) minimise the surface disturbance of the site generated by the project; and</p> <p>(g) co-ordinate the air quality management on site with the air quality management at other mines within the Leard Forest Mining Precinct to minimise the cumulative air quality impacts of the mines, to the satisfaction of the Secretary.</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Air Quality and Greenhouse Gas Management Plan					
<p>Notes:</p> <p>The requirement for regionally based control sites can be further reviewed if a regional air monitoring network is implemented and operated by the EPA as recommended in the draft Strategic Regional Land Use Plan for New England North West.</p> <p>The Leard Forest Mining Precinct Air Quality Management Strategy can be developed in stages and will need to be subject to ongoing review dependent upon the determination of and commencement of other mining projects in the area.</p> <p>The management plan should be consistent with the EPA's guidance on Best Management Practice reporting and Reactive Particulate Management Strategies.</p>					
29	<p>The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA and be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) describe the measures that would be implemented to ensure:</p> <ul style="list-style-type: none"> - best practice management is being employed; - the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events; and - compliance with the relevant conditions of this approval; <p>(c) describe the proposed air quality management system;</p> <p>(d) include a risk/response matrix to codify mine operational responses to varying levels of risk resulting from weather conditions and specific mining activities;</p>	<p>PA3-29-10 AQGGMP Approval Letter</p> <p>PA29-14 Approval AQMS - Tarrawonga</p>	<p>AQGGMP available online is dated January 2015, in place and presented on website which meets criteria.</p> <ul style="list-style-type: none"> a) Section 1 of AQGGMP. Initial document developed Dec 2005, most recently updated following 2014 IEA. Submitted 27 May 2013. Secretary Approval dated 30 March 2015. b) Section 3 of AQGGMP c) Section 3 and 5 of AQGGMP d) Section 4.1 of AQGGMP e) Section 4.3 of AQGGMP f) Section 4.2 of AQGGMP a) Leard Forest AQMS dated 6 June 2017 to be attached to AQGGMP 	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(e) include commitments to provide summary reports and specific briefings at CCC meetings on issues arising from air quality monitoring;</p> <p>(f) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the project; - adequately supports the proactive and reactive air quality management system; - includes PM2.5 monitoring; - includes monitoring of occupied mine-owned residences and residences on the air quality affected land in Table 1, subject to the agreement of the tenant and/or landowner; - evaluates and reports on the effectiveness of the air quality management system; - includes sufficient random audits of operating responses to real time air quality management systems to determine the ongoing effectiveness of these responses in maintaining the project within the relevant criteria in this Schedule and the requirements of conditions 24 and 25, above; - includes a protocol for 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>determining any exceedences of the relevant conditions in this approval; and</p> <p>(g) includes a Leard Forest Mining Precinct Air Quality Management Strategy that has been prepared in consultation with other coal mines in the Precinct to minimise the cumulative air quality impacts of all mines within the Precinct, that includes:</p> <ul style="list-style-type: none"> - systems and processes to ensure that all mines are managed to achieve their air quality criteria; - a shared environmental monitoring network and data sharing protocol; - control monitoring site(s) to provide real time data on background air quality levels (ie not influenced by mining in the Leard Forest Mining Precinct and representative of regional air quality); - a shared predictive and real time air dispersion model covering the Leard Forest Mining Precinct to be used for assessment of cumulative impacts, optimising location of the shared real time monitoring network, validation of air predictions and optimising mitigation measures; and - procedures for identifying and 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	apportioning the source/s and contribution/s to cumulative air impacts for both mines and other sources, using the air quality and meteorological monitoring network and appropriate investigative tools such as modelling of post incident plume dispersion, dual synchronised monitors and chemical methods of source apportionment (where possible).				
METEOROLOGICAL MONITORING					
30	For the life of the project, the Proponent shall ensure that there is a meteorological station in the vicinity of the site that: (a) complies with the requirements in the <i>Approved Methods for Sampling of Air Pollutants</i> in New South Wales guideline; and (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the <i>NSW Industrial Noise Policy</i> , unless a suitable alternative is approved by the Secretary following consultation with the EPA.	Sentinex Weather station calibration report (6 monthly maintenance and calibration conducted on 24/2/16 SX99-monthly-20170701.csv Weather station was observed when on-site.	The weather station is capable of continuous monitoring but has intermittent periods where continuous recording is not achieved due to signal drop out, as such this is considered an ANC. Calibration reports for the weather station were provided and reviewed.	ANC	
SOIL AND WATER					
<i>Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain the necessary water licences for the project.</i>					
Water Supply					
31	The Proponent shall ensure that it has sufficient water for all stages of	Tarrawonga WMP_Final	Auditor sited Water Access Licence	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	the project, and if necessary, adjust the scale of mining operations on site to match its available water supply, to the satisfaction of the Secretary.	Water Access Licence (WAL) 31084	(WAL) 31084 Whitehaven website referred to R.W Corkery & Co (2006) Site Water Management Plan for the Tarrawonga Coal Mine that contained a site water balance in Section 3. SLR Consultants prepared an updated Water Management Plan) that is currently outstanding with DoPE. The SLR report has a site water balance in Section 4.		
Compensatory Water Supply					
32	<p>The Proponent shall provide a compensatory water supply to any owner of privately-owned land whose water supply is adversely and directly impacted (other than a negligible impact) as a result of the project, in consultation with DPI, and to the satisfaction of the Secretary.</p> <p>The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply should be provided (at least on an interim basis) within 24 hours of the loss being identified.</p> <p>If the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may</p>	Tarrawonga WMP_Final	<p>Section 7.7.2 of report states two nearby bores may have maximum drawdown of 1m. Monitoring bore established for tracking and its impacts identified compensatory water supply will be provided.</p> <p>Environment Officer stated no indication of direct loss from adjacent to land holdings property owners.</p> <p>Environment Officer stated that WMP identifies no impacts to water sources</p> <p>Environment Officer stated that WMP identifies no impacts to water sources</p>	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>refer the matter to the Secretary for resolution.</p> <p>If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Secretary.</p>				
Surface Water Discharges					
33	The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.	<p>Water Management Inspection checklist WHC-CHK-SITE Dam Sediment Control Checklist template</p> <p>New record water management inspection (30/06/2017) email from tablet to Environment Officer</p> <p>121113.pdf 251113.pdf SKMBT_C28415040815501.PDF</p>	<p>Water management inspection checklist was observed – this demonstrates that basin capacity was inspected and comment made about whether dewatering is required or not.</p> <p>Inspection checklist SKMBT_C28415040815501.PDF was an inspection following the receipt of 87mm of rain. After this large rainfall volume no discharges were noted and capacity was available in basins that would prevent overflow off-site. This supported the interview with the Environment officer that no discharges occurred on-site.</p> <p>In order to demonstrate capacity management TCP may consider taking a photograph of capacity pegs during high rainfall events (>50mm) to demonstrate no overflow and excess capacity available.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations						
Goonbri Creek Diversion and Low Permeability Barrier – Performance Objectives											
34	<p>The Proponent shall ensure that the project has no greater environmental consequences than predicted in the EA and complies with the performance objectives in Table 13, to the satisfaction of the Secretary.</p> <p><i>Table 12: Goonbri Creek and alluvial aquifer performance objectives</i></p> <table><tr><th>Feature</th><th>Objective</th></tr><tr><td>Goonbri Creek and the Upper Namoi alluvial aquifer</td><td>No more than negligible environmental consequences to the alluvial aquifer, including: - negligible change in groundwater levels; - negligible leakage through low permeability barrier; - negligible change in groundwater quality; and - negligible impact to other groundwater users.</td></tr><tr><td>Goonbri Creek diversion</td><td>Hydraulically and geomorphologically stable (including the low permeability barrier). Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity). Riparian vegetation, habitat, energy management and dissipation, bedload transport, biophysical maintenance and pool holding capacity that is the</td></tr></table>	Feature	Objective	Goonbri Creek and the Upper Namoi alluvial aquifer	No more than negligible environmental consequences to the alluvial aquifer, including: - negligible change in groundwater levels; - negligible leakage through low permeability barrier; - negligible change in groundwater quality; and - negligible impact to other groundwater users.	Goonbri Creek diversion	Hydraulically and geomorphologically stable (including the low permeability barrier). Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity). Riparian vegetation, habitat, energy management and dissipation, bedload transport, biophysical maintenance and pool holding capacity that is the	Interview with Environment Officer	The Goonbri Creek Diversion and Low Permeability Barrier are yet to commence.	NT	
Feature	Objective										
Goonbri Creek and the Upper Namoi alluvial aquifer	No more than negligible environmental consequences to the alluvial aquifer, including: - negligible change in groundwater levels; - negligible leakage through low permeability barrier; - negligible change in groundwater quality; and - negligible impact to other groundwater users.										
Goonbri Creek diversion	Hydraulically and geomorphologically stable (including the low permeability barrier). Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity). Riparian vegetation, habitat, energy management and dissipation, bedload transport, biophysical maintenance and pool holding capacity that is the										

No	Assessment Requirement		Reference/ Evidence	Comments	Compliance Status	Recommendations
		same or better than existed prior to mining. Revegetation of the riparian zone focused on establishment of self-sustaining vegetation characteristic of the Bracteate Honeymyrtle community (as proposed in the EA).				
	Low permeability barrier, including associated flood bund	Hydraulically and geomorphologically stable. The effectiveness of the Low Permeability Barrier shall be at least 10-8 metres/second. Negligible change to off-site flooding characteristics (including flood levels, velocities and flood storage capacity). Provides suitable protection for flood events up to and including the Probable Maximum Flood.				
Goonbri Creek Diversion and Flood Bund Concept Design Plan						
35	The Proponent shall prepare and implement a Goonbri Creek Diversion and Flood Bund Concept Design Plan, to the satisfaction of the Secretary. The plan must: (a) be prepared in consultation with DPI, OEH and the LLS; (b) be submitted to the Secretary for approval by December 2016; (c) set out the vision statement for		Tarrawonga Coal – Response to DPE letter re Goonbri Creek Diversion Design Plan (via email.pdf)	Auditor reviewed a response to DPE regarding Goonbri Creek Diversion Design Plan. The letter states that correspondence was not received by December 2016.	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>the creek diversion;</p> <p>(d) assess the surface water and groundwater quality, ecology, hydrological (including flooding) and geomorphic baseline conditions within the creek;</p> <p>(e) set out the construction program for the creek diversion and LPB, describing how the work would be staged, and integrated with mining operations;</p> <p>(f) describe the revegetation program for the creek diversion and the use of a range of suitable native species;</p> <p>(g) establish the water quality, ecology, hydrological (including flooding) and geomorphic performance and completion criteria for the creek diversion and LPB based on the assessment of baseline conditions; and</p> <p>(h) be revised in consultation with DPI, OEH and the LLS, and resubmitted for approval by the Secretary in response to the findings of the detailed technical design required in condition 36 and the Monitoring and Management Plan in condition 38.</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Goonbri Creek Diversion and Low Permeability Barrier - Design and Construction					
<p><i>Notes:</i></p> <p><i>The Goonbri Creek alluvium, diversion, conceptual low permeability barrier and flood bunds are shown in Appendix 6.</i></p> <p><i>The diversion and low permeability barrier may be constructed on a staged basis. In this case, the reports required under conditions 36 and 37 shall be submitted for each stage.</i></p>					
36	<p>The Proponent shall design the Goonbri Creek diversion and LPB to the satisfaction of DPI and the Secretary. The detailed designs must:</p> <p>(a) be designed by a suitably qualified and experienced expert/s;</p> <p>(b) be endorsed by DPI and approved by the Secretary prior to the commencement of any works or construction on the Goonbri Creek diversion and LPB;</p> <p>(c) be generally in accordance with the conceptual designs in the EA (and depicted in Appendix 6), and applicable Australian Standards (including AS 3798-2007);</p> <p>(d) include detailed design, construction and engineering specifications, performance criteria and completion criteria;</p> <p>(e) demonstrate that the design would achieve the relevant performance objectives and criteria; and</p> <p>(f) demonstrate the LPB design would remain effective over an appropriate lifespan and would withstand mining operations,</p>	Interview with Environment Officer	<p>The Goonbri Creek Diversion and Low Permeability Barrier are yet to commence and therefore works have yet to be implemented.</p> <p>Environment Officer indicated that there is mine planning software that demonstrates extents of Goonbri Creek and alluvial deposits.</p>	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	geological and weather events, decay and corrosive attack - including biological attack.				
37	<p>The Proponent shall:</p> <p>(a) construct the Goonbri Creek diversion and LPB prior to undertaking any mining operations within 200 metres of the Goonbri Creek alluvium, and at least 5 years prior to the planned mining in the alluvium; and</p> <p>(b) within 2 months of the construction of the Goonbri Creek diversion and LPB, submit an as-executed report to the Secretary and DPI, certified by a practising engineer, confirming that the diversion and barrier have been constructed:</p> <ul style="list-style-type: none"> - in accordance with the concept design in the EA, applicable Australian Standards (including AS 3798-2007) and the approved design (see condition 36 above); and - in a manner that achieves the performance objectives in Table 13. 	Interview with Environment Officer	<p>The Goonbri Creek Diversion and Low Permeability Barrier are yet to commence and therefore works have yet to be implemented.</p> <p>Environment Officer indicated that there is mine planning software that demonstrates extents of Goonbri Creek and alluvial deposits.</p>	NT	
Goonbri Creek Diversion and Low Permeability Barrier - Monitoring and Management Plan					
38	The Proponent shall prepare and implement a Goonbri Creek Diversion and Low Permeability Barrier Monitoring and Management Plan to the satisfaction of the DPI and the	Interview with Environment Officer	<p>The Goonbri Creek Diversion and Low Permeability Barrier are yet to commence and therefore works have yet to be implemented.</p> <p>Environment Officer indicated that there</p>	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Secretary. The plan must:</p> <p>(a) be prepared by a suitably qualified and experienced expert/s;</p> <p>(b) be endorsed by the DPI and approved to the Secretary prior to commencement of any works or construction on the Goonbri Creek diversion and LPB;</p> <p>(c) describe the monitoring and maintenance procedures to be implemented and the scheduling of these procedures;</p> <p>(d) demonstrate the monitoring system would be capable of timely detection of any failure or deficiency in the LPB and any impacts on Goonbri Creek and its associated alluvium;</p> <p>(e) describe the contingency measures that would be implemented in the event of a failure or deficiency in the LPB, or other impact on Goonbri Creek and its associated alluvium; and</p> <p>(f) identify the entity that would take responsibility for the future liabilities and costs associated with the long-term monitoring and maintenance of the LPB, flood bund, void and pit lake, and demonstrate that this entity's security and finances would be assured in the long term.</p>		is mine planning software that demonstrates extents of Goonbri Creek and alluvial deposits.		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Water Management Plan					
<i>Note: The Leard Forest Mining Precinct Water Management Strategy can be developed in stages and will need to be subject to ongoing review, dependent upon the determination of and commencement of other mining projects in the area.</i>					
39	<p>The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH, DPI and LLS, by suitably qualified and experienced person/s whose appointment has been approved by the Secretary,</p> <p>(b) be submitted to the Secretary for approval by the end of May 2013; and</p> <p>(c) in addition to the standard requirements for management plans (see condition 3 of schedule 5), include a:</p> <p>(i) <u>Site Water Balance</u>, that includes:</p> <ul style="list-style-type: none"> - details of: <ul style="list-style-type: none"> • sources and security of water supply, including contingency for future reporting periods; • water use and management on site; • any off-site water discharges; • reporting procedures, including the preparation of a site water balance for 	<p>Tarrawonga_WMP_final</p> <p>Site observation</p> <p>PA3-39-4 WMP Submission letter.docx</p> <p>PA3 - 39-2 Tarrawonga - Approved Person Water Management Plan (27 May 2013)</p> <p>Tarrawonga - WMP Extension of Time - 120815 (TCM - WMP - Extension of Time)</p>	<p>The WMP generally addresses the requirements of this condition in the following sections.</p> <p>(a) PA3-39-4 WMP Submission letter and PA3-39-2 Tarrawonga - Approval Person Water Management Plan.pdf</p> <p>(b) PA3-39-4 WMP Submission letter</p> <p>(c) (i) Section 4 of WMP</p> <p>(ii) Section 2, 3, 4, 6 of the report. (exact locations are outlined in Table 1 of the WMP)</p> <p>(iii) Section 2.4, 7, 8 of the WMP</p> <p>(iv) Section 2.2</p> <p>Basins and groundwater wells were observed on the site.</p> <p>SLR prepared water management Plan) outstanding with DoPE (on-going correspondence has been undertaken throughout this period while it remains unapproved.</p> <p>Leard WMP has been prepared but has not been approved to the satisfaction of the secretary so is considered as an ANC.</p>	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>each calendar year;</p> <ul style="list-style-type: none"> • a program to validate the surface water model, including monitoring discharge volumes from the site and comparison of monitoring results with modelled predictions; and • describes the measures that would be implemented to minimise clean water use on site; <p>(ii) <u>Surface Water Management Plan</u>, that includes:</p> <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in the water-bodies that could potentially be affected by the project; • detailed baseline data on soils within the irrigation area; • detailed baseline data on hydrology across the downstream drainage system of the Namoi River floodplain from the mine site to the Namoi River, including Barbers Lagoon and The Slush Holes; • a detailed description of the water management system on site, including the: <ul style="list-style-type: none"> ○ clean water 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<div> <div>diversion systems;</div> <div> <div>○ erosion and sediment controls (mine water system);</div> <div>○ mine water management systems including irrigation areas;</div> <div>○ discharge limits in accordance with EPL requirements; and</div> <div>○ water storages;</div> </div> <div> <div>• detailed plans, including design objectives and performance criteria for:</div> <div> <div>○ design and management of final voids;</div> <div>○ design and management for the emplacement of reject materials, sodic and dispersible soils and acid or sulphate generating materials;</div> <div>○ the Goonbri Creek diversion and low permeability barrier;</div> <div>○ reinstatement of drainage lines on</div> </div> </div> </div>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>the rehabilitated areas of the site; and</p> <ul style="list-style-type: none"> ○ control of any potential water pollution from the rehabilitated areas of the site; • performance criteria for the following, including trigger levels for investigating any potentially adverse impacts associated with the project: <ul style="list-style-type: none"> ○ the water management system; ○ soils within the irrigation area; ○ downstream surface water quality; ○ downstream flooding impacts, including flood impacts due to the flood bunds required for the project; and ○ stream and riparian vegetation health, including the Namoi River and its tributaries including Barbers Lagoon and The 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Slush Holes;</p> <ul style="list-style-type: none"> a program to monitor and assess: <ul style="list-style-type: none"> the effectiveness of the water management system; soils within the irrigation area; the effectiveness of the Goonbri Creek diversion and flood bunds (see conditions 34-38); surface water flows and quality in the watercourses that could be affected by the project; and downstream flooding impacts; reporting procedures for the results of the monitoring program; and a plan to respond to any exceedences of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; <p>(iii) <u>Groundwater Management Plan</u>, that includes:</p> <ul style="list-style-type: none"> detailed baseline data of groundwater levels, yield 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>and quality in the region, and privately-owned groundwater bores including a detailed survey/schedule of groundwater dependent ecosystems (including stygo-fauna), that could be affected by the project;</p> <ul style="list-style-type: none"> • detailed plans, including design objectives and performance criteria, for the design and management of: <ul style="list-style-type: none"> ○ the proposed final void; and ○ coal reject and potential acid forming material emplacement; • groundwater assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts; • a program to monitor and assess: <ul style="list-style-type: none"> ○ groundwater inflows to the open cut mining operations; ○ the effectiveness of the LPB; ○ the seepage/leachate 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>from the LPB, water storages, emplacements and the final void;</p> <ul style="list-style-type: none"> ○ interconnectivity between the alluvial and bedrock aquifers; ○ background changes in groundwater yield/quality against mine-induced changes; ○ the impacts of the project on: <ul style="list-style-type: none"> ▪ regional and local (including alluvial) aquifers; ▪ groundwater supply of potentially affected landowners; ▪ groundwater dependent ecosystems (including potential impacts on 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>stygo-fauna) and riparian vegetation;</p> <ul style="list-style-type: none"> • a program to validate the groundwater model for the project, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and • a plan to respond to any exceedences of the performance criteria; and <p>(iv) <u>Leard Forest Mining Precinct Water Management Strategy</u>, that has been prepared in consultation with other mines within the precinct to:</p> <ul style="list-style-type: none"> • minimise the cumulative water quality impacts of the mines; • review opportunities for water sharing/water transfers between mines; • co-ordinate water quality monitoring programs as far as practicable; • undertake joint investigations/studies in relation to complaints/exceedences of trigger levels where 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations						
	<p>cumulative impacts are considered likely; and</p> <ul style="list-style-type: none">co-ordinate modelling programs for validation, re-calibration and re-running of the groundwater and surface water models using approved mine operation plans.										
BIODIVERSITY											
Biodiversity Offset Strategy											
Note: For the purposes of this approval Box Gum Woodland refers to the EEC listed as White Box Yellow Box Blakely's Red Gum Woodland under the TSC Act, and the CEEC listed as White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grasslands under the EPBC Act, or similar EEC as may be updated from time to time.											
40	<p>The Proponent shall implement the biodiversity offset strategy described in the EA, summarised in Table 14 and shown conceptually in Appendix 7, to the satisfaction of the Secretary.</p> <p>Table 13: Summary of the biodiversity offset strategy</p> <table><tr><td>Area</td><td>Offset Type</td><td>Minimum Size (hectares)</td></tr><tr><td>Willeroi Offset Area</td><td>Existing native vegetation to be enhanced, and additional native vegetation to be established with the</td><td>1,660</td></tr></table>	Area	Offset Type	Minimum Size (hectares)	Willeroi Offset Area	Existing native vegetation to be enhanced, and additional native vegetation to be established with the	1,660	<p>Group Superintendent - Environment (Compliance) and Specialist-Offsets interview Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Letter 0932_001.pdf DP&E to Group Superintendent - Environment (Whitehaven) 30/6/17</p> <p>Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)</p> <p>Site inspection</p> <p>Whitehaven email request to Field's Environmental Solutions Pty Ltd (FES) 6 March 2015 for tubestock supply</p> <p>FES quote to Whitehaven 9 March 2015 for supply of 4,400 stems of three native tree species</p> <p>Whitehaven email to Fields Native Nursery (FNN) 1 April 2015 requesting native seed mix</p> <p>FES Invoices (IV00000243 & IV00000244) to</p>	<p>Willeroi Offset Area: Appendix 7 is a vegetation map of the offset area. No management plan exists to audit against. Group Superintendent - Environment (Compliance) and Specialist-Offsets interview indicated Willeroi Offset Area plan ('Stage 2') was in draft.</p> <p>BMP (ELA April 2015) section 3.2 states that the Willeroi Offsets Area has been purchased by Whitehaven and that it is both 1,660ha in area and contains 232ha of EEC. The section concludes that detailed biodiversity values and management will be in the 'Stage 2' plan (Letter 0932_001.pdf from DP&E describes the status of securing the offset in the long term as being satisfactory to the DP&E).</p> <p>Rehabilitation Area (onsite):</p>	C	<p>Although not yet non-compliant, significant actions will be required to achieve the end landuse of open woodland (and specifically BGW EEC) in rehabilitation areas nominated as woodland (in the southern and northern emplacements</p>
Area	Offset Type	Minimum Size (hectares)									
Willeroi Offset Area	Existing native vegetation to be enhanced, and additional native vegetation to be established with the	1,660									

No	Assessment Requirement			Reference/ Evidence	Comments	Compliance Status	Recommendations
	ea	restoration of at least 193 ha of Box Gum Woodland EEC, as listed under the TSC Act		Whitehaven both dated 19 May 2016. for supply and planting native tubestock FNN email to Whitehaven dated 8 February 2016 claiming seed collection in Leard State Forest on 7 February 2016	BMP (ELA April 2015) section 4 contains management strategies and performance / completion criteria which contains actions to re-establish woodlands and BGW EEC (specifically section 4.2 for BGW EEC actions).). Maintain a more clear schedule and plans of native species planting actions (sourcing, planting, proposed works). The Annual Review reporting does not report clearly (nor contain enough detail) on native woodland rehabilitation actions, for example through the past three years some actions claimed to be deferred to the next year are not reported on in
	Re ha bili tati on Ar ea	Native woodland vegetation communities to be re-established, focused on Box Gum Woodland EEC	752	WHC-24 Tarrawonga Coal Mine – White-Box Yellow-Box Blakely’s Red-Gum Woodland Endangered Ecological Community: Implementation Plan (Whitehaven Coal January 2015) Annual Review 1/5/2014-30/4/2015 Annual Review 1/5/2015-30/4/2016 Annual Review 1/5/2016-31/12/2016	MOP (2015-2020) (SLR 2016) section 6 contains performance criteria for rehabilitation including woodland rehabilitation. Site inspection identified rehabilitation areas which are all shown in the MOP as being in ecosystem establishment phase, condition (described following) is not inconsistent with that phase, and therefore this condition is compliant, although it would be non-compliant if these rehabilitation areas were in later rehabilitation phases, and will be non-compliant if corrective ecological actions are not undertaken prior to progressing through ensuing stages of the rehabilitation. Native woodland was present in the rehabilitation areas of the ‘northern emplacement’ with conditions ranging from older areas of 8m tall BGW trees in rows across the slope over a non-native grassland, to the most recent being germinating native tree and shrub species from the topsoil seed bank and mulch. The former will require infill planting and non-native pasture grass control to create		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>a better BGW structural and species diversity; the latter will require monitoring to identify native species survival, persistence and weed control actions.</p> <p>Older rehabilitation which should be native woodland on the 'southern emplacement' is primarily a non-native grassland of pasture species (Rhodes Grass (<i>Chloris gayana</i>) and Summer Grasses (<i>Digitaria sanguinalis</i>)) and other herbaceous non-native species. This area will require significant effort to create a better BGW structural and species diversity commencing with soil suitability confirmation, followed by other actions including native seed spread, infill planting and non-native pasture grass control.</p> <p>WHC-24 details factors likely to impede or enhance BGW EEC re-establishment and restoration efforts specifically section 3, Table 2.</p> <p>Evidence exists of native species seed collection and tubestock supply:</p> <ul style="list-style-type: none"> - Whitehaven email request to FES 6 March 2015 requesting total 7,600 tubestock of an extensive species list which included BGW species. - FES quote to Whitehaven on 9 March 2015 (4,400 stems of three 		<p>that next year. Further, when cross-checked with the native species supplier correspondence there are clearly actions being undertaken which are not being reported upon.</p>

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>tree species <i>Eucalyptus albens</i>, <i>E. crebra</i> & <i>E. piligaensis</i>).</p> <ul style="list-style-type: none"> - Whitehaven email to Fields Native Nursery (FNN) 1 April 2015 requesting seed mix which is not BGW, rather a Narrow-leaved Ironbark – Cypress Pine community with a mostly non-native ground layer. - FES Invoices (IV00000243 & IV00000244) to Whitehaven both dated 19 May 2016 for supply and planting 5,000 and 1,200 tubestock respectively (no species list). - FNN email to Whitehaven dated 8 February 2016 claiming seed collection had occurred in Leard State Forest on 7 February 2016. Species collected are not characteristic BGW species. <p>Annual Review 1/5/2014-30/4/2015 section 5.2.8 claims rehabilitation was undertaken in accordance with the EA, MOP and management plans. Section 5.2.9 refers to an area in the northern emplacement that was direct seeded “following this reporting period” although the following year’s AEMR does not report on that event occurring. Section 5.2.18 claims that 2ha were sown with pasture mix with direct seeding of native trees and shrubs at the end of and</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>following this period. That section claims a further 5.5ha was direct seeded after the reporting period and will be reported in the following Annual Review (which it is not – refer below). Further, it states the postponement of tubestock planting on the southern emplacement due to resource availability. The following Annual Review does not contain a statement that this event actually occurred.</p> <p>Annual Reviews 1/5/2015-30/4/2016 & 1/5/2016-31/12/2016 section 8.1.2 claims that of the rehabilitation areas, the northern emplacement is the most advanced and is trending towards soon the post-mining landuse of open woodland soon being achieved. Site inspection does not agree with this statement although the current status is not non-compliant with the MOP (refer above). Further, Figure 10 in both reports shows woodland rehabilitation areas which, especially in the southern emplacement, are far from being woodlands (refer above), however this is again not inconsistent with the MOP. Section 8.1.3 states that activities in the reporting periods included transitioning lands from active mining through the rehabilitation phases in the northern emplacement. This demonstrates progress towards the woodland re-</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>establishment goals.</p> <p>Evidence that this implementation is being undertaken to the satisfaction of the Secretary is not yet triggered as the actions are in progress.</p>		
Leard Forest Mining Precinct Regional Biodiversity Strategy					
<p>Notes:</p> <p>The approvals for the Boggabri coal mine and Maules Creek coal mine require the proponents of the mines in the Leard Forest mining precinct to prepare the regional biodiversity strategy in 3 stages, including:</p> <ul style="list-style-type: none"> - Stage 1 Scoping Stage, by the end of January 2013; - Stage 2 Strategy Development Stage, by the end of January 2014; and - Stage 3 Strategy Review Stage, by the end of December 2018. <p>The strategy is required to be prepared in collaboration with a working group comprising relevant government agencies and the Leard Forest mining precinct mines, and chaired by an independent person. Funding of the strategy should be based on predicted clearing of native vegetation for the three projects within the Leard Forest Mining Precinct. Based on the predicted clearing for the projects, the funding split would equate to total contributions of 36% from Boggabri (clearing of 1,385 ha), 54% from Maules Creek (clearing of 2,078ha) and 10% from Tarrawonga (clearing of 397 ha). This funding arrangement can be further refined in the Stage 1 Scoping Stage.</p>					
41	The Proponent shall contribute to the funding and preparation of the Leard Forest Mining Precinct Regional Biodiversity Strategy, as required under the approvals for the Boggabri coal mine and Maules Creek coal mine, to the satisfaction of the Secretary.	<p>Group Superintendent - Environment (Compliance), Site Environment Officer and Specialist-Offsets interview</p> <p>Spreadsheet: Attachment 1 - BTM Project Cost Summary Spreadsheet June 2014_v2.xlsx (Parsons Brinkerhoff email to Whitehaven 21/7/2014)</p>	<p>Group Superintendent - Environment (Compliance), Site Environment Officer and Specialist-Offsets interview stated that the responsibility for the LFMPRBS was taken over by the NSW DP&E, although no evidence of the removal of Whitehaven's responsibility to contribute to the preparation of the plan is available.</p> <p>A spreadsheet viewed identified the breakdown of relative financial responsibility for some plans between the three projects, however it contains no dollar values for the LFMPRBS.</p> <p>ERM considers a non-compliance on the basis of:</p>	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<ul style="list-style-type: none"> No evidence of reports meeting each of the timings for Stages 1, 2 & 3. No evidence of Whitehaven financial contribution to the strategy. No evidence of Whitehaven contribution to the preparation of the LFMPRBS (or in the case that the DP&E took this over, evidence of that agreement). 		
Revised Biodiversity Offset Strategy					
42	<p>Within 6 months of the approval of Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy the Proponent shall review, and if necessary revise, the biodiversity offset strategy for the project to the satisfaction of the Secretary. The review/revision must:</p> <p>(a) be prepared in consultation with OEH, LLS, Forests NSW, the CCC, DPI and DoEE;</p> <p>(b) not reduce the size or quality of the offset area; and</p> <p>(c) be consistent (as far as is possible) with the recommendations and objectives of the Leard Forest Mining Precinct Regional Biodiversity Strategy.</p>	Group Superintendent - Environment (Compliance), Site Environment Officer and Specialist-Offsets interview	This LFMPRBS Stage 2 is in draft stage and is not formally approved. Therefore not triggered.	NT	
Threatened Species					
43	For the White Box – Yellow Box – Blakely’s Red Gum Grassy Woodland Endangered Ecological	(a) Group Superintendent - Environment (Compliance) and Specialist-Offsets interview Tarrawonga Biodiversity Management Plan	(a) Willeroi BOS in draft and therefore not assessable. The BMP (ELA April 2015) (as part of the	(a) C (b) C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Community the Proponent shall:</p> <p>(a) ensure that the Biodiversity Offset Strategy and site Rehabilitation Strategy is focused on protection rehabilitation, re-establishment and long-term maintenance of viable stands of this community;</p> <p>(b) investigate in consultation with OEH and the LLS, all factors likely to enhance or impede the effective long term restoration of degraded remnants of this EEC in offset areas or regeneration of this EEC on disturbed areas (both offset areas and the site);</p> <p>(c) within 24 months of the date of this approval (and if possible in conjunction with Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy), submit a report of this investigation and provide an implementation plan to maximise the prospects for rehabilitation and regeneration of this EEC on the offset areas and the site, for approval by the Secretary; and</p> <p>(d) incorporate the approved implementation plan into the revised Biodiversity Management Plan, required under condition 48.</p>	<p>(BMP) (ELA April 2015)</p> <p>Biodiversity Offset Management Plan (BOMP)- Whitehaven Regional Biodiversity Offset Site (ELA August 2013)</p> <p>Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)</p> <p>(b) WHC-24 Tarrawonga Coal Mine - White-Box Yellow-Box Blakely's Red-Gum Woodland Endangered Ecological Community: Implementation Plan (Whitehaven Coal January 2015)</p> <p>(c) WHC-24 Tarrawonga Coal Mine - White-Box Yellow-Box Blakely's Red-Gum Woodland Endangered Ecological Community: Implementation Plan (Whitehaven Coal January 2015)</p> <p>(d) Group Superintendent - Environment (Compliance) and Specialist-Offsets interview</p>	<p>Rehabilitation Strategy) management strategies and performance / completion criteria (section 4) to achieve the aims of the condition, and sections 5-10 contain measures for monitoring, risks and contingencies, roles/responsibilities, reporting, auditing and reviews to achieve the aims of the condition.</p> <p>The BOMP (ELA August 2013) details offset management actions which are undertaken on that offset site (which is a registered BioBank Site) including management, monitoring and reporting of the whole BioBank area, including BGW EEC areas.</p> <p>The MOP (2015-2020) (SLR 2016) (as part of the Rehabilitation Strategy) section 6 contains rehabilitation objectives and completion criteria. Section 7 contains actions to implement and section 8 contains monitoring and review.</p> <p>(b) WHC-24 details factors likely to impede or enhance BGW EEC re-establishment and restoration efforts specifically section 3, Table 2. Consultation was undertaken in preparing this plan (detailed in section 1.3).</p> <p>(c) WHC-24 is the report. It is stated in section 1.2 that it is not possible to provide plan in conjunction with the LFMPRBS.</p> <p>(d) Condition 48 refers to amending the BMP within 6 months of the LFMPRBS</p>	<p>(c) C</p> <p>(d) NT</p>	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			being approved. The LFMPRBS is in preparation.		
44	For all threatened species on site, the Proponent shall ensure that the Biodiversity Offset Strategy and Rehabilitation Strategy are focused on protection, rehabilitation and long-term maintenance of viable stands of suitable habitat for these species.	Group Superintendent - Environment (Compliance) and Specialist-Offsets interview Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015) Biodiversity Offset Management Plan (BOMP)-Whitehaven Regional Biodiversity Offset Site (ELA August 2013) Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	The Willeroi BOS in draft and therefore not assessable. The BOMP (ELA August 2013) details offset management actions which are undertaken on that offset site (which is a registered BioBank Site) including management, maintenance, monitoring and reporting of the whole BioBank area, including threatened species habitat. The BMP (ELA April 2015) (as part of the Rehabilitation Strategy) section 3 details the threatened species identified on the minesite (one EEC, zero flora and nine fauna species). Section 4 details management strategies and performance / completion criteria to achieve the aims of the condition, and sections 5-10 contain measures for monitoring, risks and contingencies, roles/responsibilities, reporting, auditing and reviews to achieve the aims of the condition. The MOP (2015-2020) (SLR 2016) (as part of the Rehabilitation Strategy) section 6 contains rehabilitation objectives and completion criteria. Section 7 contains actions to implement and section 8 contains monitoring and review. All of which designed to achieve this condition.	C	
45	The Proponent shall: (a) investigate, in consultation with	Tarrawonga Coal Mine: Threatened Fauna Implementation Plan (Whitehaven January	(a) & (b) The Tarrawonga Coal Mine: Threatened Fauna Implementation Plan	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>OEH and the LLS, all factors likely to enhance or impede the effective long term provision of suitable habitat(s) for the following species: Speckled Warbler, Brown Treecreeper, Grey-crowned Babbler, Hooded Robin, Varied Sittella, Turquoise Parrot, Masked Owl, Yellow-bellied Sheath Tail Bat and Squirrel Glider;</p> <p>(b) within 12 months of the date of this approval (and if possible, in conjunction with Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy), submit a report of this investigation and provide an implementation plan to ensure delivery of suitable areas of viable habitat for the species included in (a) above, for approval by the Secretary; and</p> <p>(c) incorporate the approved implementation plan into the revised Biodiversity Management Plan, required under condition 48.</p>	<p>2015)</p> <p>Site Environment Officer and Specialist-Offsets interview</p>	<p>(Whitehaven January 2015) considers all of those species (throughout report however most specific detail contained in Table 4) and was undertaken in consultation with OEH, LLS and DP&E (section 1.3).</p> <p>(c) Condition 48 refers to amending the BMP within 6 months of the LFMPRBS being approved. The LFMPRBS Stage 2 is in preparation.</p>		
Long Term Security of Offset					
<p><i>Note: The Department acknowledges that the Proponent is investigating the potential to transfer part or all of the Willeroi Offset Area directly to the national park estate, and accepts that interim conservation measures may be implemented prior to this transfer.</i></p>					
46	The Proponent shall make suitable arrangements to provide appropriate long-term security for the offset areas:	<p>(a) Letter 0932_001.pdf DP&E to Group Superintendent - Environment (Whitehaven) 30/6/17</p> <p>(b) not triggered.</p>	<p>(a) Letter 0932_001.pdf from DP&E describes the status of correspondence between NPWS and Whitehaven acknowledging Whitehaven's intention to transfer some land to NPWS estate and</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(a) for the Willeroi Offset Area the long-term security shall be provided by way of:</p> <ul style="list-style-type: none"> - the Proponent entering into a conservation agreement or agreements pursuant to section 69B of the National Parks and Wildlife Act 1974, recording the obligations assumed by the Proponent under the conditions of this approval in relation to these offset areas, and registering the agreement(s) pursuant to section 69F of the National Parks and Wildlife Act 1974 ; or - a tenure of higher conservation status such as a National Park, or Nature Reserve, under the National Parks and Wildlife Act 1974, <p>The conservation agreement(s) must be registered by the end of December 2013 unless agreed otherwise by the Secretary after consultation with OEH. The conservation agreements must remain in force in perpetuity; and</p> <p>(b) by the end of December 2030 unless otherwise agreed by the Secretary, for the woodland to be established in the Rehabilitation Area, as identified in Table 14, to the satisfaction of the Secretary.</p>		<p>secure all that residual land using a VCA. Although no conservation security was achieved by December 2013, the letter provides a revised due date of 31 December 2017. The letter states that it refers to this condition and that the DP&E is satisfied that Whitehaven is currently “demonstrating reasonable endeavours to secure the offsets”.</p> <p>(b) not triggered.</p>		
Biodiversity Management Plan					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<i>Note: The Biodiversity Management Plan and Rehabilitation Management Plan need to be substantially integrated for achieving biodiversity objectives for the rehabilitated mine-site.</i>					
47	<p>The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with OEH, DoEE, Forests NSW, the CCC, DPI Catchments and Lands and the LLS, and be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) describe the short, medium, and long term measures that would be implemented to:</p> <ul style="list-style-type: none"> - manage the remnant vegetation and habitat on the site and in the offset area; and - implement the biodiversity offset strategy, including detailed performance and completion criteria; (c) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary); (d) include a detailed description of the measures that would be implemented for: <ul style="list-style-type: none"> - enhancing the quality of existing vegetation and fauna habitat; 	<p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Group Superintendent - Environment (Compliance) and Specialist-Offsets interview</p> <p>Biodiversity Offset Management Plan (BOMP)-Whitehaven Regional Biodiversity Offset Site (ELA August 2013)</p> <p>Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)</p> <p>Tarrawonga Coal Mine - Rehabilitation Monitoring Report - Spring 2014 (ELA 12 February 2015)</p> <p>Tarrawonga Coal Mine - Rehabilitation Monitoring Report - Spring 2015 (ELA 25 May 2016)</p> <p>Tarrawonga Coal Mine - Rehabilitation Monitoring Report - Spring 2016 (ELA 29 May 2017)</p>	<p>(a) BMP (ELA April 2015) section 1.4, Table 1-3</p> <p>(b) BMP (ELA April 2015) section 4 details management of vegetation and habitat on the site.</p> <p>The Willeroi BOS in draft and therefore not assessable.</p> <p>The BOMP (ELA August 2013) details offset management actions at the BioBank Site and performance criteria (section 5, Table 12).</p> <p>(c) BMP (ELA April 2015) section 4 details management strategies and performance / completion criteria to achieve the aims of the condition. Whilst that plan contains some references to the Willeroi Offset Area, it is understood that the management plan for the Willeroi Offset Area is in preparation and not assessable.</p> <p>The BOMP (ELA August 2013) details offset management actions at the BioBank Site and performance criteria (section 5, Table 12).</p> <p>(d) BMP (ELA April 2015) sections 4.1-4.10 (with exception of managing heritage and biodiversity conflicts which will be included in the Willeroi Offsets Area (Stage 2) Plan. Specialist-Offsets identified that heritage is managed as internal due diligence prior to any activity and via HMP (section 4.5). ANC: Conflict between heritage and</p>	<p>(d) ANC:</p> <p>(e) Obs:</p>	<p>(e) Develop a clear, one-page annual monitoring schedule that integrates all requirements from all plans to make it clear what needs to be monitored and when.</p>

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> - restoring native vegetation and fauna habitat on the biodiversity offset area and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features; - maximising the salvage of resources within the approved disturbance area – including vegetative, top and sub soils and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity offset area or rehabilitation area; - collecting and propagating seed; - minimising the impacts on fauna on site, including undertaking pre-clearance surveys; - managing any potential conflicts between the proposed restoration works in the biodiversity offset area and any Aboriginal heritage values (both cultural and archaeological); - managing salinity; - controlling weeds and feral pests; - controlling erosion; - controlling access; and - managing bushfire risk; <p>(e) include a seasonally-based program to monitor and report on the effectiveness of these measures,</p>		<p>biodiversity matters not detailed in the BMP (although contained in the HMP)</p> <p>(e) BMP (ELA April 2015) section 5 includes statements that other plans will contain specific monitoring methods. These include reference to a Rehabilitation Management Plan which Site Environment Officer in interview stated is the MOP. The MOP (2015-2020) (SLR 2016) contains seasonally-based monitoring for flora (including weeds) and fauna (including feral animals and nest box use) in rehabilitation areas.</p> <p>Evidence exists that woodland rehabilitation is being monitored as described in Rehabilitation Monitoring Reports for the years 2014-2016.</p> <p>The Rehabilitation Monitoring Report – Spring 2014 (ELA 12 February 2015) references the Tarrawonga Rehabilitation Monitoring Plan (2011) which contains the monitoring parameters and frequency (Table 3.1). Site Environment Officer in interview stated that the RMP (ELA 2011) is no longer applicable and that the Rehabilitation Monitoring is detailed in the BMP (ELA April 2015) and MOP.</p> <p>The three monitoring reports contain annual monitoring in rehabilitation areas of native flora and fauna species presence, abundance and statistical analyses of changes through time.</p> <p>No clear schedule is available for monitoring required triggered by time or</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>and progress against the detailed performance and completion criteria;</p> <p>(f) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and</p> <p>(g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p>		<p>progress actions.</p> <p>(f) BMP (ELA April 2015) section 6 details risks to implementation of the rehabilitation and offsets strategy, however more applicable to onsite rehabilitation. The sections detailing offsets risks and contingencies are minimal and it would be expected that the Willeroi Offsets Area strategy (Stage 2) will be far more detailed.</p> <p>(g) BMP (ELA April 2015) section 8 details roles and responsibilities.</p>		
48	<p>The Proponent shall review and if necessary revise the Biodiversity Management Plan within 6 months of the completion of Stage 2 of the Leard Forest Mining Precinct Regional Biodiversity Strategy, to the satisfaction of the Secretary. The review/revision must:</p> <p>(a) be prepared in consultation with OEH, DoEE, Forests NSW, the CCC, DPI and the LLS;</p> <p>(b) be consistent with the findings of Leard Forest Mining Precinct Regional Biodiversity Strategy; and</p> <p>(c) include any implementation plans arising from the studies required under conditions 43 and 45 of this approval.</p>	Group Superintendent - Environment (Compliance) and Specialist-Offsets interview	The LFMPRBS is in preparation, therefore not triggered.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Conservation Bond					
<p><i>Notes:</i></p> <p><i>Alternative funding arrangements for long term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to conservation reserve estate can be used to reduce the liability of the conservation and biodiversity bond.</i></p> <p><i>The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy.</i></p>					
49	<p>By the end of May 2013, the Proponent shall lodge a Conservation and Biodiversity Bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by:</p> <p>(a) calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and</p> <p>(b) employing a suitably qualified quantity surveyor to verify the calculated costs,</p> <p>to the satisfaction of the Secretary.</p> <p>If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.</p> <p>If the offset strategy is not completed generally in accordance with the completion criteria in the</p>	Previous IEA (SMEC 2014)	<p>Predates this audit period. The previous IEA (SMEC 2014) stated against this condition: "Biodiversity Management Plan not approved, not able to calculate bond amount, not compliant with deadline stated" and adjudged as "Not Compliant Administrative".</p> <p>No evidence of a conservation bond exists which appears to have been required by May 2013 (or if not, then following the BMP preparation (ELA April 2015).</p>	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.</p> <p>With the agreement of the Secretary, this bond may be combined with rehabilitation security deposit administered by DRE.</p>				
Independent Biodiversity Audit					
50	<p>By the end of June 2014 and every 3 years thereafter, unless both the Secretary and OEH agree to a different timeframe, the Proponent shall commission suitably qualified, experienced and independent person/s, whose appointment has been approved by the Secretary, to undertake an audit of the revegetation of the rehabilitation area and management and restoration within the Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This audit must:</p> <p>(a) include consultation with OEH, LLS, DPI, DoEE, CCC and DRE;</p> <p>(b) assess the performance of the revegetation in the rehabilitation area completed to date (and the Goonbri Creek Diversion, once commenced) against the completion</p>	<p>Previous IEA (SMEC 2014)</p> <p>This audit:</p> <p>(a) lead auditor emails</p> <p>(b) field inspection (onsite rehabilitation areas)</p> <p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)</p> <p>(c) field inspection (Willeroi Offset Site and BioBank site)</p> <p>Group Superintendent - Environment (Compliance) and Specialist-Offsets interview</p> <p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Biodiversity Offset Management Plan (BOMP)-Whitehaven Regional Biodiversity Offset Site (ELA August 2013)</p> <p>(d) field inspection (onsite rehabilitation areas, Willeroi Offset Site and BioBank Site)</p> <p>(d) field inspection (onsite rehabilitation areas,</p>	<p>Previous IEA (SMEC 2014) did not specifically contain an independent biodiversity audit which addressed this condition, although noteworthy that the content and detail of the audit was congruent with this condition (without specifically referring to an IBA).</p> <p>Compliance achieved with this condition by engaging this audit.</p> <p>(a) refer to Annex E</p> <p>(b) detailed description of onsite rehabilitation and revegetation is contained in Section 8.2</p> <p>(c) detailed description of offset site performance is contained in Section 8.2, however should be noted that site interviews indicated there was no Willeroi Offset Area Plan to audit against. Site audit inspected both the Willeroi Offset Area (although no plan or completion criteria were available against</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>criteria in the Rehabilitation Management Plan;</p> <p>(c) assess the performance of management and restoration in the off-site Biodiversity Offset Strategy areas completed to date against the completion criteria in the Biodiversity Management Plan;</p> <p>(d) identify any measures that should be implemented to improve the performance of rehabilitation, management and restoration within the rehabilitation and biodiversity offset areas; and</p> <p>(d) identify any additional measures that should be applied in the establishment of native vegetation, including riparian vegetation around the realigned Goonbri Creek, both before and after the realignment is undertaken;</p> <p>(e) if the completion criteria have not been met, or are not adequately trending towards being met, determine the likely ecological value of the rehabilitation and restoration once completed, and recommend additional measures to augment the Biodiversity Offset Strategy to ensure that it adequately offsets the project's impacts on biodiversity.</p> <p>If the audit recommends the implementation of additional</p>	<p>Willeroi Offset Site and and BioBank Site)</p> <p>Group Superintendent - Environment (Compliance) and Specialist-Offsets interview</p> <p>(e) field inspection (onsite rehabilitation areas, Willeroi Offset Site and BioBank Site)</p> <p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)</p> <p>Biodiversity Offset Management Plan (BOMP)- Whitehaven Regional Biodiversity Offset Site (ELA August 2013)</p>	<p>which to assess performance) and the BioBank site.</p> <p>(d) detailed description of the measures to improve rehabilitation and offset performance is contained in Section 8.2,</p> <p>(d) detailed description of any additional measures to establish native vegetation are contained in Section 8.2.</p> <p>(e) discussion of trends towards completion criteria and predicted final ecological values are contained in Section 8.2,</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	measures to augment the Biodiversity Offset Strategy in accordance with (e) above, then within 6 months of the completion of the audit the Proponent shall revise the Biodiversity Offset Strategy, in consultation with the Department, OEH and DoEE, and to the satisfaction of the Secretary.				
HERITAGE					
Aboriginal Heritage Conservation Strategy					
51	<p>The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the project and the Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This Strategy must enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long-term protection and management. The Strategy must:</p> <p>(a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with OEH, the local Aboriginal community and other mines within the Leard Forest Mining Precinct, and submitted to the Secretary for approval within 12 months from</p>	<p>WHC_PLN_TAR_Heritage Management Plan</p> <p>Interview with Environment Officer</p>	An Aboriginal Heritage Conservation Strategy (AHCS) has been prepared in consultation with OEH and submitted to the Secretary, within an approved extension period. However the Strategy is yet to be approved by the Secretary and is awaiting approval.	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>the date of project approval;</p> <p>(c) identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas;</p> <p>(d) identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct;</p> <p>(e) identify a range of options for enhancing and conserving Aboriginal cultural heritage values, with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy areas or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and</p> <p>(f) consider cumulative impacts and potential for developing joint initiatives with other mines within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values.</p>				
Heritage Management Plan					
<i>Note: The Department acknowledges that the initial Heritage Management Plan may not include a detailed plan for the implementation of the Aboriginal Heritage Conservation Strategy. If this occurs, the Proponent will be required to update the plan as soon as practicable following the Secretary's approval of the Aboriginal Heritage Conservation Strategy.</i>					
52	The Proponent shall prepare and implement a Heritage Management	WHC_PLN_TAR_Heritage Management Plan	The HMP was initially submitted 27 May 2013 and most recently updated in June	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;</p> <p>(b) be prepared in consultation with OEHL and local Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);</p> <p>(c) be submitted to the Secretary for approval prior to undertaking any activities that may impact heritage items or sites, unless the Secretary agrees otherwise;</p> <p>(d) include the following for the management of Aboriginal cultural heritage:</p> <ul style="list-style-type: none"> a detailed archaeological salvage program for Aboriginal sites/objects within the project disturbance area, including methodology and procedures/protocols for: <ul style="list-style-type: none"> sub-surface testing; staged salvage, based on anticipated mine planning; pre-disturbance monitoring; 	<p>PA3-52-2 HMP Submission Letter.</p> <p>PA3-52-10 HMP Approval Letter</p>	<p>2015 to reflect conditions of PA 11_0047 and generally addresses the requirements of this condition in the following sections.</p> <ul style="list-style-type: none"> a) Section 1 of HMP b) Section 1 and 1.1 of HMP c) Approval received 29 March 2016 d) Section 2 and 4 of HMP 		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> ○ site assessment and reporting; ○ research objectives to inform knowledge of Aboriginal occupation; ○ protection, storage and management of salvaged Aboriginal objects; ○ addressing relevant statutory requirements under the National Parks and Wildlife Act 1974; and ○ long term protection of salvaged Aboriginal objects; • a description of the measures that would be implemented for: <ul style="list-style-type: none"> ○ protecting, monitoring and managing Aboriginal sites outside the project disturbance area; ○ maintaining and managing reasonable access for Aboriginal stakeholders to 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>cultural heritage items on site and in the biodiversity offset area;</p> <ul style="list-style-type: none"> managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols; ongoing consultation with the local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and in the biodiversity offset area; ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Aboriginal sites, and that suitable records are kept of these inductions;</p> <ul style="list-style-type: none"> include the following for the management of historic heritage: <ul style="list-style-type: none"> managing the discovery of human remains or previously unidentified historic heritage items at the site, including (in the case of human remains) stop work provisions and notification protocols; and ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and ensure that suitable records of these inductions are kept. 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
TRANSPORT					
Roadworks					
<i>Note: The road upgrade works may be undertaken in stages, with the agreement of Council.</i>					
53	<p>The Proponent shall:</p> <p>(a) construct the Goonbri Road realignments and associated mine access road intersection, Goonbri Road/private coal haulage road intersection and the Goonbri Road/Dripping Rock Road/Blair Athol Lane intersection as shown conceptually in the EA; and</p> <p>(b) install appropriate advance warning signs and lighting on Goonbri Road, the private coal haulage road at the intersection of the Northern Site Access Road, to the satisfaction of Council.</p> <p>The road realignments and associated intersection upgrades shall be undertaken:</p> <ul style="list-style-type: none"> - to a bitumen sealed standard, unless otherwise agreed by Council; and - prior to any project works occurring within 25 metres of the existing Goonbri Road alignment, or on the southern/eastern side of the existing road alignment. 	Interview with Environment Officer	Goonbri Road realignment not commenced during the audit period.	NT	
Coal Transport					
54	Whilst coal transport by road is permitted under this approval, the	Interview with Environment Officer Service agreement between WHC and	During the audit period there has been no requirement to relocate public	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Proponent shall ensure that: (a) trucks travelling to and from the site do not exceed 40 kilometres per hour in the vicinity of the school bus when it is operating near school bus stops along the approved haulage route, unless an alternative protocol is agreed by the Secretary; and (b) spillage from coal haulage vehicles is minimised and promptly managed.	Gunnedahshire and Road Maintenance Agreement with Narrabri Council (Dec 2015)	infrastructure. Service agreement between WHC and Gunnedah Shire and Road Maintenance Agreement with Narrabri Council (Dec 2015) with respect to road maintenance. This condition is outside of the agreement and has not been triggered during audit period.		
Traffic Management Plan					
54 A	The Proponent shall prepare and implement a revised Traffic Management Plan for the Project, to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with RMS, Gunnedah Shire Council, Narrabri Shire Council and the owners of the Rocglen and Vickery coal mines; (b) be submitted to the Secretary for approval by 31 March 2017; (c) include a program for implementing Whitehaven's commitments in the EA; (d) include transport protocols that describe control measures for coal haulage: - during school bus hours;	WHC_PLN_TAR/ROC_Traffic Management Plan 1506- Comments regarding Draft TMP - RMS Response.pdf NSC Response.pdf Tarrawonga Coal Mine - Traffic Management Plan.msg	The TMP available online was most recently updated in May 2016 to reflect conditions of PA 11_0047 and generally addresses the requirements of this condition in the following sections. a) 1506- Comments regarding Draft TMP - RMS Response.pdf NSC Response.pdf Tarrawonga Coal Mine - Traffic Management Plan.msg b) document was first submitted on 30/6/15. On 28/3/17 the plan was resubmitted (hasn't been approved since submission) hence is classified as an ANC c) Section 6 of TMP d) Section 2 of TMP outlines statutory requirements of the	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> - on the Kamilaroi Highway; and - during seasonal and event based peak traffic periods. <p>(e) include a driver's Code of Conduct to include but not limited to:</p> <ul style="list-style-type: none"> - behavioural safety practises and initiatives used by drivers to implement the transport protocols; - induction process for vehicle operators and regular toolbox meetings; and - complaint resolution and disciplinary procedures; <p>(f) describe measures to minimise dust from roads that may be used for access to the mine site;</p> <p>(g) arrangements to comply with cumulative coal haulage limits from the project and the Rocglen and Vickery coal mines; and</p> <p>(h) a monitoring program to audit vehicle movements, including the origin and destination of employees, against predictions in the EA.</p>		<p>operating until the Kamilaroi Highway is constructed. No discussion of peak traffic conditions</p> <ul style="list-style-type: none"> e) Section 3.5 identifies inductions and toolbox talks but doesn't specifically detail a driver Code of Conduct with behavioural safety practices. f) Section 3.2 of TMP g) Section 3.3 of TMP <p>Site observations demonstrated sealed haul/access routes.</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Road Maintenance					
55	During mining operations, the Proponent shall continue to implement road maintenance agreements with Narrabri Shire Council and Gunnedah Shire Council for the maintenance of the public roads affected by the project to the satisfaction of the respective Council. These agreements may be modified from time to time by agreement of the Proponent and respective Council. If there is any dispute in relation to these agreements, then any of the parties may refer the matter to the Secretary for resolution.	Interview with Environment Officer PA3-54A-4 Road Maintenance Protocol between WHC and Gunnedah Shire Road Maintenance Agreement with Narrabri Council (Dec 2015)	During the audit period there has been no requirement to relocate public infrastructure. Service agreement between WHC and Gunnedahshire and Road Maintenance Agreement with Narrabri Council (Dec 2015) with respect to road maintenance. This condition is outside of the agreement and has not been triggered during audit period.	C	
Monitoring of Coal and Gravel Transport					
56	The Proponent shall: (a) keep records of the: - amount of coal and gravel transported from the site (on a monthly basis); and - date and time of each train movement on the Boggabri rail spur line generated by the project (if coal from the project is transported by rail); and (b) make these records available on its website at the end of each calendar year.	Tarrawonga Coal Transport and Truck Movements 2014 - 2016 Tarrawonga Domestic Coal Figures https://www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm	Auditor reviewed coal movements and production tonnages for Tarrawonga and Rocglen. Vickery Colliery was non-operational during audit period. Amount of coal transported was observed and was accessed on the website. Boggabri rail spur line not utilised by Tarrawonga No gravel extracted and hauled off site during audit period.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
VISUAL					
Operating Conditions					
57	<p>The Proponent shall:</p> <p>(a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project;</p> <p>(b) ensure no outdoor lights shine above the horizontal;</p> <p>(c) wherever possible, ensure that mobile equipment is appropriately designed and/or retrofitted to prevent light being directed above the horizontal;</p> <p>(d) ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting or its latest version;</p> <p>(e) provide for the establishment of trees and shrubs and/or the construction of mounding or bunding:</p> <ul style="list-style-type: none"> - along the realigned Goonbri Road and access road to the mine site; - along the services corridor to the Boggabri Coal Mine; - around the water storage dams; and - at other areas identified as necessary for the maintenance of 	PA-27-2 Satisfaction of Secretary Response	<p>TCM received letter dated 7 July 2017 from Department Planning & Environment confirming this condition is met to Secretary's satisfaction.</p> <p>TCM has undertaken an external lighting assessment in accordance with AS4282 that concluded full compliance with requirements of the Standard.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	satisfactory visual amenity; and (f) ensure that the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape, to the satisfaction of the Secretary.				
Additional Visual Impact Mitigation					
<p><i>Notes:</i></p> <p><i>The additional visual impact mitigation measures must be aimed at reducing the visibility of the mining operations on site from affected residences, and do not require measures to reduce the visibility of the mining operations from other locations on the affected properties.</i></p> <p><i>The additional visual impact mitigation measures do not necessarily have to include the implementation of measures on the affected property itself (ie. the additional measures could involve the implementation of measures outside the affected property boundary that provide an effective reduction in visual impacts).</i></p> <p><i>Except in exceptional circumstances, the Secretary will not require additional visual impact mitigation to be undertaken for residences that are more than 5 kilometres from the mining operations.</i></p>					
58	<p>Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the mining operations and infrastructure on-site during the project, the Proponent shall implement additional visual impact mitigation measures (such as landscaping treatments or vegetation screens) to reduce the visibility of the mining operations and infrastructure from the residences on the privately-owned land.</p> <p>These mitigation measures must be reasonable and feasible, and must</p>	Site Environment Officer interview	Site Environment Officer stated that this has not occurred and therefore was not triggered.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	be implemented within a reasonable timeframe. If the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.				
BUSHFIRE MANAGEMENT					
59	The Proponent shall: (a) implement all reasonable and feasible measures to manage bushfire risks, including the suspension of activities that may have the potential to ignite a fire, during adverse conditions; (b) ensure that the project is suitably equipped to respond to any fires on site; and (c) assist the Rural Fire Service, Forests NSW, emergency services and National Parks and Wildlife Services as much as possible if there is a fire in the surrounding area.	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015) Site Environment Officer interview Tarrawonga Coal Mine - Rehabilitation Monitoring Report - Spring 2016 (ELA 29 May 2017)	Site Environment Officer indicated in interview that there have been no bushfires which any bushfire management agency have requested assistance. BMP (ELA 2015) section 4.10 contains reference to a site Bushfire Management Plan being referred to the Rural Fire Service (Narrabri) and Narrabri Shire Council. That section details bushfire risk management strategies and performance / completion criteria. This includes management actions such as fuel load inspection records, fire equipment inspections, bushfire incidents reporting, Bushfire Management Plan review schedule and a recommendation for planned burn frequency in BGW EEC area. No evidence of management actions is available, not least of which being fuel load monitoring (not included in rehabilitation monitoring reports).	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations				
			Site Environment Officer identified that the bushfire management procedures will be detailed in the Stage 2 BMP (in preparation).						
WASTE									
60	The Proponent shall: (a) implement all reasonable and feasible measures to minimise the waste (including coal reject) generated by the project; (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and (c) monitor and report on the effectiveness of waste minimisation and management measures in the Annual Review.	(a) recycled products and waste minimisation is demonstrated in Section 6.10 Waste of the AEMR (b) Observations on site (c) 21135302-annual-review-2016.pdf - AEMR authorisation date 28/2/2017	(a) recycled products and waste minimisation is demonstrated in Section 6.10 Waste of the AEMR (b) site observations (c) recycled products and waste minimisation is demonstrated in Section 6.10 Waste of the AEMR	C					
REHABILITATION									
Rehabilitation Objectives									
61	The Proponent shall rehabilitate the site to the satisfaction of DRE. This rehabilitation must be generally consistent with the proposed Rehabilitation Strategy described in the EA (and depicted conceptually in Appendix 8) and comply with the objectives in Table 15. <i>Table 14: Rehabilitation objectives</i>	EA (Rehabilitation Strategy) Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015) Field inspection	Field inspection observed rehabilitation on the northern and southern emplacements. Refer CoA 50 and Section 8.2 for appraisal. The MOP (2015-2020) (SLR 2016) details the procedure to meet these conditions, (specifically sections 5 and 6) and plans showing the annual progress of site land areas during the MOP (Plan 3), trending	O					
	<table><tr><th>Feature</th><th>Objective</th></tr><tr><td></td><td></td></tr></table>	Feature	Objective						
Feature	Objective								

No	Assessment Requirement		Reference/ Evidence	Comments	Compliance Status	Recommendations
	Mine site (as a whole)	Safe, stable and non-polluting; Constructed landforms drain to the natural environment; Landforms fully integrated with the final landform for the Boggabri coal mine/	Annual Review (2016)	towards the final land use (Plan 4). It identifies Domains including the final void, surface infrastructure, agricultural land and remaining land and sets out the actions to meet the condition's requirements. No agricultural land will be established during this MOP term (MOP section 7, Table 21) therefore trajectory towards the 210ha of agricultural land is not assessable. MOP section 7, Table 20 states that during the term of the MOP 78.93ha of woodland areas will be rehabilitated.		
	Final void	Minimise the size and depth of the final void as far as is reasonable and feasible; Minimise the drainage catchment of the final void as far as is reasonable and feasible; Negligible high wall instability risk; Minimise risk of flood interaction for all flood events up to and including the Probable Maximum Flood level.		The MOP section 7, Table 20 shows cumulative rehabilitation will be at 64.9ha at end of calendar year 2016). The AR (2016) states that active rehabilitation area is 59ha and area being prepared for rehabilitation is 9.9ha (totalling 68.9ha). Those numbers for 2017 are 70.76ha (MOP Table 20) and 68.9ha active rehabilitation and 5.8 in preparation for rehabilitation (totalling 74.7ha).		
	Surface infrastructure	To be decommissioned and removed, unless DRE agrees otherwise		Goonbri Creek diversion requirements are not triggered.		
	Agricultural land	Establish a minimum of 210 hectares of Class 3 agricultural suitability land, including 160 hectares with cropping capability		Notable site observations regarding features:		
	All land - excluding the 210 ha of agricultural land and the	Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: - local native plant species (particularly Box Gum Woodland EEC); and - a landform consistent with the surrounding environment		Mine site (as a whole): rehabilitated areas appear to be of slope angles to manage erosion. Drainage structures observed on northern and southern emplacements to direct water off the rehabilitated slopes.		

No	Assessment Requirement		Reference/ Evidence	Comments	Compliance Status	Recommendations
	final void			Final void: objectives not triggered. Agricultural land: no areas have been rehabilitated yet (nor are required by the MOP), therefore not triggered. Woodland areas: refer field inspection comment above. Community: Site Environment Officer stated that public safety is managed by maintaining a secure site. Assessing performance to manage adverse socio-economic consequences is not triggered as planned closure is outside the scope of this audit and the current MOP period (2015-2020).		
	Goonbri Creek diversion and LPB	See Table 13				
	Community	Ensure public safety; Minimise the adverse socio-economic effects associated with mine closure.				
Operating Conditions						
62	The Proponent shall, in consultation with the LLS: (a) develop a detailed soil management protocol that identifies procedures for: - comprehensive soil surveys prior to soil stripping; - assessment of top-soil and sub-soil suitability for mine rehabilitation; and - annual soil balances to manage soil handling including direct resspreading and stockpiling; (b) maximise the salvage of suitable top-soils and sub-soils and biodiversity habitat components such as bush rocks, tree hollows		Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015) Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Site Environment Officer interview Land Disturbance Protocol (included as Appendix B of the (BMP) (ELA April 2015))	MOP (2015-2020) (SLR 2016) section 1.2 and BMP (ELA April 2015) section 1.4 demonstrates consultation with LLS. (a) Section 4.3.2 of the BMP (ELA April 2015) include soil stripping plans, techniques which identifies stripping depth, management and reuse principles. Figure 12 is a plan of the soil suitability across the site. This section 4.3.2 first point is cross referencing that soil resource management should be undertaken in accordance with the RMP (presumably the Rehabilitation Management Plan), however Site Environment Officer in site interview stated that the BMP (ELA April 2015) and the MOP (2015-2020) (SLR 2016) together	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	and fallen timber for rehabilitation of disturbed areas within the site and for enhancement of biodiversity offset areas; and (c) ensure that coal reject, or any potentially acid forming interburden materials, are not emplaced at elevations in the pit shell where they may promote acid or sulphate species generation and migration beyond the pit shell.		form the RMP. The BMP (ELA April 2015) and the MOP (2015-2020) (SLR 2016) both contain high-level principles for soil Table 4 of the MOP (2015-2020) (SLR 2016) contains the annual material production schedule for the six years of the MOP including one line which regards 'stripped topsoil'.. (b) The BMP (ELA April 2015) section 4.3 describes soil stripping management strategies and vegetation and fauna habitat salvage. (c) The MOP (2015-2020) (SLR 2016) section 3.2.8 contains PAF storage procedures which satisfy this condition.		
Progressive Rehabilitation					
<i>Note: It is accepted that the parts of the site that are progressively rehabilitated may be subject to further disturbance in future.</i>					
63	The Proponent shall rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies shall be employed when areas prone to dust generation cannot yet be permanently rehabilitated.	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Field inspection Annual Review 1/5/2016-31/12/2016	The MOP (2015-2020) (SLR 2016) section 5, Table 5.2 contains domain objectives and includes action that temporary rehabilitation will be undertaken for dust suppression on Domains: Topsoil Stockpile Areas and Temporary Rehabilitation. MOP (2015-2020) (SLR 2016) section 2.3.8 contains description of one temporary stabilisation effort in July 2015 (aerial cover crop on the south-facing slope of the southern emplacement).	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>The section concludes that this will occur at the site as and when required.</p> <p>Field inspection observed progressive rehabilitation in the northern and southern emplacements with land contour shaping by machinery occurring adjacent to growth medium establishment was occurring adjacent to rehabilitation areas.</p> <p>The steep southern embankment currently in shaping phase appears covered by germinating seed which will provide soil stability.</p> <p>Annual Review 1/5/2016-31/12/2016 does not detail any interim dust suppression techniques via interim or temporary rehabilitation.</p> <p>Therefore, there is no evidence to show that any temporary soil stabilisation has occurred since July 2015.</p>		
Rehabilitation Management Plan					
<i>Note: The Biodiversity Management Plan and Rehabilitation Management Plan require substantial integration to achieve biodiversity objectives for the rehabilitated mine site.</i>					
64	The Proponent shall prepare and implement a Rehabilitation Management Plan to the satisfaction of DRE. This plan must:	Interview with Environment Officer Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Tarrawonga Biodiversity Management Plan	The auditor understands there is not RMP for the project. Site Environment Officer in site interview stated that the BMP (ELA April 2015) and the MOP (2015-2020) (SLR	ANC	(h) Develop a clear, one-page annual monitoring

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(a) be prepared in consultation with the Department, Forests NSW, DPI, OEH, LLS and Council;</p> <p>(b) be submitted to the DRE for approval by the end of May 2013;</p> <p>(c) be prepared in accordance with any relevant DRE guideline;</p> <p>(d) describe how the rehabilitation of the site would be integrated with:</p> <ul style="list-style-type: none"> - the implementation of the biodiversity offset strategy; and - the final landform for the Boggabri coal mine; <p>(e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);</p> <p>(f) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval and address all aspects of rehabilitation including mine closure, final landform and final land use;</p> <p>(g) include interim rehabilitation where necessary to minimise the area exposed for dust generation;</p> <p>(h) include a program to monitor, independently audit and report on the effectiveness of the</p>	<p>(BMP) (ELA April 2015)</p> <p>Tarrawonga Coal Mine - Rehabilitation Monitoring Report - Spring 2015 (ELA 25 May 2016)</p> <p>Tarrawonga Coal Mine - Rehabilitation Monitoring Report - Spring 2016 (ELA 29 May 2017)</p> <p>PA3-39-12 Groundwater Monitoring Data</p>	<p>2016) together form the RMP. Those documents together include the relevant detail as cross referenced below.</p> <p>(a) BMP (ELA April 2015) (section 1.4) prepared in consultation with all named parties except Council. MOP (2015-2020) (SLR 2016) (section 1.5.1) prepared in consultation with all parties except DPI.</p> <p>(b) condition predates this audit period.</p> <p>(c) MOP Table 3 indicates the MOP as was prepared in 2013 (forming the basis of the current MOP) was prepared to meet the ESG3 Guidelines. Review indicates the heading are consistent with the ESG3 guideline.</p> <p>(d) Integration with the Boggabri coal mine is contained in MOP section 1.2 including a commitment to prepare (in conjunction with the Boggabri proponent and DRE) an Overburden Emplacement Integration Management Plan.</p> <p>(e) MOP (2015-2020) (SLR 2016) includes performance criteria (section 6).</p> <p>(f) MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).</p> <p>(g) refer CoA 63.</p> <p>(h) MOP (2015-2020) (SLR 2016) details rehabilitation monitoring (section 8). BMP (ELA April 2015) details rehabilitation monitoring requirements</p>		<p>schedule that integrates all requirements from all plans to make it clear what needs to be monitored and when.</p>

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>rehabilitation measures, and progress against the detailed performance and completion criteria;</p> <p>(i) include a coal rejects disposal procedure and monitoring program for potential acid generation; and</p> <p>(j) build to the maximum extent practicable on the other management plans required under this approval.</p>		<p>for flora and fauna (including monitoring weeds and feral species).</p> <p>(i) MOP (2015-2020) (SLR 2016) section 2.3.7 details coal reject procedure and section 3.2.8 details acid mine drainage management. No groundwater monitoring within the mine was undertaken to determine if acid rock drainage was occurring during the reporting period, all groundwater monitoring was at locations outside of the mine. Surface water monitoring within the void is being undertaken, and review of data demonstrated alkaline to neutral pH concentrations. AEMR 2016 states no acid rock drainage has occurred – more clear indication of how this conclusion was drawn would be beneficial.</p> <p>(j) not assessable</p> <p>No evidence that the implementation is to the satisfaction of the DRE, except that Annual Reviews are submitted to the DRE.</p> <p>Implementation of the measures identified in (e), (f) and (g) is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself is not fully implementing MOP section 8.1.3 with no monitoring occurring in the</p>		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>regenerating native vegetation in the north east corner of ML1579.</p> <p>No evidence available of implementation of parameters stated in section 5 of the BMP (ELA April 2015) including: weeds, feral animal monitoring and nest box monitoring.</p> <p>The MOP (2015-2020) (SLR 2016) section 3.2.4 states that vertebrate pests will be monitored on an as needs basis (not seasonal) and this appears to be done in an ad hoc manner. That section states weeds will be monitored monthly in areas including rehabilitation areas. No evidence exists of this occurring.</p> <p>Limited Implementation: Evidence of regular monitoring of rehabilitation ecological risks and performance is piecemeal or absent (beyond only the woodland rehabilitation monitoring undertaken annually in spring).</p>		
Final Void Design and Closure					
65	The Proponent shall prepare and implement an updated Final Void and Mine Closure Plan (as a component of the overall Rehabilitation Management Plan required under condition 64 of schedule 3) to the satisfaction of DRE, following consultation with the Secretary. A draft plan must be	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	The current life of mine extends through to 2030. This condition is currently not triggered in MOP until 2019.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>prepared and submitted to DRE by the end of December 2019, and a final plan must be prepared and submitted to DRE by the end of December 2024. Each version of the plan must:</p> <p>(a) be subject to independent review and verification by suitably qualified, experienced and independent person/s (including a groundwater expert) whose appointment has been approved by the Secretary;</p> <p>(b) identify and consider:</p> <ul style="list-style-type: none"> - options for continued mining beyond current project life; - interactions with the final landform of adjoining mines (including any direct or indirect interaction between final voids); - opportunities for integrated mine planning with adjoining mines to minimise environmental impacts of the mines' final landforms; - all reasonable and feasible landform options for the final void (including filling); - predicted stability of the proposed landforms; and - predicted hydrochemistry and hydrogeology (including long-term groundwater recovery and void groundwater quality); 				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	(c) include a detailed proposed landform design; and (d) demonstrate that the proposed final landform: <ul style="list-style-type: none"> - satisfies the relevant objectives in Table 15; - minimises the extent of any resulting pit lake; - avoids salt scalding; - maximises the capacity of emplaced spoil to drain to the natural environment; and - ensures that drained waters do not adversely affect the downstream environment. 				
AGRICULTURE					
<i>Note: This includes properties primarily used for agriculture that are acquired by the Proponent due to noise and/or air quality impacts. However, it does not include land where disturbance is permitted under the conditions of this approval or land that forms part of the biodiversity offset area.</i>					
66	The Proponent shall use its best endeavours to ensure that the agricultural productivity and production of non-operational project-related land is maintained or enhanced.	WHC_PLN_TAR_FARM MANAGEMENT PLAN (draft) (WHC 13/5/2016) Site Environment Officer interview	Farm Management Plan (draft) (WHC 13/5/2016) describes actions to maintain or enhance agricultural production on non-operational lands via measures including: property, grazing and cropping management measures, and erosion, weeds and pest controls. As stated by Site Environment Officer in interview, the plan is in draft and has not yet been implemented.	C	
SCHEDULE 4 ADDITIONAL PROCEDURES					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
NOTIFICATION OF LANDOWNERS/TENANTS					
1	<p>Within 3 months of the date of this approval, the Proponent shall:</p> <p>(a) notify in writing the owners of:</p> <ul style="list-style-type: none"> - the land listed in Table 1 of schedule 3 that they have the right to require the Proponent to acquire their land in accordance with the procedures in conditions 8 and 9 below at any stage during the project; - any residence on the land listed in Table 1 of schedule 3 that they have the right to request the Proponent to ask for additional noise and/or air quality mitigation measures to be installed at their residence at any stage during the project; and - any privately-owned land within 2 kilometres of the approved open-cut mining pit/s that they are entitled to ask for a property inspection, to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated; <p>(b) notify the tenants of any mine-owned land of their rights under this approval; and</p> <p>(c) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time</p>	2014 IEA	This condition was met as part of the 2014 IEA.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the EA identify that dust emissions generated by the project are likely to be greater than the relevant air quality criteria in schedule 3 at any time during the life of the project.				
2	<p>Prior to entering into any tenancy agreement for any land owned by the Proponent that is predicted to experience exceedences of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Proponent, the Proponent shall:</p> <p>(a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land, and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time);</p> <p>(b) advise the prospective tenants of the rights they would have under this approval; and</p> <p>(c) request the prospective tenants consult their medical practitioner to discuss the air quality monitoring data and predictions and health impacts arising from this information,</p>	<p>PA3-27-3 Example Licencing Whitehaven Property Letter</p> <p>PA-27-2 Satisfaction of Secretary Response</p>	<p>Auditor reviewed example of letters issued to prospective tenants covering the prescribe conditions.</p> <p>TCM received letter dated 7 July 2017 from Department Planning & Environment confirming this condition is met to Secretary's satisfaction.</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	to the satisfaction of the Secretary.				
3	<p>As soon as practicable after obtaining monitoring results showing:</p> <p>(a) an exceedance of the relevant criteria in schedule 3, the Proponent shall notify the affected landowner in writing of the exceedance, and provide regular monitoring results to the landowner until the project is complying with the relevant criteria again; and</p> <p>(b) an exceedance of the relevant air quality criteria schedule 3, the Proponent shall send to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land) a copy of:</p> <ul style="list-style-type: none"> - the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and - the monitoring data, in an appropriate format so that a medical practitioner can assist the resident in making an informed decision on the health risks associated with occupation of the property. 	<p>Monitoring results</p> <p>Interview with Environment Officer.</p>	No exceedances impacting private land owners during the audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
INDEPENDENT REVIEW					
4	<p>If an owner of privately-owned land considers the project to be exceeding the criteria in schedule 3 at his/her land, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land.</p> <p>If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Proponent shall:</p> <p>(a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to:</p> <ul style="list-style-type: none"> consult with the landowner to determine his/her concerns; conduct monitoring to determine whether the project is complying with the relevant impact assessment criteria in schedule 3; and if the project is not complying with the relevant criteria, then: <ul style="list-style-type: none"> determine if the more than one mine is responsible for the exceedence, and if so the 	Interview with Environment Officer.	No written request made to the Secretary during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>relative share of each mine towards the impact on the land;</p> <ul style="list-style-type: none"> o identify the measures that could be implemented to ensure compliance with the relevant criteria; and <p>(b) give the Secretary and landowner a copy of the independent review.</p>				
5	<p>If the independent review determines that the project is complying with the relevant criteria in schedule 3, then the Proponent may discontinue the independent review with the approval of the Secretary.</p> <p>If the independent review determines that the project is not complying with the relevant criteria, and that the project is primarily responsible for this non-compliance, then the Proponent shall:</p> <p>(a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until the project complies with the</p>	Interview with Environment Officer.	No written request made to the Secretary during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>relevant criteria; or</p> <p>(b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Secretary.</p> <p>If the independent review determines that the project is not complying with the relevant acquisition criteria, and that the project is primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land in accordance with the procedures in conditions 8 and 9 below.</p>				
6	<p>If the independent review determines that the relevant criteria are being exceeded, but that more than one mine is responsible for this exceedance, then together with the relevant mine/s the Proponent shall:</p> <p>(a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until there is compliance with the relevant criteria; or</p> <p>(b) secure a written agreement with the landowner and other relevant</p>	Interview with Environment Officer.	No written request made to the Secretary during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>mine/s to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Secretary.</p> <p>If the independent review determines that the project is not complying with the relevant acquisition criteria in schedule 3, but that more than one mine is responsible for this non-compliance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s, in accordance with the procedures in conditions 8 and 9 below.</p>				
Biodiversity & Heritage					
7	<p>If a person has good reason to believe the Proponent is not implementing the biodiversity and/or heritage conditions in schedule 3 satisfactorily, then he/she may ask the Secretary in writing for an independent review of the matter.</p> <p>If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision, the Proponent shall:</p> <p>(a) commission a suitably qualified,</p>	Interview with Environment Officer	In interview Environment Officer stated that this situation has not occurred.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>experienced and independent person, whose appointment has been approved by the Secretary, to:</p> <ul style="list-style-type: none"> - consult with the person and/or any relevant agencies; - investigate the person's complaints/claims; - review the environmental performance of the Proponent; - determine whether the Proponent's performance is satisfactory or not; and if necessary - recommend measures to improve the Proponent's performance; and <p>(b) give the Secretary and complainant a copy of the independent review.</p>				
LAND ACQUISITION					
8	<p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:</p> <p>(a) the current market value of the landowner's interest in the land at the date of the written request, as if the land was unaffected by the project, having regard to the:</p> <ul style="list-style-type: none"> - existing and permissible use of the land, in accordance with the applicable planning instruments at 	Interview with Environment Officer.	No written request made to the Proponent during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>the date of the written request; and</p> <ul style="list-style-type: none"> - presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional mitigation measures required under condition 2 of schedule 3; <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> - relocating within the Tamworth, Narrabri, Gunnedah or Moree local government areas, or to any other local government area as agreed by the Secretary; and - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and <p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>However, if the Proponent and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>resolution.</p> <p>Upon receiving such a request, the Secretary shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:</p> <ul style="list-style-type: none"> - consider submissions from both parties; - determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above; - prepare a detailed report setting out the reasons for any determination; and - provide a copy of the report to both parties. <p>Within 14 days of receiving the independent valuer's report, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.</p> <p>However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review.</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.</p> <p>Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination.</p> <p>If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Secretary determines otherwise.</p>				
9	The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 8 above, including the costs associated with obtaining	Interview with Environment Officer.	No written request made to the Proponent during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.				
SCHEDULE 5					
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING					
ENVIRONMENTAL MANAGEMENT					
Environmental Management Strategy					
1	<p>The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. The strategy must:</p> <p>(a) be submitted to the Secretary for approval by the end of May 2013;</p> <p>(b) provide the strategic framework for environmental management of the project;</p> <p>(c) identify the statutory approvals that apply to the project;</p> <p>(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;</p> <p>(e) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> - keep the local community and relevant agencies informed about the operation and environmental performance of the project; - receive, record, handle, and 	<p>PA5-1-6 EMS_Final</p> <p>PA5-1-1 EMS Submission Letter</p>	<p>EMS available online is dated 2009, developed under DA and current EMS not yet approved. It is required to be updated following each IEA to the satisfaction of the Secretary if necessary.</p> <ul style="list-style-type: none"> a) Initially submitted to the Secretary for 27 May 2013 and subsequently 29 June 2017. Currently awaiting Secretary Approval. b) Compliant Section 5 c) Refers to DA 88-4-2005 as opposed to PA 11_0047, only ML 1579. Approved EMS developed under DA and current EMS not yet approved. d) Compliant Section 4 e) Compliant Section 6, 7 and 8 <p>Supporting individual Plans and standalone Environmental Monitoring Plan provided online.</p> <p>The EMS is currently not approved to the Satisfaction of the Secretary.</p>	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>respond to complaints;</p> <ul style="list-style-type: none"> - resolve any disputes that may arise during the course of the project; - respond to any non-compliance; - respond to emergencies; and <p>(f) include:</p> <ul style="list-style-type: none"> - copies of any strategies, plans and programs approved under the conditions of this approval; and - a clear plan depicting all the monitoring to be carried out in relation to the project. 				
Adaptive Management					
2	<p>The Proponent must assess and manage project-related risks to ensure that there are no exceedences of the criteria and/or performance measures in schedule 3. Any exceedence of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.</p> <p>Where any exceedence of these criteria and/or performance measures has occurred, the Proponent must at the earliest opportunity:</p> <p>(a) take all reasonable and feasible steps to ensure that the exceedence</p>	<p>Response to SPL Show Cause – 160727.pdf</p> <p>PA5-2-1 Sound Power Level Show Cause Reponse.msg</p> <p>2016_05_Incident Report – Tarrawonga Sound Power Levels.pdf</p>	<p>These documents demonstrated a non-compliance with regards to plant sound power levels and avoiding the requirement to stop using the equipment, on the basis that attended noise monitoring at residences has identified no noise exceedances since March 2015. are attempting to manage by removing the criteria to cease using SPL exceeding material at the site. No evidence that this has been accepted to the satisfaction of the Secretary.</p>	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>ceases and does not reoccur;</p> <p>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other courses of action; and</p> <p>(c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.</p>				
Management Plan Requirements					
3	<p>The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:</p> <p>(a) detailed baseline data;</p> <p>(b) a description of:</p> <ul style="list-style-type: none"> - the relevant statutory requirements (including any relevant approval, licence or lease conditions); - any relevant limits or performance measures/criteria; - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; <p>(c) a description of the measures</p>	Review of Management Plans.	Approval letters in place with exception of Water Management Plan, as th condition relates to preparation of plans, this is compliant.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>(d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> - impacts and environmental performance of the project; - effectiveness of any management measures (see c above); <p>(e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the project over time;</p> <p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> - incidents; - complaints; - non-compliances with statutory requirements; and - exceedences of the impact assessment criteria and/or performance criteria; and <p>(h) a protocol for periodic review of the plan.</p>				
Annual Review					
4	By the end of June each year (or as otherwise agreed by the Secretary), the Proponent shall review the	AMER and ARs 2014 - 2016	Review of AMER and ARs for audit period	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>environmental performance of the project for the previous calendar year to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> - relevant statutory requirements, limits or performance measures/criteria; - monitoring results of previous years; and - relevant predictions in the EA; <p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the project;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	significant discrepancies; and (f) describe what measures will be implemented over the next year to improve the environmental performance of the project.				
Revision of Strategies, Plans and Programs					
<i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.</i>					
5	Within 3 months of the submission of an: (a) annual review under condition 4 above; (b) incident report under condition 8 below; (c) audit under condition 10 below; or (d) any modification to the conditions of this approval, the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary.	PA5-5-1 Review Register	Auditor reviewed the TCM Review Register detailing all environmental plans and dates for updates.	C	
Management of Cumulative Impacts					
6	In conjunction with the owners of the nearby mines in the Leard Forest Mining Precinct, the Proponent shall use its best endeavours to minimise the cumulative impacts of the project on the surrounding area, to the satisfaction of the Secretary.	PA-28-3 BTM Monthly Meeting Minutes	Monthly meeting minutes between Environment teams from each mine maintained internally.	C	
Community Consultative Committee					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
<p><i>Notes:</i></p> <p><i>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.</i></p> <p><i>In accordance with the Department's guideline, the CCC should be comprised on an independent chair and appropriate representation from the Proponent, Council and the local community.</i></p>					
7	<p>The Proponent shall establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version), and be operating by the end of May 2013.</p> <p>The CCC must seek to include joint membership with CCCs for other operating coal mines within the Leard Forest Mining Precinct, unless otherwise agreed by the Secretary.</p>	https://www.whitehavencoal.com.au/environment/docs/17-may-2017.pdf	CCC established and meets on quarterly basis. Minutes of Meeting disclosed on TMC website.	C	
REPORTING					
Incident Reporting					
8	The Proponent shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the Secretary and any other relevant	PA5-8-1 Environmental Harm Notification	TCM maintains an Environmental Harm Notification folder. Auditor reviewed a sample of notifications, specifically an example of environmental incident report relating to sound power levels relating to monitoring on 13 th and 14 th April 2016, report issued to TCM on 13 th May. Notification issued to Department following internal investigation 20 th May	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.		2016.		
Regular Reporting					
9	The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.	https://www.whitehavencoal.com.au/environment/docs/03081735-july-2017.pdf	Monthly Environmental Monitoring Reports and Annual Reviews disclosed on TCM website	C	
AUDITING					
Independent Environmental Audit					
<i>Note: This audit team must be led by a suitably qualified auditor, and include experts in noise, air quality, water, ecology, and any other fields specified by the Secretary.</i>					
10	By the end of June 2014 and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must: (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by	This Audit	Auditor commissioned for 2017 IEA as approved by DP&E on 30 June 2017.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>the Secretary;</p> <p>(b) include consultation with the relevant agencies;</p> <p>(c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, and any other relevant approvals, relevant EPL/s and/or Mining Lease/s (including any assessment, plan or program required under these approvals);</p> <p>(d) assess whether the Proponent is implementing best noise, blasting and air quality management practice;</p> <p>(e) investigate and report on the measures taken to minimise the noise and air quality impacts of the project during meteorological conditions and/or extraordinary events when the relevant noise and air quality limits in this approval do not apply, including:</p> <ul style="list-style-type: none"> - the effectiveness of these measures in maintaining impacts within the relevant criteria in this approval and/or the limits in the relevant EPL; and - any additional measures available to mitigate impacts under such conditions; <p>(f) review the adequacy of any</p>				

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	approved strategy, plan or program required under the abovementioned approvals; and (g) recommend measures or actions to improve the environmental performance of the project and/or any strategy, plan or program required under these approvals.				
11	Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	This Audit	IEA Report issued by 30 September 2017	C	
ACCESS TO INFORMATION					
12	The Proponent shall: (a) within 3 months of the date of this approval, make the following information publicly available on its website: - the EA; - all current statutory approvals for the project; - approved strategies, plans and programs required under the conditions of this approval; - a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the	https://www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm	The adjacent project website environmental management webpage was inspected and it was determined that the following documents were available: <ul style="list-style-type: none"> • EA • Project Approval • Approved Plans (noted that plans that have been prepared and submitted, but have not been approved, are not present) • EPL Monitoring Data • Greater than five previous years AEMRs • Complaints register • Minutes of CCC minutes • Independent audits 	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>conditions of this approval;</p> <ul style="list-style-type: none"> - a complaints register, which is to be updated on a monthly basis; - minutes of CCC meetings; - the last five annual reviews; - any independent environmental audit, and the Proponent's response to the recommendations in any audit; - any other matter required by the Secretary; and <p>(b) keep this information up to date, to the satisfaction of the Secretary.</p>				
On-line Communication of Onsite Activities and Monitoring of Noise and Air Quality					
13	<p>The Proponent shall, within 3 months of the date of this approval:</p> <p>(a) make the following information for the project publicly available on its website, on a daily basis and in a clearly understandable form:</p> <ul style="list-style-type: none"> - daily weather forecasts for the coming week; - proposed operational responses to these weather forecasts; - real-time noise and air quality monitoring data (subject to any necessary caveats); and - any operational responses that were taken in response to the noise and air quality monitoring data, and <p>(b) make provision on its website</p>	https://www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm	Active monitoring updated on website daily. On occasion there may be a delay in upload of data received.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	for the provision of on-line and/or email comments by members of the community regarding this information, to the satisfaction of the Secretary.				

Annex B

Audit Table A.2 –
Compliance with Statement
of Commitments

Table A.2 Compliance with Statement of Commitments

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Tarrawonga Coal Project Environmental Assessment - Statement of Commitments					
SOC1.1 Proposed Project Environmental Management, Monitoring and Reporting					
1.1	<p>TCPL will review and revise the existing Tarrawonga Coal Mine management and monitoring plans listed in Table SOC-1. Table SOC-1 also lists new management and monitoring plans that are proposed to be prepared for the Project.</p> <p>SOC-1 includes:</p> <ul style="list-style-type: none"> • Management and Monitoring Environmental Management Strategy • Water Management Plan • Site Water Balance • Erosion and Sediment Control Plan • Surface Water Monitoring Program • Groundwater Monitoring Program • Surface and Groundwater Response Plan • Goonbri Creek Management Plan* • Noise Management Plan • Blast Management Plan • Air Quality and Greenhouse Gas Management Plan • Biodiversity Offset Strategy • Biodiversity Management Plan* • Offset Area Management Plan* • Farm Management Plan* • Aboriginal Heritage Management Plan • Waste Management Plan • Rehabilitation Strategy 	Management Plans	<p>Auditor reviewed the management plans as detailed in the review of Conditions of Approval.</p> <p>Management Plan reviews documented in Documentation Register</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> Rehabilitation Management Plan Bushfire Management Plan Reporting Requirements Annual Environmental Management Report and Mining Operations Plan or Rehabilitation and Environmental Management Plan Licences and Approvals Greenhouse Gas Reporting <p>(* = New management plans to be prepared) Note most of these plans have been revised but are not yet approved by the DG.</p>				
1.1	The existing monitoring program at the Tarrawonga Coal Mine will be augmented to address additional Project disturbance areas and the open cut extensions.	Management Plans	Refer to revised and updated management plans	C	
1.1	Environmental management, monitoring and reporting will be conducted in accordance with finalised Project Approval conditions, with the final monitoring details (locations, parameters and frequencies) to be provided in the relevant management plans/monitoring programs.	Management Plans	Refer to revised and updated management plans	C	
SOC1.2 Specific Environmental Commitments					
1.2.1	Environmental management and offset measures to be implemented for the Project are described in Section 4. Key commitments include:	Note	Noted	Note	
1.2.2	Design and construction of an engineered low permeability barrier to the east and south-east of the open cut;	Note	Not Triggered	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
1.2.3	Design, construction and implementation of a permanent Goonbri Creek alignment and associated flood bund;	Note	Not Triggered	NT	
1.2.4	Integration of key aspects of the Project with the adjoining Boggabri Coal Mine (i.e. Northern Emplacement, coal processing and loading of Project product coal onto trains);	PA3-24-1 MOP SOC1-3 Common Boundary Integrated Management Plan	Mining Operations Plan and Common Boundary Integrated Management Plan detail actions against this commitment.	C	
1.2.5	Cessation of sized run-of-mine (ROM) coal road transport to the Whitehaven Coal Handling and Preparation Plant (once suitable approvals and upgrades are in place);	Interview with Environment Officer	This option is reviewed every two years, currently continue to transport to CHPP as rail haulage not implemented, in accordance with Project Approval,	NT	
1.2.6	Management and mitigation of operational noise;	PA3-11-1 NMP	Noise Management Plan details actions against commitment.	C	
1.2.7	Rehabilitation of Project disturbance areas, including the reinstatement of key agricultural and ecological values;	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Annual Review (2016)	MOP (2015-2020) (SLR 2016) sets out rehabilitation actions to achieve commitment (specifically sections 5-7, with monitoring in section 8), and plans showing annual progress through the years of the MOP (Plans 3a-f) and final landuse (Plan 4). Annual review reports rehabilitation progress for 2016 (which is largely in accordance with the MOP with a reported greater area of actual rehabilitation vs predicted).	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
1.2.8	Provision of biodiversity offset measures for the Project;	<p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Group Superintendent - Environment (Compliance) and Specialist-Offsets interview</p> <p>Biodiversity Offset Management Plan (BOMP)-Whitehaven Regional Biodiversity Offset Site (ELA August 2013)</p>	<p>Project biodiversity offsets are secured in both a BioBank Site (the Yarari & Belah site) and the Willeroi Offsets Area.</p> <p>The BioBank Site is managed according to the BioBanking Agreement (ID:43) and the BOMP (ELA August 2013).</p> <p>Group Superintendent - Environment (Compliance) and Specialist-Offsets interview indicated Willeroi Offset Area plan ('Stage 2') was in draft although the BMP (ELA 2015) section 3.2 states that the Willeroi Offset site is 1,660ha. Biodiversity values are shown in figures 3.4 - 3.6.</p>	C	
1.2.9	Management of the Project final void to minimise potential long-term impacts on water resources; and	Interview with Environment Officer	Condition not triggered until 2019	NT	
1.2.10	Participation in joint air quality, operational noise and regional groundwater monitoring schemes with the adjoining Boggabri Coal Mine and the Maules Creek Coal Project.	Boggabri, Tarrawonga and Maules Creek (BTM) Noise Management Strategy and Regional Water Strategy	Boggabri, Tarrawonga and Maules Creek (BTM) Noise Management Strategy and Regional Water Strategy. Although not approved, implemented the monitoring program.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Low Permeability Barrier					
1.2.11	A low permeability barrier will be constructed in the alluvium to the east and south-east of the open cut. Construction of the low permeability barrier will be completed before the Project open cut intersects the alluvium (approximately Year 12).	Interview with Environment Officer	Construction of low permeability barrier cot commenced during audit period.	NT	
1.2.12	The design objectives of the low permeability barrier include minimising the potential for drainage of alluvial groundwater into the open cut during operations and post-mining, and maintaining the hydraulic character of Goonbri Creek.	Interview with Environment Officer	Construction of low permeability barrier cot commenced during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
1.2.13	TCPL commits to construction of the low permeability barrier to meet the following design objectives: <ul style="list-style-type: none"> • minimise the potential for local drainage of alluvial groundwater into the open cut during operations and post-mining; • minimise the potential for future instability of the open cut batters formed in the alluvium; • maintain the hydraulic character of Goonbri Creek by minimizing the potential loss of baseflow; and • maintain the value of alluvial groundwater, by minimizing potential interactions with the mine final void, post-mining. 	Interview with Environment Officer	Construction of low permeability barrier cot commenced during audit period.	NT	
1.2.14	In addition, TCPL will augment the existing piezometer network with additional sites to validate the performance of the low permeability barrier.	Interview with Environment Officer	Construction of low permeability barrier cot commenced during audit period.	NT	
Permanent Goonbri Creek Alignment and Associated Flood Bund					
1.2.15	In approximately Year 15, open cut mining would remove a 3 kilometre (km) section of Goonbri Creek. Prior to the open cut advancing into this section of the creek, the permanent Goonbri Creek alignment will be established.	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	
1.2.16	A permanent flood bund will also be constructed to prevent inundation of the open cut during operations and postmining. The permanent flood bund will generally coincide with the alignment of the low permeability barrier.	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
1.2.17	TCPL commits to the design, construction and implementation of the permanent Goonbri Creek alignment to meet the following design objectives: Construct a low flow channel that approximates the existing section of Goonbri Creek upstream of the Project in terms of stream geometry, hydrology and geomorphology;	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	
1.2.18	Mimic the meandering path of the existing alignment of Goonbri Creek, such that the length of the permanent Goonbri Creek alignment is approximately the same length as the section of Goonbri Creek being removed;	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	
1.2.19	Minimise the disturbance to the reaches of Goonbri Creek upstream of the permanent Goonbri Creek alignment; and	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	
1.2.20	Provide a stable transition back to the existing Goonbri Creek alignment which results in no detectable change to the hydraulic conditions in the reaches of Goonbri Creek or the Bollol Creek floodplain area downstream.	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	
1.2.21	In addition, TCPL commits to the design and construction of the permanent flood bund to a height that will provide protection against the peak flood height associated with a Probable Maximum Precipitation rainfall event.	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
1.2.22	TCPL will develop and implement a Goonbri Creek Management Plan prior to the commencement of construction activities associated with the low permeability barrier, permanent Goonbri Creek alignment and flood bund.	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	
1.2.23	The Goonbri Creek Management Plan will describe: The design and construction details of the permanent Goonbri Creek alignment and flood bund;	Interview with Environment Officer	No realignment of Goonbri Creek during audit period.	NT	
1.2.24	Revegetation objectives and activities;	Interview with Environment Officer	Site Environmental Officer identified that preparation of the Goonbri Creek Management Plan is not yet required.	NT	
1.2.25	Water quality, ecological, hydrological and geomorphic performance and completion criteria for the permanent Goonbri Creek alignment based on baseline conditions; and	Interview with Environment Officer	Site Environmental Officer identified that preparation of the Goonbri Creek Management Plan is not yet required.	NT	
1.2.26	A monitoring/maintenance program for water quality, ecological, hydrological and geomorphic integrity of the permanent Goonbri Creek alignment.	Interview with Environment Officer	Site Environmental Officer identified that preparation of the Goonbri Creek Management Plan is not yet required.	NT	
Management of Operational Noise					
1.2.27	TCPL will implement the following noise management and mitigation measures to appreciably reduce noise emissions associated with the Project:	Interview with Environment Officer	The services corridor has not been constructed during Audit period	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Installation of an earth bund on the southern side of exposed sections of the services corridor (i.e. ROM coal haul road to the Boggabri Coal Mine);				
1.2.28	Modified alignment of haul routes to reduce their exposure relative to nearby receivers; and	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	Cessation of southern emplacement dumping in line with current MOP.	C	
1.2.29	A reduction in the number of mobile fleet items operating during the evening and night-time periods.	OCE Diary	Review of operational plan confirms that fewer mobile plant is operated during evening hours.	C	
Rehabilitation Objectives and Final Landform					
1.2.30	The Project final landform and revegetation program will provide for a combination of approximately 752 ha of native woodland/forest and some 210 ha of Class 3 agricultural suitability land.	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Annual Review (2016)	MOP (2015-2020) (SLR 2016) sets out rehabilitation actions to achieve commitment (specifically sections 5-7, with monitoring in section 8), and plans showing annual progress through the years of the MOP (Plan 3) and final landuse (Plan 4). Annual review reports rehabilitation progress for 2016 (which is largely in accordance with the MOP with a reported greater area of actual rehabilitation vs predicted). No verification of the areas	O	MOP and Annual Reports should include table showing progress towards final landform areas

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			contained in the final landform areas is available.		
1.2.31	The agricultural land will be capable of being used for pasture production for grazing and occasional cropping. Revegetation of woodland/forest areas will include the planting of species characteristic of the local vegetation communities, including species from the Box-Gum Woodland endangered ecological community.	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Field inspection (onsite rehabilitation)	MOP (2015-2020) (SLR 2016) Plan 4 shows post mining landuse containing agricultural land, and section 5.2, Table 10 includes commitment for rehabilitation to agricultural land to that class. MOP (2015-2020) (SLR 2016) identifies no rehabilitation to agricultural land is planned during this MOP period (Plan 3). Field inspection identified tree species characteristic of the BGW EEC. Youngest rehabilitation (the farthest north) contains tree and shrub species of the BGW EEC although the ground layer germination appears of questionable species composition when compared with the BGW EEC list. Older rehabilitation areas will require species augmentation to enhance values to be more closely aligned to the BGW EEC (from the very poor quality southern emplacement slopes which will require significant rehabilitation rework to the western slope of the northern emplacement which has	O	Rehabilitation areas are not currently non-compliant however work will be required to maintain integrity of germinating areas (the youngest) and enhance the native species diversity and value in the older areas

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			tree species however will require infill plantings or seed spreading).		
1.2.32	In addition, TCPL commits to a riparian vegetation enhancement program on a 3.2 km section of Goonbri Creek downstream of the Project open cut, through measures such as revegetation and stock exclusion.	Interview with Environmental Officer	Site Environmental Officer stated that the Goonbri Creek measures have not yet been implemented and not yet triggered.	NT	
1.2.33	A Rehabilitation Management Plan will be developed and implemented for the Project, including a rehabilitation monitoring program designed to track the progress of rehabilitation and revegetation.	Interview: Site Environmental Officer Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	The auditor understands there is not RMP for the project. Site Environmental Officer in site interview stated that the BMP (ELA April 2015) and the MOP (2015-2020) (SLR 2016) together form the RMP. Those documents together include the relevant detail as cross referenced below. MOP (2015-2020) (SLR 2016) details rehabilitation monitoring (section 8). BMP (ELA April 2015) details rehabilitation monitoring requirements for flora and fauna (including monitoring weeds and feral species). Implementation of the measures identified in (e), (f) and (g) is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself is not fully implementing MOP section	O	TCPL to develop a clear, one-page annual monitoring schedule that integrates all requirements from all plans to make it clear what needs to be monitored and when. Evidence of regular monitoring of rehabilitation ecological risks and performance is piecemeal or absent (beyond only the woodland rehabilitation monitoring undertaken annually in spring).

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			<p>8.1.3 with no monitoring occurring in the regenerating native vegetation in the north east corner of ML1579.</p> <p>No evidence available of implementation of parameters stated in section 5 of the BMP (ELA April 2015) including: weeds, feral animal monitoring and nest box monitoring.</p> <p>The MOP (2015-2020) (SLR 2016) section 3.2.4 states that vertebrate pests will be monitored on an as needs basis (not seasonal) and this appears to be done in an ad hoc manner. That section states weeds will be monitored monthly in areas including rehabilitation areas. No evidence exists of this occurring.</p>		
Biodiversity Offset Measures					
1.2.34	TCPL commits to the provision of an area to offset the residual impacts of the Project on flora and fauna and maintain or improve the biodiversity values of the region in the medium to long-term.	<p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Biodiversity Offset Management Plan (BOMP)-Whitehaven Regional Biodiversity</p>	<p>Project biodiversity offsets are secured in both a BioBank Site (the Yarari & Belah site) and the Willeroi Offsets Area.</p> <p>The BioBank Site is managed according to the BioBanking Agreement (ID:43) and the BOMP (ELA August 2013).</p>	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
		Offset Site (ELA August 2013)	Group Superintendent - Environment (Compliance) and Specialist-Offsets interview indicated Willeroi Offset Area plan ('Stage 2') was in draft although the BMP (ELA 2015) section 3.2 states that the Willeroi Offset site is 1,660ha. Biodiversity values are shown in figures 3.4 - 3.6 (including demonstrating that the site adjoins the Mount Kaputar National Park).		
1.2.35	The biodiversity offset for the Project comprises approximately 1,600 ha of freehold land that has been purchased by Whitehaven.	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	The BMP (ELA 2015) section 3.2 states that the Willeroi Offset site is 1,660ha. Biodiversity values are shown in figures 3.4 - 3.6 (including demonstrating that the site adjoins the Mount Kaputar National Park).	C	
1.2.36	The offset is situated approximately 20 km to the north-east of the Project and adjoins Mount Kaputar National Park (Figure SOC-2). Prior to its recent purchase by Whitehaven the offset area was part of a larger agricultural property.	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	The BMP (ELA 2015) section 3.2 states that the Willeroi Offset site is 1,660ha. Biodiversity values are shown in figures 3.4 - 3.6 (including demonstrating that the site adjoins the Mount Kaputar National Park).	C	
1.2.37	Ecological gains from the biodiversity offset include:	Tarrawonga Biodiversity	The BMP (ELA 2015) section 3, Tables 3.1 & 3.3 demonstrate	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Similar vegetation communities/fauna habitats, compared to the Project area, will be conserved/enhanced in the biodiversity offset area.	Management Plan (BMP) (ELA April 2015)	similar vegetation communities exist in the Project Area to the Willeroi Offset site (one exception present in the Project Area not present in the Offset Site).		
1.2.38	The biodiversity offset area is suitably located to benefit flora and fauna populations (biodiversity values) potentially impacted by the Project.	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	The BMP (ELA 2015) section 3.2 states that a range of fauna similarities exist between the Project Area and the Willeroi Offset Area.	C	
1.2.39	The biodiversity offset area is located adjacent to Mount Kaputar National Park.	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	The BMP (ELA 2015) section 3.2 states that the Willeroi Offset site is 1,660ha. Biodiversity values are shown in figures 3.4 - 3.6 (including demonstrating that the site adjoins the Mount Kaputar National Park).	C	
1.2.40	Ephemeral creeks occur within the biodiversity offset area, providing a diversity of habitats.	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	The BMP (ELA 2015) section 3.2 states that the area contains drainage lines Maules Creek and Teatree Gully.	C	
1.2.41	Substantial areas of Box-Gum Woodland (232 ha) occur in the biodiversity offset area.	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	The BMP (ELA 2015) section 3.2, Table 3.4 states that the Willeroi Offset site contains 232ha of BGW EEC.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
1.2.42	Through active management, particularly of areas previously cleared for agriculture, the ecological values of the biodiversity offset area can be further improved. TCPL commits to a number of management measures to enhance the offset area's flora and fauna values. These measures will be detailed in the Offset Area Management Plan to be prepared for the Project.	Interview: Specialist-Offsets Field inspection: Willeroi Offset Area	In interview the Specialist-Offsets indicated management of weeds and feral animals (especially goats) is occurring throughout the Willeroi Offset Area. This was observed during site visit to Willeroi Offsets Area where evidence of senescent weeds were observed.	C	
1.2.43	The Offset Area Management Plan will also include a program to monitor and audit the effectiveness of the management measures and to evaluate performance against specified completion criteria.	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	The 2017 BMP contains a monitoring program for the Willeroi Offset Area.	C	
1.2.44	TCPL intends to reach an agreement with the New South Wales (NSW) Government so that the biodiversity offset area can be permanently added to the adjoining Mount Kaputar National Park.	Letter 0932_001.pdf DP&E to Group Superintendent - Environment (Whitehaven) 30/6/17	Letter 0932_001.pdf from DP&E describes the status of correspondence between NPWS and Whitehaven acknowledging Whitehaven's intention to transfer some land to NPWS estate and secure all that residual land using a VCA. The letter states that it refers to this condition and that the DP&E is satisfied that Whitehaven is currently "demonstrating reasonable endeavours to secure the offsets".	C	
1.2.45	In the interim, TCPL will enter into a conservation arrangement with the NSW	Interview: Specialist-Offsets	Interview with Specialist-Offsets indicated no such interim	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Government to ensure the protection and management of the offset area (e.g. a voluntary conservation agreement with the NSW Minister for the Environment).		agreement has been (or will be) pursued as WHC (on TCPL's behalf) actively negotiating with National Parks and Wildlife Service to transfer the entire Willeroi Offset over to National Parks Estate.		
Management of the Project Final Void					
1.2.46	TCPL commits to installing permanent perimeter bunds and/or diversion channels to limit the catchment area of the final void.	Interview with Environmental Officer	Final void plans not developed during this audit period and not required prior to 2019.	NT	
1.2.47	In addition, TCPL will design and construct the final void to minimise the long-term drawdown and potential water quality effects on local groundwater aquifers. This will be achieved by adjusting the final void batter angles and/or placing additional waste rock backfill in the final void such that a permanent waterbody will form and reach an equilibrium level close to, but below, the local pre-mining groundwater level in the coal measures.	Interview with Environmental Officer	Refer above	NT	
1.2.48	TCPL will adopt an adaptive management approach to the final void design and mine closure planning for the Project. Final void design and mine planning will be undertaken by TCPL in consultation with relevant government agencies as a component of the Rehabilitation Management Plan.	Interview with Environmental Officer	Refer above	NT	
Participation in Joint Air Quality, Operational Noise and Regional Groundwater Monitoring					
1.2.49	TCPL will work with the proponents of the	AQGGMP	AQGGMP and NMP have	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Boggabri Coal Mine and Maules Creek Coal Project to develop and implement a joint network of real-time particulate matter monitors, operational noise monitors and regional groundwater monitoring in the vicinity of the Project. The details of the joint network will be provided in the revised Air Quality and Greenhouse Gas Management Plan, Noise Management Plan and Water Management Plan.	NMP WMP	approved strategies. Groundwater monitoring in place, Water Management Plan not yet approved.		

Annex C

Table B.1 Compliance with
Environment Protection
Licence

Table B.1 Compliance with Environment Protection Licence (EPL) 12365

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
ADMINISTRATIVE CONDITIONS					
A1 What the licence authorises and regulates					
A1.1	<p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.</p> <p>Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <p>Coal Works 2000000 – 5000000 T annual handling capacity</p> <p>Mining for Coal 2000000 – 3500000 T annual production capacity</p>	<p>PA2-6-1 Production, Haulage and Sales Volumes</p> <p>EPL1-A1.1-1 Annual Return Statement of Compliance</p> <p>2016-2017</p> <p>2015-2016</p> <p>2014-2015</p>	<p>Auditor reviewed production tonnages.</p> <p>Extracted:</p> <p>FY14-15: 2.2 million tonnes</p> <p>FY15-16: 2.2 million tonnes</p> <p>FY16-17: 2.43 million tonnes</p> <p>Coal Workings</p> <p>FY14-15: 2.28 million tonnes</p> <p>FY15-16: 2.1 million tonnes</p> <p>FY16-17: 2.23 million tonnes</p>	C	
A2 Premises or plant to which this licence applies					
A2.1	<p>Premises Details</p> <p>TARRAWONGA COAL MINE</p> <p>469 GOONBRI ROAD</p> <p>BOGGABRI</p> <p>NSW 2382</p> <p>THE LAND APPROVED UNDER PROJECT APPROVAL 11_0047- INDICATED IN APPENDIX 1- SCHEDULE OF LAND OF PROJECT APPROVAL 11_0047, DATED 22 JANAURY 2013 (DOC13/87399).</p>	Note	Noted	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations								
A3 Information supplied to the EPA													
A3.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	Note	Noted	C									
2 - DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND													
P1 Location of monitoring/discharge points and areas													
P1.1	<div>The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.</div> <div>Air</div> <table><tr><th>EPA ID Number</th><th>Type of monitoring point</th><th>Type of discharge point</th><th>Location description</th></tr><tr><td>28</td><td>Ambient air monitoring</td><td></td><td>Real time air quality monitor located on 'Flixton' as shown on map entitled 'Figure 2' - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).</td></tr></table>	EPA ID Number	Type of monitoring point	Type of discharge point	Location description	28	Ambient air monitoring		Real time air quality monitor located on 'Flixton' as shown on map entitled 'Figure 2' - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).	<div>Site observations</div> <div>EPL Monitoring Locations Figure 2</div>	<div>Auditor observed a sample of EPA ID locations while on Site.</div> <div>The auditor sighted environmental database spreadsheet and inspected key monitoring points.</div> <div>Monitoring is conducted at these locations and reported in the AEMR / AR.</div>	C	
EPA ID Number	Type of monitoring point	Type of discharge point	Location description										
28	Ambient air monitoring		Real time air quality monitor located on 'Flixton' as shown on map entitled 'Figure 2' - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).										
P1.2	<div>The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</div> <div>Water and land</div> <table><tr><th>EPA ID Number</th><th>Type of monitoring point</th><th>Type of discharge point</th><th>Location description</th></tr><tr><td>1</td><td>Wet weather discharge Discharge water quality monitoring</td><td>Wet weather discharge Discharge water quality</td><td>Discharge point located on the western boundary and labelled 'SD17' on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the</td></tr></table>	EPA ID Number	Type of monitoring point	Type of discharge point	Location description	1	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality	Discharge point located on the western boundary and labelled 'SD17' on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the	<div>EPL 12365_Figure2_270217 - monitoring locations offsite</div> <div>EPL 12365 Figure 1 monitoring locations offsite</div> <div>Site observation</div> <div>Environmental Officer interview</div> <div>PA3-39-7 Surface Water and Wet Weather Discharge Monitoring Data.xlsx</div>	<div>Auditor review of monitoring locations on EPL Figure demonstrated monitoring locations, site inspection to demonstrate some of the locations in the field and review of monitoring data identified that these locations are monitored. Interview with the Environmental Officer identified that Nagero Creek Downstream (NCD) and Nagero Creek Upstream (NCU) are to be removed from licence as now discharge to Boggabri Coal mine site and into their dirty water management system. The water will then be managed by Boogabri Coal prior to discharge</div>	Noted	
EPA ID Number	Type of monitoring point	Type of discharge point	Location description										
1	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality	Discharge point located on the western boundary and labelled 'SD17' on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the										

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations
			Monitoring	EPA on 10 March 2016 (DOC16/128744-01)				
	2	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Storage Dam 9 located on southern boundary of premises labelled 'SD9' on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the EPA on 10 March 2016 (DOC16/128744-01).				
	3	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Sediment Basin 14 located on the southern boundary & labelled 'SB14' on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the EPA on 10 March 2016 (DOC16/128744-01).				
	5	Ambient water quality monitoring		Bollol Creek upstream of discharge from premises labelled 'BCU' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).				
	6	Ambient water quality monitoring		Bollol Creek downstream of discharge from premises labelled 'BCD' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).				
	7	Ambient water quality monitoring		Nagero Creek upstream of discharge from premises labelled 'NCU' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).				
	8	Ambient water quality monitoring		Nagero Creek downstream of discharge from premises labelled 'NCD' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).				
	9	Groundwater		Groundwater monitoring				

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations
		monitoring		bore located on property 'Thuin' labelled 'MW1' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).				
	10	Groundwater monitoring		Groundwater monitoring bore located on property 'Bollol Ck Station' labelled 'MW2' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).				
	11	Groundwater monitoring		Groundwater monitoring bore located on property 'Nagero' labelled 'MW3' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).				
	12	Groundwater monitoring		Groundwater monitoring bore located on the property 'Tarrawonga' labelled 'MW4' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).				
	13	Surface water quality monitoring		Mining void (variable location) labelled 'Void' on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the EPA on 10 March 2016 (DOC16/128744-01).				
	24	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Storage Dam 16 located on the southern side of the premises labelled 'SD16' on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the EPA on 10 March 2016 (DOC16/128744-01).				
	26	Wet weather discharge Discharge water quality	Wet weather discharge Discharge	Spillway on Sediment Basin 23B located on the south- western side of the premises labelled 'SB23B'				

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations						
		monitoring	water quality monitoring	on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the EPA on 10 March 2016 (DOC16/128744-01).										
	27	Wet weather discharge Discharge water quality monitoring	Wet weather discharge Discharge water quality monitoring	Spillway on Sediment Basin 18 located on south eastern side of premises labelled 'SB24A' on the map entitled 'Figure 1 - EPL 12365 Monitoring Locations Onsite' received by the EPA on 10 March 2016 (DOC16/128744-01).										
P1.3	The following point(s) in the table are identified in this licence for the purpose of the monitoring of weather parameters at the point. <table><tr><td>EPA ID Number</td><td>Type of monitoring point</td><td>Description of location</td></tr><tr><td>W1</td><td>Weather analysis</td><td>Weather station located on the property 'Templemore' labelled 'W1' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).</td></tr></table>				EPA ID Number	Type of monitoring point	Description of location	W1	Weather analysis	Weather station located on the property 'Templemore' labelled 'W1' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).	Site observations EPL Monitoring Locations Figure 2	Auditor observed EPA ID locations while on Site. Monitoring is conducted at these locations and reported in the AEMR / AR.	C	
EPA ID Number	Type of monitoring point	Description of location												
W1	Weather analysis	Weather station located on the property 'Templemore' labelled 'W1' on the map entitled 'Figure 2 - EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).												
3 - LIMIT CONDITIONS														
L1 Pollution of waters														
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.				EPL 12365_Figure2_270217 - monitoring locations offsite EPL 12365 Figure 1 monitoring locations offsite	NCD and NCU currently to be removed from licence as discharging to Boggabri Coal – into their dirty system – then they manage	Noted							
L2 Concentration limits														
L2.1	For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.				PA3-39-7 Surface Water and wet weather discharge monitoring data.xlsx	No discharges during period encompassed by the audit.	C							
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.				PA3-39-7 Surface Water and wet weather discharge monitoring data.xlsx	The pH quality limit has a 100% concentration limit of 6.5-8.5. pH concentrations were observed above this criteria in monitoring records but no discharge occurred during the audit reporting period so the site is compliant with the condition	C							

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																								
L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\	PA3-39-7 Surface Water and wet weather discharge monitoring data.xlsx	No discharge occurred during the period encompassed by the audit	C																									
L2.4	Water and/or Land Concentration Limits <table border="1"> <tr> <th>Pollutant</th><th>Units of measure</th><th>50 percentile Concentration limit</th><th>90 percentile Concentration limit</th><th>3DGM Concentration limit</th><th>100 percentile Concentration limit</th></tr> <tr> <td>Oil and grease</td><td>Milligrams per litre</td><td></td><td></td><td></td><td>10</td></tr> <tr> <td>pH</td><td>pH</td><td></td><td></td><td></td><td>6.5-8.5</td></tr> <tr> <td>Total suspended solids</td><td>Milligrams per litre</td><td></td><td></td><td></td><td>50</td></tr> </table>	Pollutant	Units of measure	50 percentile Concentration limit	90 percentile Concentration limit	3DGM Concentration limit	100 percentile Concentration limit	Oil and grease	Milligrams per litre				10	pH	pH				6.5-8.5	Total suspended solids	Milligrams per litre				50	Note	Noted	Note	
Pollutant	Units of measure	50 percentile Concentration limit	90 percentile Concentration limit	3DGM Concentration limit	100 percentile Concentration limit																								
Oil and grease	Milligrams per litre				10																								
pH	pH				6.5-8.5																								
Total suspended solids	Milligrams per litre				50																								
L2.5	The Total Suspended Solids concentration limits specified for Points 1, 2, 3, 24, 26 and 27 may be exceeded for water discharged provided that: (a) the discharge occurs solely as a result of rainfall measured at the premises that exceeds 38.4 millimetres over any consecutive 5 day period immediately prior to the discharge occurring; and (b) all practical measures have been implemented to dewater all sediment dams within 5 days of rainfall such that they have sufficient capacity to store run off from 38.4 millimetre, 5 day rainfall event. Note: 38.4 mm equates to the 5 day 90%ile rainfall depth for Gunnedah sourced from Table 6.3a Managing Urban Stormwater: Soils and Construction Volume 1: 4th edition, March 2004.	PA3-39-7 Surface Water and wet weather discharge monitoring data.xlsx 121113.pdf 251113.pdf SKMBT_C28415040815501.PDF	Water management inspection checklist was observed – this demonstrates that basin capacity was inspected and comment made about whether dewatering is required or not. Inspection checklist SKMBT_C28415040815501.PDF was an inspection following the receipt of 87mm of rain. After large rainfall volume no discharges were noted and capacity was available in basins that would overflow off-site.	C																									
L3 – Waste																													
L3.1	The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.	Note	Refer to condition L3.3	C																									
L3.2	This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.	Note	Noted	Note																									
L3.3	Reject material from the Whitehaven CHPP can be disposed of at the premises in accordance with the disposal method outlined in the Environmental Assessment titled 'Tarrawonga Coal Project - Environmental Assessment', prepared by Resource Strategies, or as modified, or as otherwise approved by the EPA.	Note	Noted	Note																									
L4 Noise limits																													
L4.1	Noise generated at the premises must not exceed the noise	10081552-june-2017.pdf	Exceedance of criteria occurred once at one location of	C																									

Item	Assessment Requirement					Reference/ Evidence	Comments	Compliance	Recommendations
	limits in the table below.					Tarrawonga Coal Mine - Environmental Noise Monitoring Quarter 2 2017.pdf 04095_6702_Rpt_Sep16.docx	2dB but was not considered to be sustained or systematic, as such this was not reported as a non-compliance 04095_6702_Rpt_Sep16.docx states '...an exceedance of less than 2 dB (A) above a statutory noise limit specified in a licence condition is not considered to be a non-compliance as per the discussion in Section 11.1.3 of the NSW Industrial Noise Policy'. No separate agreements are held with land owners.		
	Locality/Location	Day- LAeq (15 minute)	Evening- LAeq (15 minute)	Night- LAeq (15 minute)	Night- LA1 (1 minute)				
	All other surrounding residences	35	35	35	45				
L4.2	<p>The noise limits identified in the above table do not apply at privately owned residences that are:</p> <p>a) identified as residences subject to acquisition or noise mitigation on request within the Project Approval; or</p> <p>b) subject to a private agreement, relating to the noise levels, between the licensee and the land owner.</p>					<p>2015-08-06 Property Search.pdf - 6046 Rangari Rd (Tarrawonga Pty Ltd Property) - settlement date - 20/12/2013 (Property ID - 45)</p> <p>2015-08-06 Property Search - Kyalla Northam.pdf</p> <p>2015-08-06 Property Search_tarrawonga.pdf</p> <p>Interview with Environment Officer</p>	Interview with Environmental office and review of property dealings identified that TCP own all the relevant premises. No issues due to owning the land. No private agreement with adjacent land owners. Only private land that does not below to TCO is monitored hence the noise limits in the condition above applies.	C	
L4.3	<p>For the purpose of the table above:</p> <p>a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays;</p> <p>b) Evening is defined as the period from 6pm to 10pm;</p> <p>c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.</p>					Tarrawonga Coal Mine - Environmental Noise Monitoring Quarter 2 2017.pdf 04095_6702_Rpt_Sep16.docx	The breakdown of periods comprising day, evening and night are noted within the quarterly noise report glossary	Noted	
L4.4	<p><u>Determining Compliance</u></p> <p>To determine compliance:</p> <p>a) with the Leq(15 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located:</p> <p>i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</p> <p>ii) within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable</p> <p>iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.</p> <p>b) with the LA1(1 minute) noise limits in the Noise Limits table, the noise measurement equipment must be located within 1 metre of a dwelling façade.</p> <p>c) with the noise limits in the Noise Limits table, the noise measurement equipment must be located:</p>					Tarrawonga Coal Mine - Environmental Noise Monitoring Quarter 2 2017.pdf	Monitoring locations are stated in the NMP and in quarterly monitoring report. Site inspection demonstrated where noise monitoring is undertaken. The location of monitoring at Barbers Lagoon is on the property boundary however the residence is approximately 200m from the monitoring location. Hence this is considered a non-compliance.	NC	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	i) at the most affected point at a location where there is no dwelling at the location; or ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.				
L4.5	The noise limits set out in the Noise Limits table apply under all meteorological conditions except for the following: a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or c) Stability category G temperature inversion conditions. For the purposes of this condition: a) Data recorded by the meteorological station identified as EPA Identification Point(s) W1 must be used to determine meteorological conditions; and b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.	Tarrawonga Coal Mine – Environmental Noise Monitoring Quarter 2 2017.pdf	Auditor review identified that the weather conditions are outlined in the Tarrawonga Coal Mine – Environmental Noise Monitoring Quarter 2 2017 report. Results Tables in section 4 of the quarterly report state recorded noise monitoring result and real time weather conditions.	C	
L4.6	For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.	Tarrawonga Coal Mine – Environmental Noise Monitoring Quarter 2 2017.pdf	Section 2.4 Modifying Factors addresses this requirement.	C	
L5 Blasting					
L5.1	The overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time and at any point within 30 metres of any non-project related residential building or other noise sensitive location. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Environmental Monitoring 2015.xlsx. Blast Environmental Monitoring 2016.xlsx. Blast	A number of exceedances of blast overpressure on project related land – (January 2015 was the item observed by auditor). These have previously been reported to the EPA but no longer reported as they are on project land. Review of records available for property purchased and blasting records demonstrated no exceedances prior to the properties being purchased by TCP.	C	
L5.2	The overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than five per cent of the total number of blasts over each reporting period at any time and at any point within 30 metres of any non-project related residential building or other noise sensitive location. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Environmental Monitoring 2015.xlsx. Blast Environmental Monitoring 2016.xlsx. Blast	A number of exceedances of blast overpressure on project related land – (January 2015 was the item observed by auditor). These have previously been reported to the EPA but no longer reported as they are on project land. Review of records available for property purchased and blasting records demonstrated no exceedances prior to the properties being purchased by TCP.	C	
L5.3	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time and at any point within 3.5 metres of any non-project	Environmental Monitoring 2015.xlsx. Blast	Auditor reviewed blast monitoring records. No exceedances of ground vibration of 10mm/s.	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	related residential building or other noise sensitive location. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Environmental Monitoring 2016.xlsx. Blast			
L5.4	Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec for more than five per cent of the total number of blasts over each reporting period at any point within 3.5 metres of any non-project related residential building or other noise sensitive location. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Environmental Monitoring 2015.xlsx. Blast Environmental Monitoring 2016.xlsx. Blast	Auditor reviewed blast monitoring records. No exceedances of ground vibration of 10mm/s.	C	
L5.5	Blasting operations on the premises must only be carried out between the hours 9am to 5pm, Monday to Saturday, inclusive.	Environmental Monitoring 2015.xlsx. Blast Environmental Monitoring 2016.xlsx. Blast Dynamaster (captured events - table view) provided by gotech	Auditor reviewed blast monitoring data, no blasting has occurred on a Sunday and all blasts within defined timeframes during the audit period.	C	
L5.6	The hours during which blasting is permitted may be varied by the EPA upon consideration of the impact any variation may have on the amenity of the residents in the locality.	Note	Noted	Note	
L5.7	Blasting at the premises is limited to 1 blast on each day on which blasting is permitted <i>Note: Additional blasts are permitted where it is demonstrated to be necessary for safety reasons and the EPA and neighbours have been notified of the intended blast prior to the additional blast being fired.</i>	Environmental Monitoring 2015.xlsx. Blast Environmental Monitoring 2016.xlsx. Blast Tarrawonga Shot today - 24/3/2016.msg	Auditor reviewed blast monitoring data, there are a number of instances where two shots have occurred due to misfire. Consultation occurred with EPA via email when the misfires have occurred.	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
4 - Operating Conditions					
O1 Activities must be carried out in a competent manner					
O1.1	<p>Licensed activities must be carried out in a competent manner.</p> <p>This includes:</p> <p>a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and</p> <p>b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</p>	<p>Interview with Environmental Officer</p> <p>Site observations</p> <p>Skills Matrix Report for Tarrawonga (27 June 2017)</p>	<p>Emplacement, topsoil and timber reuse observed.</p> <p>Training matrix documents training needs for all employees.</p> <p>TCM has well developed waste management strategies for all liquid and solid wastes.</p> <p>The identified non-compliances recorded against EPL limits as discussed against other relevant conditions is not considered reflective of a lack of competence or effort with regard to environmental management.</p> <p>The auditor observed an area for improvement in relation to housekeeping and storage of chemicals and hydrocarbons at the maintenance yard and laydown. One example included compatibility of stored Class 2 and Class 3 chemicals in same cabinet in Boiler Workshop.</p>	O	It is recommended that all chemicals are stored and appropriately segregated in cabinets.
O2 Maintenance of plant and equipment					
O2.1	<p>All plant and equipment installed at the premises or used in connection with the licensed activity:</p> <p>a) must be maintained in a proper and efficient condition; and</p> <p>b) must be operated in a proper and efficient manner.</p>	<p>Pulse - work planning and scheduling system and outputs.</p> <p>Service Sheets reviewed.</p> <p>Interview - Workshop personnel</p>	<p>Review of the maintenance work planning and scheduling process, and information management system. This included tracing a sample of maintenance activities for scheduled vehicle maintenance.</p> <p>During the site inspection no observations were made of unmaintained or inappropriately operated equipment.</p>	C	
O3 Dust					
O3.1	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Observations	<p>Dust suppression is provided through water sprinkler bars on conveyors and dust carts on internal roads. All trucks must be covered prior to leaving Site.</p> <p>Dust cart observed operating at Box Cut and Central Pit. Despite dry conditions during the site inspection, dust was not observed emanating from inactive coal stockpiles or emplacements.</p>	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
O3.2	Trucks transporting coal from the premises must be covered immediately after loading to prevent wind-blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.	Observations	Trucks observed within the site and on haul roads observed to be provided with covers.	C	
O4 Other operating conditions					
Blast Fume					
O4.1	Offensive blast fume must not be emitted from the premises. Definition: <i>Offensive blast fume</i> means post-blast gases (whether visible or invisible, odorous or odourless) from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other circumstances: (i) are harmful to (or is likely to be harmful to) a person that is outside the premises from which it is emitted, or (ii) interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.	Environmental Blast Checklist Interview with Environmental Officer. Blast management plan,	All blasts videoed, reviewed rated. Sample Environmental Blast Checklist reviewed by auditor. Pers comms no blast fumes known to have been emitted from site during review period. Environmental conditions are reviewed prior to blasting as per blast management plan.	C	
Pollution Incident Response Management Plan					
O4.2	The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The PIRMP must document systems and procedures to deal with all types of incidents (e.g. spills, explosions, fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment.	PIRMP (December) 2016	PIRMP updated annually however online PIRMP dated August 2015. Update the website with up to date PIRMP.	O	
O4.3	The licensee must keep the PIRMP on the premises at all times.	Observations	Current hard copy with available on site, a copy with both the Environment Officer and Operations Manager.		
5 MONITORING AND RECORDING CONDITIONS					
M1 Monitoring records					
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Environmental Blast Monitoring 2015.xlsx. Environmental Blast Monitoring 2016.xlsx. Tarrawonga Coal Mine - Environmental Noise Monitoring Quarter 2 2017.pdf PA3-39-7 Surface Water and wet weather discharge monitoring data.xlsx	The Auditor reviewed the web address below and determined that it demonstrates all recorded monthly monitoring data. www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																			
		EPL Monthly monitoring Data on www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm																						
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	EPL Monthly monitoring Data on www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm	The monthly monitoring data recorded on the Whitehaven website demonstrated the four year retaining of information requirement and was legible in pdf format	C																				
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	EPL Monthly monitoring Data on www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm Es1616261 - ALS Certificate of Analysis.	The records required under this condition are provided in the EPL monthly monitoring data provided on the White haven website. Howeverm it is noted that the name of the person collecting the samples was not shown in some cases, however the name of the sampler is shown on the certificate of analysis provided by the laboratory when analysis is required.	C																				
M2 Requirement to monitor concentration of pollutants discharged																								
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Note	Noted	Note																				
M2.2	Air Monitoring Requirements <u>Point 28</u> <table><tr><td>Pollutant</td><td>Unit of measure</td><td>Frequency</td><td>Sampling method</td></tr><tr><td>PM10</td><td>Micrograms per cubic metre</td><td>Continuous</td><td>AM-22</td></tr></table>	Pollutant	Unit of measure	Frequency	Sampling method	PM10	Micrograms per cubic metre	Continuous	AM-22	Statement of Compliance - Tarrawonga 2016-17.	Technical non-compliance as continuous monitoring not able to be achieved due to periodic connection failure and maintenance. Does not require notification of NC as impact negligible.	NC												
Pollutant	Unit of measure	Frequency	Sampling method																					
PM10	Micrograms per cubic metre	Continuous	AM-22																					
M2.3	Water and/ or Land Monitoring Requirements <u>Point 1, 2, 3, 24, 26, 27</u> <table><tr><td>Pollutant</td><td>Unit of measure</td><td>Frequency</td><td>Sampling method</td></tr><tr><td>Conductivity</td><td>Microsiemens per centimetre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Oil and grease</td><td>Milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Special Frequency 1</td><td>Grab sample</td></tr><tr><td>Total Suspended Solids</td><td>Milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr></table>	Pollutant	Unit of measure	Frequency	Sampling method	Conductivity	Microsiemens per centimetre	Special Frequency 1	Grab sample	Oil and grease	Milligrams per litre	Special Frequency 1	Grab sample	pH	pH	Special Frequency 1	Grab sample	Total Suspended Solids	Milligrams per litre	Special Frequency 1	Grab sample	Statement of Compliances - Tarrawonga 2016-2017	Auditor review of statement of compliance reports identified that during the reporting period of the audit, no non-compliances were recorded.	C
Pollutant	Unit of measure	Frequency	Sampling method																					
Conductivity	Microsiemens per centimetre	Special Frequency 1	Grab sample																					
Oil and grease	Milligrams per litre	Special Frequency 1	Grab sample																					
pH	pH	Special Frequency 1	Grab sample																					
Total Suspended Solids	Milligrams per litre	Special Frequency 1	Grab sample																					

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	<u>Point 5, 6, 7, 8</u>				
	<i>Pollutant</i>				
	<i>Unit of measure</i>				
	<i>Frequency</i>				
	<i>Sampling method</i>				
	Conductivity				
	Microsiemens per centimetre				
	Special Frequency 1				
	Grab sample				
	Oil and grease				
	Milligrams per litre				
	Special Frequency 1				
	Grab sample				
	pH				
	pH				
	Special Frequency 1				
	Grab sample				
	Total Suspended Solids				
	Milligrams per litre				
	Special Frequency 1				
	Grab sample				
	<u>Point 9, 10, 11, 12</u>				
	<i>Pollutant</i>				
	<i>Unit of measure</i>				
	<i>Frequency</i>				
	<i>Sampling method</i>				
	Conductivity				
	Microsiemens per centimetre				
	Every 6 months				
	Grab sample				
	Lead				
	Milligrams per litre				
	Every 6 months				
	Grab sample				
	pH				
	pH				
	Every 6 months				
	Grab sample				
	Standing water level				
	Metres				
	Every 6 months				
	In situ				
	<u>Point 13</u>				
	<i>Pollutant</i>				
	<i>Unit of measure</i>				
	<i>Frequency</i>				
	<i>Sampling method</i>				
	Conductivity				
	Microsiemens per centimetre				
	Quarterly				
	Grab sample				
	Oil and grease				
	Milligrams per litre				
	Quarterly				
	Grab sample				
	pH				
	pH				
	Quarterly				
	Grab sample				
	Total Suspended Solids				
	Milligrams per litre				
	Quarterly				
	Grab sample				
M2.4	For the purposes of the table(s) above Special Frequency 1 means the collection of samples as soon as practicable after a discharge from points 1, 2, 3, 24, 26, and 27 commences and in any case not more than 12 hours after a discharge commences.	Note	Noted. Not triggered during this audit as no discharges occurred.	NT	
M2.5	For the purposes of condition M2.1, this licence acknowledges that point 11 is established, maintained and monitored by the licensee who holds Environment Protection Licence number 12407. The holder of environment protection licence 12365 obtains monitoring data from Licensee 12407 for this point to meet their obligations under this licence. The licensee is deemed to have not breached condition M2.1 of this licence where the licensee is unable to obtain the monitoring data to meet this condition.	EPL Monthly monitoring Data on www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm (January 2015 and 2017)	Auditor review of EPL Monthly monitoring data on the Whitehaven website identified that Tarrawonga has all data from Licensee 12407 Boggabri Coal as relevant to Point 11.	C	
M3 Testing methods - concentration limits					
M3.1	Monitoring for the concentration of a pollutant emitted to the	Statement of Compliance -	Real time air quality monitor does not meet AM-22 as	NC	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations																																								
	air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	Tarrawonga 2016-17.	required by EPL. Note: Dual monitoring system measures two different particulates;; one result is calculated rather than measured which does not meet AM-22.																																										
M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted. <i>Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".</i>	Monthly Report Environmental	No water discharged form Site during audit period	NT																																									
M4 Weather monitoring																																													
M4.1	For each monitoring point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns. <u>Point W1</u> <table><tr><td>Parameter</td><td>Unit of measure</td><td>Frequency</td><td>Averaging period</td><td>Sampling method</td></tr><tr><td>Temperature @ 2 metres</td><td>°C</td><td>Continuous</td><td>15 minute</td><td>AM-4</td></tr><tr><td>Wind direction @ 10 metres</td><td>°</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr><tr><td>Wind speed @ 10 metres</td><td>m/s</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr><tr><td>Sigma theta @ 10 metres</td><td>°</td><td>Continuous</td><td>15 minute</td><td>AM-2 & AM-4</td></tr><tr><td>Rainfall</td><td>Mm/h</td><td>Continuous</td><td>1 hour</td><td>AM-4</td></tr><tr><td>Solar radiation</td><td>W/m2</td><td>Continuous</td><td>15 minute</td><td>AM-4</td></tr><tr><td>Temperature @ 10 metres</td><td>°C</td><td>Continuous</td><td>15 minute</td><td>AM-4</td></tr></table>	Parameter	Unit of measure	Frequency	Averaging period	Sampling method	Temperature @ 2 metres	°C	Continuous	15 minute	AM-4	Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4	Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4	Rainfall	Mm/h	Continuous	1 hour	AM-4	Solar radiation	W/m2	Continuous	15 minute	AM-4	Temperature @ 10 metres	°C	Continuous	15 minute	AM-4	Sentinex Weather station calibration report (6 monthly maintenance and calibration conducted on 24/2/16 SX99-monthly-20170701.csv	The requirement for continuous monitoring is not met due to temporary outages as a result of technical issues such as internet drop out or temporary instrument failure Maintenance of accuracy and proper functioning of the monitor was demonstrated by the calibration report provided for weather station.	NC	
Parameter	Unit of measure	Frequency	Averaging period	Sampling method																																									
Temperature @ 2 metres	°C	Continuous	15 minute	AM-4																																									
Wind direction @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4																																									
Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4																																									
Sigma theta @ 10 metres	°	Continuous	15 minute	AM-2 & AM-4																																									
Rainfall	Mm/h	Continuous	1 hour	AM-4																																									
Solar radiation	W/m2	Continuous	15 minute	AM-4																																									
Temperature @ 10 metres	°C	Continuous	15 minute	AM-4																																									

Item	Assessment Requirement					Reference/ Evidence	Comments	Compliance	Recommendations
	Additional requirements - Siting - Measurement		Continuous		AM-1 & AM-4 AM-2 & AM-4				
M4.2	The meteorological weather station must be maintained so as to be capable of continuously monitoring the parameters specified in this section.					<u>Weather Station Calibration Report Feb 2016</u>	Sample of weather station maintenance and calibration schedule reviewed for audit period.	C	
M5 Recording of pollution complaints									
M5.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.					Complaints Register (2014-17)	Complaints register held online dating back to 2006.	C	
M5.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.					Complaints Register (2014-17)	Complaints register held online dating back to 2006.	C	
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.					Complaints Register (2014-17)	Complaints register held online dating back to 2006.	C	
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.					Note	Noted	NT	
M6 Telephone complaints line									
M6.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.					https://www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm	Number displayed on website. Tested during the audit.	C	
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.					https://www.whitehavencoal.com.au/environment/tarrawonga_mine_environmental_management.cfm	Number displayed on website. Tested during the audit.	C	
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.					Note	Noted	C	
M7 Other monitoring and recording conditions									
M7.1	For each monitoring point specified below, the Licensee must monitor the noise or vibration parameter specified in Column 1. The Licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns.					17095_R01 Tarrawonga Coal Mine - Environmental Noise Monitoring Quarter 2 2017.pdf	Auditor review identified that LAeq (15 minute) is all that is displayed in reports prior to quarter four 2016. All other units of measurement were not provided prior to quarter 4 2016 and hence these reports are considered non-compliant. Since quarter four 2016	NC	

Item	Assessment Requirement				Reference/ Evidence	Comments	Compliance	Recommendations
	<u>Point TN2, TN3, TN4</u>					this oversight has been rectified and all units of measurement are displayed.		
	<i>Parameter</i>	<i>Unit of measure</i>	<i>Frequency</i>	<i>Sampling method</i>				
	Ambient noise	LAeq (15 minute) LAmax LA1 LA10 LA90 LAmin	Quarterly	As detailed in the most recently approved "Noise Management Plan" for the premises.				
M7.2	<u>Point N2</u>				SX96_20170706.zip Tarrawonga Coal Mine – Environmental Noise Monitoring Quarter 2 2017.pdf	Auditor review of report identified that all requirements are met.	C	
	<i>Parameter</i>	<i>Unit of measure</i>	<i>Frequency</i>	<i>Sampling method</i>				
	Ambient noise	LAeq (15 minute) LAmax LA1 LA10 LA90 LAmin	Continuous real time noise monitoring as detailed in the most recently approved "Noise Management Plan" for the premises.	As detailed in the most recently approved "Noise Management Plan" for the premises.				
M7.3	<u>Point TB1</u>				Statement of Compliance – Tarrawonga 2016-2017 Final Clean	Administrative non-compliance and now resolved – EPA incorrectly issued an EPL variation where this error was noted by TCPL when reviewing the draft. EPA issued final EPL without amending error. EPA were verbally advised of the error; however, informed TCM a variation is required. An EPL variation will be submitted to address error. Overview of Error – EPL variation submitted by TCPL to amend attended noise monitoring locations; blast locations was not to change. Draft issued to TCPL by EPA had changed blast-monitoring locations to be the same as attended noise locations. It was noted in response that this was incorrect and blast monitoring was not part of the variation. Final version issued with error not rectified. (as outlined in Statement of Compliance – Tarrawonga 2016-2017 Final Clean)	C	
	<i>Parameter</i>	<i>Unit of measure</i>	<i>Frequency</i>	<i>Sampling method</i>				
	Blast noise	DB (Lin Peak)	Every blast	Type 1 Noise Blast Logger				
	Blast Vibration	Mm/s	Every blast	Geophone Logger or Similar				
M7.4	For the purpose of conditions M7.1, M7.2 and M7.3 the monitoring locations are described as:				Site Observations	The auditor observed the noise monitoring locations in the field. Monitoring locations are stated in the NMP and in quarterly monitoring report. Site inspection demonstrated where noise monitoring is undertaken. The location of monitoring at Barbers Lagoon is on the property boundary however the residence is approximately 200m from the monitoring location. Hence this is considered a non-compliance. New EPL includes TB1	NC	
	<i>EPA ID number</i>	<i>Description of location</i>						
	N2	Portable monitor						
	TN2	Within 30 metres of the 'Matong' property boundary as shown within 30 metres of the 'Matong' property boundary as shown on the map entitled 'Figure 2 – EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).						
	TN3	Within 30 metres of the residence on the property 'Barbers Lagoon' as shown on the map entitled 'Figure 2 – EPL 12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).						
	TN4	Within 30 metres of the residence on the property 'Bungalow' as shown on the map entitled 'Figure 2 – EPL						

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	<div>12365 Monitoring Locations Offsite' received by the EPA on 21 April 2016 (DOC16/128744-02).</div> <p><i>Note: Point N2 is a portable monitor enabling the monitor to be relocated to areas of potential greatest impact. The licensee is responsible to ensure that it is located at the most suitable location.</i></p> <p><i>Note: The location, frequency of monitoring and the parameters to be monitored may be varied by the EPA once the variability of the noise impact is established.</i></p>				
M7.5	<p>To assess compliance with the noise limits presented in the Noise Limits table, attended noise monitoring must be undertaken in accordance with the condition titled Determining Compliance, outlined above, and:</p> <p>a) at each one of the monitoring locations TN2, TN3 and TN4; b) occur Quarterly in a reporting period; c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy for a minimum of: i) 1.5 hours during the day; ii) 30 minutes during the evening; and iii) 1 hour during the night. d) occur for three consecutive operating days.</p>	Tarrawonga Coal Mine - Environmental Noise Monitoring Quarter 2 2017	Auditor review of report identified that all requirements are met. The report provided four consecutive days monitoring as this is requirement of project approval, i.e. greater requirement than EPL).	C	
6 REPORTING CONDITIONS					
R1 Annual return documents					
R1.1	<p>The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ol style="list-style-type: none"> 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data, 7. a Statement of Compliance - Environmental Management Systems and Practices; and 8. a Statement of Compliance - Environmental Improvement Works. <p>At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.</p>	EPL Annual Returns 2014 - 2016	Auditor reviewed Annual Returns for the audit period.	C	
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	Note	Noted	Note	
R1.3	<p>Where this licence is transferred from the licensee to a new licensee:</p> <p>a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period</p>	Note	Noted	NT	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.				
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Note	Noted	NT	
R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	eConnect email notification JJ09515_EPA re EPL12365 overdue notice	Auditor sighted eConnect receipt and Australia Post receipt March 2015 in response to incorrect overdue notice from EPA.	C	
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	EPL Annual Return 2013-2017	Annual returns held on site dating back to 2006-07.	C	
R1.7	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder. <i>Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period. An application to transfer a licence must be made in the approved form for this purpose.</i>	EPL Annual Return 2013-2017	Auditor sighted the signed Annual Returns for the audit period.	C	
R2 Notification of environmental harm					
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	2015_09 Incident Report - Tarrawonga_LDE_Discharge of Waters	Incident investigation with regard to dewatering of bunded area. No offsite discharge. Water was tested to confirm no contaminants. Although no environmental harm, actions reported to EPA for information and no further action required.	C	
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred. <i>Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.</i>	2015_09 Incident Report - Tarrawonga_LDE_Discharge of Waters	Above item was reported within 7 days of 11 th September.	C	
R3 Written report					

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Signed Section 191 Notice to Provide Information and or Records No 1525 JJ08614_EPA re EPL 12365 s191 notice 2014_12_08_PIN 2016_11_Response to Notice to Provide Information_signed.	EPA issued a Notice to Provide Information and/or Records relating to over production of coal during the period 9 Jan 2013 and 8 Jan 2014. Although over production is outside the audit period the Notice was issued during the audit period. In response TCM provided required information dated 14 November 2014. The EPA issued a Penalty Notice Advice with a fine of \$15,000. Further the EPA issued a Notice to Provide Information and/or Records relating provision of attended noise monitoring data at locations identified as "Matong", "Barbers Lagoon" and "Bungalow". In response TMC provided additional data to the satisfaction of the EPA.	C	
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	As above	Refer above	C	
R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	As above	Refer above	C	
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	As above	Refer above	C	
R4 Other reporting conditions					
R4.1	A noise compliance assessment report must be submitted to the EPA within thirty (30) days of the completion of the quarterly noise monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant	Tarrawonga Coal Mine - Environmental Noise Monitoring Quarter 4 and corresponding email sent 06/01/2017 -FWD:	Auditor observed emails demonstrating submission of reports in required timeframes.	C	

Item	Assessment Requirement	Reference/ Evidence	Comments	Compliance	Recommendations
	and include: a) an assessment of compliance with noise limits detailed in the limit conditions of this licence; and b) an outline of any management actions taken within the monitoring period to address any exceedences of the limits detailed in the limit conditions of this licence.	Tarrawonga Attended Noise Monitoring Report 04095_6702_rpt2_SEP16 June Attended Noise Monitoring Results - Tarrawonga.msg RE Tarrawonga Attended Noise Monitoring Report - March 2016.msg			
R4.2	The licensee must report any exceedence of the licence blasting limits to the regional office of the EPA as soon as practicable after the exceedence becomes known to the licensee or to one of the licensee's employees or agents.	Environmental Blasting Monitoring Spreadsheet	No exceedances of blasting criteria	NT	
7 General Conditions					
G1 Copy of licence kept at the premises or plant					
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	Observations EPL 12365	Hard copy of EPL 12365 available from Environment Officer and Operations Manager.	C	
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Note	Noted	Note	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Note	Noted	Note	

Annex D

Table C.1 Compliance
Assessment Mining Lease

Table C1 **Compliance Assessment - Mining Lease 1579**

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
ML1579					
Notice to Landholders					
1	<p>Within a period or three months from the date of grant/renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice.</p> <p>If there are ten or more landholders affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted/renewed: state whether the lease includes the surface and must contain an adequate plan and description of the lease area.</p>	Interview of Environmental Officer	Not related to this audit - Previously identified as a non-compliance	NT	
Mining, Rehabilitation, Environmental Management Process					
Mining Operations Plan					
2.1(a)	Mining operations, including mining purposes, must be conducted in accordance with a Mining Operations Plan (the Plan) satisfactory to the Director-General. The Plan together with environmental	<p>Interview: Site Environmental Officer</p> <p>Mining Operations Plan (2015-2020)</p>	Site Environmental Officer indicated that the Director-General satisfaction of performance is gained through the approval of the MOP (2015-	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	conditions of development consent and other approvals will form the basis:- ongoing mining operations and environmental management; and	(Amendment A) (SLR 2016) Annual Review (2016)	2020) (SLR 2016) Director-General acceptance of performance against the MOP reported in Annual Reviews.		
2.1b	ongoing monitoring of the project	<p>Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)</p> <p>Tarrawonga Coal Mine - Rehabilitation Monitoring Report - Spring 2015 (ELA 25 May 2016)</p> <p>Tarrawonga Coal Mine - Rehabilitation Monitoring Report - Spring 2016 (ELA 29 May 2017)</p>	<p>Implementation of monitoring as required in the MOP is not well demonstrated through records. Evidence that woodland rehabilitation monitoring is occurring is available through annual spring monitoring (ELA 25 May 2016 and ELA 29 May 2017), although in itself is not fully implementing MOP section 8.1.3 with no monitoring occurring in the regenerating native vegetation in the north east corner of ML1579.</p> <p>The MOP (2015-2020) (SLR 2016) section 3.2.4 states that vertebrate pests will be monitored on an as needs basis and this was not verified during the audit. That section states weeds will be monitored monthly in areas including rehabilitation areas (monthly inspection checklists were sighted containing a question regarding weeds in rehabilitation areas).</p>	NV	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
2.2	The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgement	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) section 1 states that the document was prepared in accordance with <i>Mining Operations Plan (MOP) Guidelines</i> (DTIRIS 2013).	C	
3a	A Plan must be lodged with the Director General:- prior to the commencement of mining operations (including mining purposes)	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	Timing of condition predates this audit period.	C	
3b	subsequently as appropriate prior to the expiry of any current Plan; and	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	Timing of condition predates this audit period.	C	
3c	in accordance with any direction issued by the Director-General	Interview: Site Environmental Officer	Site Environmental Officer interview indicated no directions had been issued during that MOP version period.	NT	
4a	The Plan must present a schedule of proposed mine development for a period of up to seven (7) years and contain diagrams and documentation which identify:- area(s) proposed to the disturbed under the Plan;	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse). Section 2.3.10 contains a table showing the material production schedule for six years. Plans are only for 5 years and	ANC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			material production schedule is only for 6 years, as such this is ANC.		
4b	mining and rehabilitation method(s) to be used and their sequence;	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7).	C	
4c	areas to be used for disposal of tailings/waste	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).	C	
4d	existing and proposed surface infrastructure	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).	C	
4e	existing flora and fauna on site	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	BMP (ELA April 2015) describes and demonstrates the flora and fauna on the site (especially shown in Figures 3.1, 3.2 and 3.3). Not contained in MOP, ANC.	ANC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
4f	progressive rehabilitation schedules	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).	C	
4g	areas of particular environmental, ecological and cultural sensitivity and measures to protect these areas	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)	BMP (ELA April 2015) describes and demonstrates the flora and fauna on the site (especially shown in Figures 3.1, 3.2 and 3.3). Not contained in MOP, ANC.	ANC	
4h	water management systems (including erosion and sediment controls)	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	MOP (2015-2020) (SLR 2016) MOP Plans 3(a-f) show water management structures.	C	
4i	proposed resource recovery	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	Resource recovery described in MOP (2015-2020) (SLR 2016) section 2.3.4.	C	
4j	where the mine will cease extraction during the term of the plan, a closure plan including final rehabilitation objectives/methods and post mining landuse/vegetation.	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	Mine closure not in MOP period.	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
5	The Plan when lodged will be reviewed by the Department	MOP (2015-2020) (SLR 2016)	Evidence of DP&E consultation described in MOP (2015-2020) (SLR 2016) section 1.5.2. Formal review by Department.	C	
6	the Director-General may within two (2) months of the lodgement of a Plan, require modification and re-lodgement	Interview: Site Environmental Officer	Not triggered.	NT	
7	If a requirement in accordance with clause (6) is not issued within two (2) months of lodgement of a Plan, the lease holder may proceed with implementation of the Plan	Interview: Site Environmental Officer	Not triggered.	NT	
8	During the life of the Mining operations Plan, proposed modifications to the Plan must be lodged with the Director-General and will be subject to the review process outlined (5)-(7) above.	Interview: Site Environmental Officer	Not triggered.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
ANNUAL ENVIRONMENTAL MANAGEMENT REPORT (AEMR)					
3.1	Within 12 months of the commencement of mining operations and thereafter annually or, at such other times as may be allowed by the Director-General, the lease holder must lodge an Annual Environmental Management Report (AEMR) with the Director-General.	04121516-annual-review-2015-2016.pdf 14155242-aemrannual-review-2013-2014.pdf 21135302-annual-review-2016.pdf 2014_03_06_DRE AEMR acceptance letter.pdf Tarrawonga 2014 2015 Advice of Satisfaction.pdf	Auditor reviewed evidence of reports and letters demonstrating satisfaction of the Minister.	C	
3.2a	The AEMR must be prepared in accordance with the Director-General's guidelines current at the time of reporting and contain a review and forecast of the performance for the preceding and ensuing twelve months in terms of: the accepted Mining Operations Plan	Table 10 – Environmental Performance of 21135302-annual-review-2016.pdf	Section 6 – Environmental Performance and Table 10 of the AEMR provides a review of environmental of performance Proposed improvements are provided under each sub heading within Section 6 of the AEMR.	C	
3.2b	development consent requirements and conditions	Table 10 – Environmental Performance of 21135302-annual-review-2016.pdf	Proposed improvements and review of development consent requirements are provided under each sub heading within Section 6 of the AEMR report.	C	
3.2c	Department of Environmental and Conservation and Department of Planning licences and approvals	Section 6 of 21135302-annual-review-2016.pdf	Proposed improvements and review of licences and approvals are provided under each sub	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			heading within Section 6 of the AEMR report.		
3.2d	any other statutory environmental requirements	Section 6 of 21135302-annual-review-2016.pdf	Proposed improvements and review of statutory environmental requirements are provided under each sub heading within Section 6 of the AEMR report.	C	
3.2e	details of any variations to environmental approvals applicable to the lease area; and	21135302_annual-review-2016.pdf	Section 3 Table 3 of the AEMR outlines variations to any environmental approvals. The proposed improvements component of Section 6 also outlines required modifications to environmental approvals applicable to the lease area.	C	
3.2f	where relevant, progress towards final rehabilitation	21135302_annual-review-2016.pdf	Section 8 of the AEMR outlines progress towards final rehabilitation.	C	
3	after considering an AEMR the Director-General may, by notice in writing, direct the lease holder to undertake operations, remedial actions or supplementary studies in the manner and within the period specified in the notice to ensure that operations on the lease area are conducted in accordance with sound mining and environmental practice	Interview response	Environmental Officer identified amendments to the report itself but no further investigation required. DRG have not requested any changes within the reporting period.	C	
4	the lease holder shall, as and when directed by the Minister, co-operate with the Director-General to conduct and facilitate review of the AEMR involving other	21135302_annual-review-2016.pdf	The AEMR is provided to relevant agencies as shown in distribution list with the report.	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	government agencies and the local council.				
SUBSIDENCE MANAGEMENT					
4a	the lease holder shall prepare a Subsidence Management Plan prior to commencing any underground mining operations which will potentially lead to subsidence of the land surface.	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
4b	Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or miniwalls, associated first workings (gateroads, installation roads and associated main headings, etc), and pillar extraction and are otherwise defined by the <i>Applications for Subsidence Management Approvals Guidelines (EDG 17)</i>	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
4c	The lease holder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the <i>Coal Mines Regulations Act 1982</i> , or the document <i>New Subsidence Management Plan Approval Process - Transitional Provisions (EDP09)</i>	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
4d	Subsidence Management Plans are to be prepared in accordance with the <i>Guidelines for Applications for Subsidence Management Approvals</i>	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
4e	Subsidence Management Plans as approved form part of the Mining Operations Plan required under condition 2 and will to the Annual Environmental Management Report process as set out under Condition 3. The SMP is also subject to the requirements for subsidence monitroing and reporting set out in the document <i>New Approval Process for Management of Coal Mining Subsidence - Policy</i>	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
WORKING REQUIREMENT					
5a	The lease holder must : ensure that at least 27 competent people are efficiently employed on the lease area on each week day except Sunday or any week day that is a public holiday, or	Environmental Officer interview response	Environmental officer indicated that 110 people work over day and night shift Monday to Sunday, which is greater than the requirement for at least 27 competent people each week day except Sunday and public holidays.	C	
5b	expend on operations carried in the course of prospecting or mining the lease area, an amount of not less than \$472,500 per annum whilst the lease is in force.	Weekly Financial spreadsheet observed on-site	Auditor reviewed the weekly financial spreadsheet and identified that the expenditure on operations per annum is well above criteria of \$472,500.	C	
5	The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed.	Not required	Noted	note	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
CONTROL OF OPERATIONS					
6a	If an Environmental Officer of the Department believes that the lease holder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the lease holder to:- (i) cease working the lease;- (ii) cease that part of the operation not complying with the Act or conditions until in the opinion of the Environmental Officer the situation is rectified	Not required	Noted	note	
6b	The lease holder must comply with any direction given. The Director-General may confirm, carry revoke any such direction.	Out17_20956 - Direction Under Section 240 (1) (d) of the Mining Act 1992 DI 033 2017.PDF	Direction from the Director-General has been given but compliance cannot be confirmed as deadline has not yet been reached (no later than 31 December 2017)	C	
6c	A direction referred to in condition may be served on the Mine Manager	Out17_20956 - Direction Under Section 240 (1) (d) of the Mining Act 1992 DI 033 2017.PDF	The direction was served on the Mine Manager	Note	
REPORTS					
7a	The lease holder must provide an exploration report, within a period of twenty eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate,	ML1579_201604_A.pdf	Auditor review determined that the date of issue of the exploration report was provided within required timeframe	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	of each year. The report must be to the satisfaction of the Director-General and contain the following: Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period				
7b	Details of expenditure incurred in conducting that exploration	ML1579_201604_A.pdf	The exploration report contains Table 1 Current Exploration and Expenditure that outlines expenditure incurred in conducting the exploration.	C	
7c	A summary of all geological findings acquired through mining or development evaluation activities	ML1579_201604_A.pdf	The exploration report contains borehole summaries as required by this condition.	C	
7d	Particulars of exploration proposed to be conducted in the next twelve month period	ML1579_201604_A.pdf	The exploration report outlines exploration proposed in upcoming twelve months in chapter 8	C	
7e	All plans, maps, sections and other data necessary to satisfactorily interpret the report	ML1579_201604_A.pdf	Auditor review of the report identified maps and plans to satisfactorily interpret the report.	C	
LICENCE TO USE REPORTS					
8a	The lease holder grants to the Minister, by way of a non-exclusive licence, the right in copyright to publish, print, adapt and reproduce all exploration reports lodged in any form and for the full duration of copyright.	Not required	Noted	note	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
8b	The non-exclusive licence will operate as a consent for the purposes of section 365 of the Mining Act 1992	Not required	Noted	note	
CONFIDENTIALITY					
9a	All exploration reports submitted in accordance with the conditions of this lease will be kept confidential while the lease is in force, except in cases where: (i) the lease holder has agreed that specified reports may be on non-confidential (ii) reports deal with exploration conducted exclusively on areas that have ceased to be part of the lease.	Not required	Noted	note	
9b	Confidentiality will be continued beyond the termination of a where an application for a flow on title was lodged during the currency of the lease. The confidentiality will last until that flow on title or any subsequent flow on title has terminated.	Not required	Noted	note	
9c	The Director-General may extend the period of confidentiality	Not required	Noted	note	
TERMS OF NON-EXCLUSIVE LICENCE					
10a	The terms of the non-exclusive copyright licence granted under condition 8 (a) are: the Minister may sub-licence others to publish, print, adapt and reproduce by not on-licence reports	Not required	Noted	note	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
10b	the Minister and any sub-licensee will acknowledge the lease holders and any identifiable consultants ownership of copyright in any reproduction of the reports, including storage of reports on an electronic database.	Not required	Noted	note	
10c	the lease holder does not warrant ownership of all copyright works in any report and, the lease holder will use best endeavours to identify those parts of the report for which the lease holder owns the copyright.	Not required	Noted	note	
10d	there is no royalty payable by the Minister for the licence.	Not required	Noted	note	
10e	of the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence in a manner which adversely affects the operations of the lease holder, that licence is revocable on the giving of a period of not less than three months notice.	Not required	Noted	note	
BLASTING					
11a	Ground Vibration The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10mm/sec and does not exceed 5mm/sec in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless	Environmental Blast Monitoring 2015.xlsx. Environmental Blast Monitoring 2016.xlsx.	Auditor reviewed blast monitoring records. No exceedances of ground vibration of 10mm/s.	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	determined otherwise by the Department of Environment and Conservation.				
11b	<p>Blast Overpressure</p> <p>The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120dB (linear) and does not exceed 115dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment and Conservation.</p>	<p>Environmental Blast Monitoring 2015.xlsx.</p> <p>Environmental Blast Monitoring 2016.xlsx.</p> <p>ML1579 & ML 1685 – Notification of Blast Exceedance.msg</p>	<p>A number of exceedances of blast overpressure on project related land – (January 2015 was the item observed by auditor). These have previously been reported to the EPA but no longer reported as they are on project land. Review of records available for property purchased and blasting records demonstrated no exceedances prior to the properties being purchased by TCP.</p> <p>The AEMR of the 2015/2016 reporting period outlined that a blast on 19 August 2016 generated a Blast overpressure greater than the 120dB limit and exceeded limit of 5% of blasting above 115dB over a period of 12 months.</p>	NC	
SAFETY					
12	Operations must be carried out in manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavation opened up or used by the lease holder must be filled	Observation and Environmental Officer interview	<p>Observation and Environmental Officer interview identified no abandoned shafts or excavations.</p> <p>Inspection by the auditor determined that stock is restricted via fencing</p> <p>Observation in the field by the auditor identified demarcation to render safe excavations</p>	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	in or otherwise rendered safe to a standard acceptable to the Director-General.				
REHABILITATION					
13a	<p>Land disturbed must be rehabilitated to a stable and permanent form suitable for a subsequent land use acceptable to the Director-General and in accordance with the Mining Operations Plan so that:-</p> <ul style="list-style-type: none"> * there is no adverse environmental effect outside the disturbed area and that the land is properly drained and protected from soil erosion. *the state of the land is compatible with the surrounding land and land use requirements * the landforms, soils, hydrology and flora require no greater maintenance than that in surrounding land. * In cases where revegetation is required and native vegetation has been removed or damaged, the original species must be re-established with close reference to the flora survey included in the Mining Operations Plan. If the original vegetation was not native, any re-established vegetation must be appropriate to the area and at an acceptable density. *the land does not pose a threat to public safety. 	<p>Field inspection (rehabilitation areas)</p> <p>Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)</p>	<p>Field inspection of impact areas identified:</p> <ul style="list-style-type: none"> - rehabilitation areas containing drainage control structures, - revegetation is occurring with species characteristic of local native vegetation. - The MOP (2015-2020) (SLR 2016) includes rehabilitation planning to maintain safe, stable and self-sustaining landforms with vegetation cover that also pose no risks to public safety. - Field inspection identified rehabilitation is largely progressing in accordance with the MOP. - Director-General acceptance does not apply until relinquishment, therefore NT 	C	
13b	Any top soil that is removed must be stored and maintained in manner acceptable to the	Interview: Site Environmental Officer	Site Environmental Officer indicated that topsoil is being	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Director-General		stored in accordance with the MOP (2015-2020) (SLR 2016) and Director-General acceptance is received through approval of the MOP and Annual Reviews.		
14	The lease holder must comply with any direction given by the Director-General regarding the stabilisation and revegetation of any mine residues, tailings or overburden dumps situated on the lease area.	Mining Act 1992 Section 240(1)(d): Direction Notice (DP&E ref: DI 0333 2017) dated 7 June 2017	Direction issued by DP&E to WHCL regarding the coal reject emplacement area (REA) stability and surface water management issues. Actions detailed in the direction are to be actioned by 31 December 2017, therefore not triggered at time of audit.	NT	
EXPLORATION DRILLING					
15.1	At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Natural Resources regional hydrogeologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes.	Tarrawonga Drill Notification.msg	It could not be demonstrated that the notification occurred 28 days prior to the commencement of drilling operations. Email demonstrated that the notification had taken place (but could not be determined if 28 days prior to drilling commencement.	ANC	
15.2a	If the lease holder drills exploratory drill holes he must satisfy the Director-General that:- All cored holes are accurately surveyed and	Exploration reports ML1579_201604_A.pdf	The auditor reviewed Figure 2 - Exploration Activities of the exploration report. The figure and the report demonstrates the cored hole and open hole	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	permanently marked in accordance with Department guidelines so that location can be easily established		locations. The following statement appears within report: 'All boreholes were geophysically logged before being fully grouted to surface on completion'. An annexure with table demonstrating the Co-ordinates of the locations would more 'easily establish' the locations.		
15.2b	all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface	Exploration reports ML1579_201604_A.pdf ML1579_201404_A.pdf	Auditor reviewed identified the following statement within the report: 'All boreholes were geophysically logged before being fully grouted to surface on completion'	C	
15.2c	all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters	Exploration reports ML1579_201604_A.pdf ML1579_201404_A.pdf	Auditor reviewed identified the following statement within the report: 'All boreholes were geophysically logged before being fully grouted to surface on completion'.	C	
15.2d	if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape	Exploration reports ML1579_201604_A.pdf ML1579_201404_A.pdf	Auditor review of the 2016 Exploration report states that 'Selected seams were tested for gas desorption and composition' – but clear evidence of noxious gas testing could not be identified. If not currently being undertaken, noxious gas testing needs to be	NC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			conducted and clearly stated in report		
15.2e	if any drill hole meets an artesian or sub artesian flow it is effectively sealed to prevent contamination of aquifers	Exploration reports ML1579_201604_A.pdf ML1579_201404_A.pdf	Auditor review of the exploration reports could not identify discussion of interaction with artesian flow.	ANC	
15.2f	once any drill ceases to be used the hole must be sealed in accordance with Departmental guidelines. Alternatively, the hole must be sealed as instructed by the Director-General	Exploration reports ML1579_201604_A.pdf ML1579_201404_A.pdf	Auditor reviewed identified the following statement within the report: 'All boreholes were geophysically logged before being fully grouted to surface on completion'.	C	
15.2g	once any drill hole ceases to be used the land and its immediate vicinity is left clean, tidy and stable condition.	Exploration reports ML1579_201604_A.pdf ML1579_201404_A.pdf	Auditor review of the exploration report could not identify a clear statement on the final condition of the drill hole (tidiness or cleanliness) other than the fact that the holes were grouted. Provide indication of final condition of drill hole on completion to address this condition.	ANC	
PREVENTION OF SOIL EROSION AND POLLUTION					
16	Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with	Site observation of water cart operation and sediment basins, rehabilitation commenced in locations on-site.	Site inspection by the auditor identified that erosion and sediment control on-site is managed with basins and progressive rehabilitation. Water carts observed working on	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, water body or groundwaters. the holder must observe and perform any instruction given by the Director-General in this regard.	Environmental Officer interview	site to manage dust. Environmental Officer indicated that weather conditions monitored prior to blasts such that the blast is only carried out during conditions to prevent fugitive dust migration.		
TRANSMISSION LINES, COMMUNICATION LINES AND PIEPLINES					
17	Operations must not interfere with or impair the stability of efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without prior written approval of the Director-General and subject to any conditions he may stipulate.	Not required	Not triggered as none on site	NT	
FENCES, GATES					
18a	Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate.	Not required	Noted	note	
18b	Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.	Not required	Noted	note	
ROADS AND TRACKS					
19a	Operations must not affect any road unless in accordance with an accepted Mining Operations plan or with the prior written approval of the Director-General and subject to any conditions be may stipulate.	Not required	Noted	note	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
19b	The lease holder must pay to the designated authority in control of the road (generally the local council or the Roads and Traffic Authority) the cost incurred in fixing damages to roads caused by operations carried out under the lease, less any amount paid or payable from the Mine Subsidence Compensation Fund.	Not required	Environmental officer identified that there has been no costs incurred due to damage to roads and that there is no subsidence fund for the site.	NT	
20	Access tracks must be kept to a minimum and be positioned so that they do not cause unnecessary damage to the land. Temporary access tracks must be ripped, top soiled and revegetated as soon as possible after they are no longer required for mining operations. The design and construction of access tracks must be in accordance with specifications fixed by the Department of Natural Resources.	Not required	Noted	note	
TREES AND TIMBER					
21a	The lease holder must not fell trees, strip bark or cut timber on the lease without the consent of the landholders refuses consent or attaches unreasonable conditions to the consent, without the approval of the warden.	Interview: Site Environmental Officer	Whitehaven is landowner, therefore no other landowner consent is required.	C	
21b	The lease holder must not cut, destroy, ringbark or remove any timber or other vegetation cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining 1992 must	Interview: Site Environmental Officer Land Disturbance Protocol (LDP)	Site Environmental Officer indicated in interview that all clearing is undertaken in approved areas (managed using the Land Disturbance Protocol: Appendix B of the BMP (ELA	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	comply with the provisions of the Native Vegetation Act 2003.	(included as Appendix B of the BMP (ELA April 2015)) Sample completed LDP form number 6 (signed 17/2/16)	April 2015)) and that no clearing requiring approval under the Native Vegetation Act has been required. Sample LDP viewed contained map of clearing limits.		
21c	The lease holder must obtain all necessary approvals or licences before using timber from any crown reserve within the lease area.	Interview: Site Environmental Officer	No Crown Reserves in ML 1579.	NT	
RESOURCE RECOVERY					
23a	Notwithstanding any description of mining methods and their sequence or of the proposed resource recovery contained within the Mining Operations Plan, if at any time the Director General is of the opinion that materials which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be removed, he may give notice in writing to the lease holder requiring the holder to recover such minerals.	Environmental Officer Interview	No notice has been provided to this date	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
23b	The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery.	Environmental Officer interview	No notice has been provided to this date	NT	
23c	The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area.	Environmental Officer Interview Tarrawonga AEMR 2014_15.PDF	AEMR Environmental Officer indicated that no specific request has come from the director general. Production and waste summary reported within the AEMR.	NT	
23d	The Director-General shall issue no such notice unless the matter has firstly been thoroughly discussed with and a report to the Director-General has incorporated the views of the lease holder.	Environmental Officer interview	No notice has been provided to this date	NT	
23e	The lease holder may object to the requirements of any notice issued under this condition and on receipt of such an objection the Minister shall refer it to a Warden for inquiry and report under Section 334 of the Mining Act 1992.	Environmental Officer interview	No notice has been provided to this date	NT	
23f	After considering the Warden's report the Minister shall decide whether to withdraw, modify or maintain the requirements specified in the original notice and shall give the lease holder written notice of the decision. The lease holder must comply with the requirements of this notice.	Environmental Officer interview	No notice has been provided to this date	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
INDEMNITY					
24	The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect to any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	Not required	Noted	note	
SECURITY					
25a	A security in the sum of \$100,000 must be given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of obligations under this lease. If the lease holder fails to fulfil any one or more of such obligations the said sum may be applied at the discretion of the minister towards the cost of fulfilling such obligations. For the purpose of this clause the lease holder shall be deemed to fail to fulfil the obligations of	2016_01_19_DRE re review of Tarrawonga Security.pdf - Review of Group Security letter provided by the DoPE	The security letter details review of security and outlines currently held security.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	this lease if the lease holder fails to comply with any condition or provision her of, any provision of the Act or regulations made thereunder or any condition or direction imposed of the Act or regulation made thereunder.				
25b	The lease holder must provide the security required by sub-clause (a) in one of the following forms: (i) cash (ii) a security certificate in a from approved by the Minister and issued by an authorised deposit taking institution	Not required	Noted	note	

Table C1 **Compliance Assessment – Mining Lease 1693**

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
ML1693					
Notice to Landholders					
1a	Within a period or three months from the date of grant/renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice.	Interview of Environmental Officer	Not related to this audit	NT	
1b	If there are ten or more landholders affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted / renewed: state whether the lease includes the surface and must contain an adequate plan and description of the lease area.	Interview of Environmental Officer	Not related to this audit	NT	
Environmental Harm					
2a	The holder must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operations or rehabilitation of any activities under this lease.	Management Plans	Broadly compliant, see review of Management Plan in Annex A Table A.1 Conditions of Approval.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
2b	<p>For the purpose of this condition:</p> <p>(i) environment means components of the earth, including:</p> <ul style="list-style-type: none"> a) land, air, water, and b) any layer of the atmosphere, and c) any organic or inorganic matter and any living organism, and d) human-made or modified structures and areas <p>and includes interacting natural ecosystems that include components referred to in paragraphs (a)-(c).</p> <p>(ii) harm to the environment includes any direct or indirect alteration of the environment that the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution, contributes to the extraction or degradation of any threatened species, populations or ecological communities and their habitats and causes impacts to places, objects and features of significance to Aboriginal people.</p>				
Mining Operations Plan					
3a	Mining operations must not be carried out otherwise than in accordance with a Mining Operations Plan (MOP) which has been	Mining Operations Plan (2015-2020) (Amendment A) (SLR	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) section 1 states that the document	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	approved by the Director-General.	2016)	was prepared in accordance with <i>Mining Operations Plan (MOP) Guidelines</i> (DTIRIS 2013).		
3b	<p>The MOP must:</p> <p>(i) identify areas that will be disturbed by mining operations;</p> <p>(ii) detail the staging of specific mining operations;</p> <p>(iii) identify how the mine will be managed to allow mine closure;</p> <p>(iv) identify how mining operations will be carried out in order to prevent and or minimise harm to the environment;</p> <p>(v) reflect the condition of approval under</p> <ul style="list-style-type: none"> the <i>Environmental Planning & Assessment Act 1979</i> the <i>Protection of the Environmental Operations Act 1997</i> any other approvals relevant to the development including the conditions of this lease; and have regard to any relevant guidelines adopted by the Director-General 	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	<p>(i)&(ii) MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).</p> <p>Section 2.3.10 contains a table showing the material production schedule for six years.</p> <p>(iii) MOP (2015-2020) (SLR 2016) identifies that closure is not planned during MOP period and that a closure MOP will be prepared for the final period of years prior to planned closure. The current MOP (SLR 2016) contains proposed activities during MOP period including consideration of post-mining landuse and rehabilitation (sections 4 and 5). Rehabilitation implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).</p> <p>(iv) MOP (2015-2020) (SLR 2016) generally contains discussion of</p>	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			activities and controls to minimise environmental harm. (v) MOP (2015-2020) (SLR 2016) generally addresses project approvals, however a detailed assessment of compliance with conditions of approval is contained in Annex A Table A.1.		
3c	The lease holder may apply to the Director-General to amend an approved MOP at any time.	Interview: Site Environmental Officer	Not triggered.	NT	
3d	It is not a breach of this condition if: (i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the <i>Mining Act 1992</i> , the <i>Environmental Planning and Assessment Act 1979</i> , <i>Protection of the Environment Operations Act 1997</i> , <i>Mine Health and Safety Act 2004</i> ,/Coal mine Health and Safety Act 2002 and <i>Mine Health and Safety Regulation 2007</i> /Coal Mine Health and Safety Regulation 2006 or the <i>Occupation Health and Safety Act 2000</i> ; and (ii) the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	Interview: Site Environmental Officer	Interview with Site Environmental Officer indicated this did not occur.	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
3e	A MOP ceases to have effect 7 years after date of approval or other such period identified by the Director-General.	Note	Noted	Note	
ENVIRONMENTAL MANAGEMENT REPORTING					
4a	The lease holder must lodge Environmental Management Report (EMR) with the Director-General annually or at the dates otherwise directed by the Director-General.	04121516-annual-review-2015-2016.pdf 14155242-aemrannual-review-2013-2014.pdf 21135302-annual-review-2016.pdf 2014_03_06_DRE AEMR acceptance letter.pdf Tarrawonga 2014 2015 Advice of Satisfaction.pdf	Auditor reviewed evidence of reports and letters demonstrating satisfaction of the Minister.	C	
4b	The EMR must: (i) report against compliance with the MOP; (ii) report on progress in respect of rehabilitation completion criteria; (iii) report on the extent of compliance with regulatory requirements; and (iv) have regarding to any relevant guidelines adopted by the Director-General.	Table 10 – Environmental Performance of 21135302-annual-review-2016.pdf Section 6 of 21135302-annual-review-2016.pdf	Section 6 – Environmental Performance and Table 10 of the AEMR provides a review of environmental of performance Proposed improvements are provided under each sub heading within Section 6 of the AEMR.	C	
Environmental Incident Report					
5a	The lease holder must report any environmental incidents. The report must:	Environmental Officer Interview	Auditor document review and interview with the Environmental	NC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	(i) be prepared according to any relevant Departmental guidelines; (ii) be submitted within 24 hours of the environment incident occurring:	2015_09_Incident Report - Tarrawonga_LDE_Discharge of Waters V2.docx	Officer identified that no environmental incidents occurred on this mining lease. Other incidents have occurred and evidence of reporting has been observed. The incident report referenced was not submitted within 24 hours. Report all environmental incidents within 24 hours of the incident occurring.		
5b	For the purpose of this condition, environmental incidents include: (i) any incident causing or threatening material harm to the environment (ii) any breach of conditions 1-9 and 11-24 (iii) any breach of environmental protection legislation; or (iv) a serious complaint from landholders or the public.	Not applicable	Noted	Note	
4c	for the purposes of this condition, harm to the environment is material if: (i) it involves actual or potential harm to the health or safety of human being or ecosystems that is not trivial, or it results in actual or potential loss or property damage of an amount or amounts in aggregate, exceeding \$10,000, where loss	Not applicable	Noted	Note	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	includes the reasonable cost and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.				
Additional Environmental Reports					
6	Additional environmental reports may be required from time to time as directed in writing by the Director-General and must be lodged as instructed.	Environmental Officer Interview	Environmental Officer interview identified that there has been no request from the Director-General	NT	
Rehabilitation					
7	Any disturbance as result of activities under this lease must be rehabilitated to the satisfaction of the Director-General.	Interview: Site Environmental Compliance Officer Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	No rehabilitation is completed at time of audit.	NT	
Subsidence Management					
8a	The lease holder shall prepare a Subsidence Management Plan prior to commencing any underground mining operations which will potentially lead to subsidence of the land surface.	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
8b	Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as	Not applicable	No underground mining has commenced on the site so subsidence management is not an	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	longwalls or miniwalls, associated first workings (gate-roads, installation roads and associated main headings, etc.), and pillar extractions' and are otherwise defined by the <i>Applications for Subsidence Management Approvals Guidelines</i> (EDG 17)		issue requiring management.		
8c	The lease holder must not commence or undertake underground mining operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the Coal Mines Regulations Act 1982, or the document New Subsidence Management Plan Approval Process - Transitional Provisions (EDP09)	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
8d	Subsidence Management Plans are to be prepared in accordance with the Guidelines for Applications for Subsidence Management Approvals	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
8e	Subsidence Management Plans as approved form part of the Mining Operations Plan required under condition 3 and will to the Environmental Management Report process as set out under Condition 4. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document New Approval Process for Management of Coal Mining Subsidence - Policy.	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	
WORKING REQUIREMENT					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
9a	The lease holder must: ensure that at least 17 competent people are efficiently employed in relation to the mining process or mining operations on the lease area. OR	Environmental Officer interview response	Environmental officer indicated that 110 people work over day and night shift Monday to Sunday, which is greater than the requirement for at least 27 competent people each week day except Sunday and public holidays.	C	
9b	expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$297,500 per annum whilst the lease is in force. The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed.	Weekly Financial spreadsheet observed on-site	Auditor reviewed the weekly financial spreadsheet and identified that the expenditure on operations per annum is well above criteria of \$297,500.	C	
Blasting					
10a	Ground Vibration The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10mm/sec and does not exceed 5mm/sec in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.	Environmental Blast Monitoring 2015.xlsx. Environmental Blast Monitoring 2016.xlsx	Auditor reviewed blast monitoring records. No exceedances of ground vibration of 10mm/s.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
10b	Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120dB (linear) and does not exceed 115dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.	Environmental Blast Monitoring 2015.xlsx. Environmental Blast Monitoring 2016.xlsx	A number of exceedances of blast overpressure on project related land – (January 2015 was the item observed by auditor). These have previously been reported to the EPA but no longer reported as they are on project land. Review of records available for property purchased and blasting records demonstrated no exceedances prior to the properties being purchased by TCP.	C	
SAFETY					
11	Operations must be carried out in manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavation opened up or used by the lease holder must be filled in or otherwise rendered safe to a standard acceptable to the Director-General.	Observation and Environmental Officer interview	Observation and Environmental Officer interview identified no abandoned shafts or excavations. Inspection by the auditor determined that stock is restricted via fencing Observation in the field by the auditor identified demarcation to render safe excavations	C	
PREVENTION OF SOIL EROSION AND POLLUTION					
12	Prospecting operations must be carried out in a manner that does not cause or aggravate air pollution, water (including groundwater) pollution, soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with	Site observation of water cart operation and sediment basins, rehabilitation commenced in	Site inspection by the auditor identified that erosion and sediment control on-site is managed with basins and progressive rehabilitation.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	an accepted Mining Operations Plan.	locations on-site. Environmental Officer interview	Water carts observed working on site to manage dust. Environmental Officer indicated that weather conditions monitored prior to blasts such that the blast is only carried out during conditions to prevent fugitive dust migration		
TRANSMISSION LINES, COMMUNICATION LINES AND PIPELINES					
13	Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions stipulated.	Not required	Not triggered as none on site	NT	
ROADS AND TRACKS					
14a	The lease holder must pay to the relevant roads authority in control of the road or track the reasonable cost incurred by the roads authority in making good any damage to roads or tracks caused by operations carried out under this lease less any amount paid or payable from the Mine Subsidence Fund.	Not required	Environmental officer identified that there has been no costs incurred due to damage to roads and that there is no subsidence fund for the site.	NT	
14b	During wet weather the use of any road or track must be restricted so as to prevent damage to the road or track	Environmental Officer interview	Environment officer interview identified that all tracks used are owned by TCPL	NT	
14c	Existing access tracks should be used for all operations where reasonably practicable.	Not required	No tracks have reached the stage where they are required to be	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	New access tracks must be rehabilitated and revegetated to the satisfaction of the Director-General as soon as reasonably practicable after they are no longer required under this lease.		rehabilitated		
14d	Temporary access tracks must be rehabilitated and revegetated to the satisfaction of the Director-General as soon as reasonably practicable after they are no longer required under this lease.	Not required	Not applicable	NT	
TREES AND VEGETATION					
15a	The lease holder must not fell trees, strip bark or cut timber on any land subject of this lease without the consent of the landholder who is entitled to the use of the timber.	Interview: Site Environmental Compliance Officer	Whitehaven is landowner, therefore no other landowner consent is required.	C	
15b	The lease holder must contact Forests NSW and obtain any required permit, licence or approval before taking timber from any Crown land within the lease area.	Interview: Site Environmental Compliance Officer	No Crown Reserves in ML 1579.	NT	
	Note: Any clearing not authorised under the Act must comply with the requirements of the Native Vegetation Act 2003. Any clearing or taking of timber on Crown land is subject to the requirements of the Forestry Act 1916.				
RESOURCE RECOVERY					
17a	Notwithstanding any description of mining methods and their sequence or of the proposed resource recovery contained within the Mining Operations Plan, if at any time the Director General is of the opinion that materials which the lease entitles the lease holder to mine and which are	Environmental Officer Interview	No notice has been provided to this date	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being received to the extent which should be economically possible or which for environmental reasons are necessary to be removed, he may give notice in writing to the lease holder requiring the holder to recover such minerals.				
17b	The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery.	Environmental Officer interview	No notice has been provided to this date	NT	
17c	The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area.	Environmental Officer Interview Tarrawonga AEMR 2014_15.PDF	Environmental Officer indicated that no specific request has come from the Director-General. Production and waste summary reported within the AEMR.	NT	
INDEMNITY					
18	The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect to any accident or injury to any person or property which may arise out of the construction, maintenance or working of	Not required	Noted	Note	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.				
SINGLE SECURITY					
21	The single security given and maintained with the Minister by the lease holder for the purpose of ensuring the fulfilment by the lease holder of obligation under Mining Lease 1579 is extended to apply to this lease.	2016_01_19_DRE re review of Tarrawonga security.pdf	The security letter details review of security and outlines currently held security	C	
SUSPENSION OF MINING OPERATIONS					
23	The holder of a mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the minister.	Not required	Noted	Note	
COOPERATION AGREEMENT					
24	The lease holder must make every reasonable attempt, and be able to demonstrate their attempts, to enter into a cooperation agreement with the holders of any overlapping titles (s). The cooperation agreement should address but not be limited to issues such as: <ul style="list-style-type: none"> Access agreements operational interaction procedures 	SoC -1-3 Common Boundary Integrated Management Plan	Environmental Officer considered that this is not triggered given that no leases 'overlap'.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<ul style="list-style-type: none"> • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts and • rehabilitation issues. 				

Table C1 **Compliance Assessment – Mining Lease 1685**

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
ML1685					
Notice to Landholders					
1a	Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted / renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area and a description of the lease area must accompany the notice.	Interview of Environmental Officer	Not related to this audit	NT	
1b	If there are ten or more landholders affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted / renewed: state whether the lease includes the surface and must contain an adequate plan and description of the lease area.	Interview of Environmental Officer	Not related to this audit	NT	
Rehabilitation					
2	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.		Progress is demonstrated that is in accordance with the MOP. The MOP has been approved by the DG.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Mining Operations Plan and Annual Rehabilitation Plan					
3a	The lease holder must comply with an approved Mining Operations Plan in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	ML1579-2-3 MOP Apporval Notices Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016) Annual Review (2016)	Formal Director-General approval of MOP (2015-2020) (Amendment A) (SLR 2016). Compliance with MOP is reported in Annual Reviews which are submitted to the Department. Areas of actual rehabilitation vs predicted differ between the MOP and Annual Review (2016). The MOP section 7, Table 20 shows cumulative rehabilitation will be at 64.9ha at end of calendar year 2016). The Annual Review (2016) states that active rehabilitation area is 59ha and area being prepared for rehabilitation is 9.9ha (totalling 68.9ha). Those numbers for 2017 are 70.76ha (MOP Table 20) and 68.9ha active rehabilitation and 5.8 in preparation for rehabilitation (totalling 74.7ha). Commencement of mining predates this audit period.	C	
3b	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which:	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	(i)&(ii) MOP (2015-2020) (SLR 2016) details rehabilitation planning (section 5), implementation (section 7) and	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(i) identifies areas that will be disturbed;</p> <p>(ii) details the staging of specific mining operations, mining purposes and prospecting;</p> <p>(iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;</p> <p>(iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and reflects the conditions of approval under:</p> <ul style="list-style-type: none"> the <i>Environmental Planning and Assessment Act 1979</i>; the <i>Protection of the Environment Operations Act 1997</i>; and any other approvals relevant to the development including the conditions of this mining lease. 		<p>MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).</p> <p>Section 2.3.10 contains a table showing the material production schedule for six years.</p> <p>(iii) MOP (2015-2020) (SLR 2016) identifies that closure is not planned during MOP period and that a closure MOP will be prepared for the final period of years prior to planned closure. The current MOP (SLR 2016) contains proposed activities during MOP period including consideration of post-mining landuse and rehabilitation (sections 4 and 5). Rehabilitation implementation (section 7) and MOP Plans 3(a-f) (annual timeslices) and 4 (post-mining landuse).</p> <p>(iv) MOP (2015-2020) (SLR 2016) generally contains discussion of activities and controls to minimise environmental harm.</p> <p>(v) MOP (2015-2020) (SLR 2016) generally addresses project</p>		

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			approvals, however a detailed assessment of compliance with conditions of approval is contained in Annex A Table A.1 CoA.		
3c	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at www.resource.nsw.gov.au/environment	Mining Operations Plan (2015-2020) (Amendment A) (SLR 2016)	MOP Table 3 indicates the MOP as was prepared in 2013 (forming the basis of the current MOP) was prepared to meet the ESG3 Guidelines. Review indicates the heading are consistent with the ESG3 guideline.	C	
3d	The lease holder may apply to the Minister to amend an approved MOP at any time.	Interview: Site Environmental Officer	Not triggered.	NT	
3e	It is not a breach of this condition if: (i) the operations which, but for this condition 3(e) would be a breach of condition 3 (a), where necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Mine Health and Safety Act 2004/Coal Mine Health and Safety Act 2002, and Mine Health and Safety Regulation 2007/ Coal Mine Health and Safety Regulation 2006 or the Work Health and Safety Act 2011; and	Interview: Site Environmental Officer	Interview with Site Environmental Officer indicated this did not occur.	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	(ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.				
3f	<p>The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:</p> <p>(i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;</p> <p>(ii) be submitted annually on the grant anniversary date (or at other such times as agreed by the Minister); and</p> <p>(iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resources.nsw.gov.au/environment.</p> <p><i>Note: the Rehabilitation Report replaces the AEMR</i></p>	Annual Review (2016)	<p>There is no standalone <i>Rehabilitation Report</i> and the contents are contained within the Annual Review (2016).</p> <p>(i) Annual Review (2016) section 8 does not contain a detailed comparison of landscape performance against completion criteria and is qualitative in nature. NC: no detailed review of progress against completion criteria.</p> <p>(ii) ML conditions dated 18 July 2013. Annual Review (2016) dated 28 February 2017 reporting for the period 1 May 2016 to 31 December 2016. ANC: dates are misaligned.</p> <p>(iii) Annual Review (2016) generally in accordance with guidelines.</p>	NC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
COMPLIANCE REPORT					
4a	The lease holder must submit a Compliance Report to the satisfaction of the Minister. The report must be prepared in accordance with any relevant guidelines or requirements published by the Minister for compliance reporting.	04121516-annual-review-2015-2016.pdf 14155242-aemrannual-review-2013-2014.pdf 21135302-annual-review-2016.pdf 2014_03_06_DRE AEMR acceptance letter.pdf Tarrawonga 2014 2015 Advice of Satisfaction.pdf	Auditor reviewed evidence of reports and letters demonstrating satisfaction of the Minister.	C	
4b	The Compliance Report must include: (i) the extent to which the conditions of this mining lease or any provisions of the Act or the regulations applicable to activities under this mining lease, have or have not been complied with; (ii) particulars of any non-compliance with any such conditions or provisions, (iii) the reasons for any such non-compliance; (iv) any action taken, or to be taken, to prevent any recurrence, or to mitigate the effects, of that non-compliance.	04121516-annual-review-2015-2016.pdf 14155242-aemrannual-review-2013-2014.pdf 21135302-annual-review-2016.pdf 2014_03_06_DRE AEMR acceptance letter.pdf Tarrawonga 2014 2015 Advice of Satisfaction.pdf	Auditor reviewed evidence of reports and letters demonstrating satisfaction of the Minister.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
4c	The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining licence.	Environmental Officer interview	Environmental Officer interview identified that reports have been submitted in conjunction with ML1579 reporting timeframes. AEMR/ER may provide demonstration that the methodology to provide all on the same date as the 1579 is satisfied – though likely was outside of the reporting period for this audit. Dates of submission did seem varied and inconsistent.	ANC	Consolidated report summarises all leases areas and is provided at one time, corresponding to the reporting period for one of the leases. This eliminates the requirement to provide similar report at three different times. Evidence for approval of this approach from minister to be provided. If not available such approval is to be obtained.
4d	In addition to annual lodgement under condition 4(c) above, a Compliance Report: (i) Must accompany any application to renew this mining lease under the Act (ii) Must accompany any application to transfer this mining lease under the Act; and (iii) Must accompany any application to cancel, or to partially cancel, this mining lease under the Act.	Not applicable	Not Triggered	NT	
4e	Despite the submission of any Compliance report under c or d above, the titleholder must lodge a Compliance Report with the Department at any date of dates otherwise required by the Minister.	Not applicable	Not triggered	NT	
4f	A Compliance Report must be submitted one month prior to expiry of this mining lease, where the licence holder is not seeking to renew or cancel this mining lease.	Not applicable as yet	Not triggered	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Environmental Incident Report					
5a	<p>The lease holder must notify the Department of all:</p> <p>(i) breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and</p> <p>(ii) breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the <i>Protection of the Environment Administration Act 1991</i>) arising in connection with significant surface disturbing activities, including mining operations, mining purposes and prospecting operations, under this mining lease. The notification must be given immediately after the lease holder becomes aware of the breach.</p>	<p>Environmental Officer Interview</p> <p>2015_09_Incident Report - Tarrawonga_LDE_Discharge of Waters V2.docx</p>	<p>No environmental incidents occurred on this mining lease.</p> <p>Incidents against other conditions have occurred as detailed in this report and evidence of reporting has been observed. However, the incident report referenced was not submitted within 24 hours.</p> <p>Report all environmental incidents within 24 hours of the incident occurring as this is the most stringent criteria at the site.</p>	NC	
5b	<p>The lease holder must submit an Environmental Incident report to the Department within seven (7) days of all breaches referred to in condition 5(a)(i) and (ii). The Environmental Incident report must include:</p> <p>(i) The details of the mining lease;</p> <p>(ii) Contact details for the lease holder;</p> <p>(iii) A map identifying the location of the incident and where material harm to the environment has or is likely to occur;</p>	<p>Environmental Officer Interview</p> <p>2015_09_Incident Report - Tarrawonga_LDE_Discharge of Waters V2.docx</p>	<p>No environmental incidents occurred on this mining lease.</p> <p>Incidents against other conditions have occurred as detailed in this report and evidence of reporting has been observed. However, the incident report referenced was not submitted within 24 hours.</p> <p>Report all environmental incidents within 24 hours of the incident occurring as this is the</p>	NC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>(iv) A description of the nature of the incident or breach, likely causes and consequences;</p> <p>(v) A timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in 5(a).</p> <p>(vi) A summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface disturbing activities, including mining operations, mining purposes and prospecting operations under this mining lease.</p> <p><i>Note: the lease holder should have regard to any relevant Director-general's guidelines in the preparation of an Environmental Incident Report. Refer to www.resources.nsw.gov.au/environment for further details.</i></p>		most stringent criteria at the site.		
5c	In addition to the requirements set out in conditions 5(a) and (b), the lease holder must immediately advise the Department of any notification made under section 148 of the Protection of the Environment Operations Act 1997 arising in connection with significant surface disturbing activities including mining operations, mining purposes and prospecting operations, under this mining lease.	Environmental Officer Interview	Not triggered	NT	
Subsidence Management					

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
6	<p>The lease holder must not commence or undertake any underground mining operations that may cause subsidence of the surface other than in accordance with an Eligible Subsidence Management Plan approved by the Director-General.</p> <p>For the purposes of this condition, an Eligible Subsidence Management Plan means:</p> <p>(i) A Subsidence Management Plan prepared in accordance with the current government guidelines for the preparation of Subsidence Management Plans; or</p> <p>(ii) Those parts of an Extraction Plan or another type of plan:</p> <ul style="list-style-type: none"> • Prepared, either in whole or in part, with reference to current government guidelines for the preparation of a Subsidence Management Plan; and • Approved for the purposes of the <i>Environmental Planning and Assessment Act 1979</i> (or any planning legislation which replaces that Act) by the Minister or Director-General of the Department of Planning and Infrastructure, or another officer of that Department authorised to approve such a plan, which relates to issues of subsidence. 	Not applicable	No underground mining has commenced on the site so subsidence management is not an issue requiring management.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Resource Recovery					
7	The lease holder must optimise recovery of the minerals that are subject of this mining lease to the extent economically feasible.	Environmental Officer Interview Tarrawonga AEMR 2014_15.PDF ML1579_201604_A.pdf	Auditor review identified production and waste summary reported within the AEMR. Exploration report demonstrates investigation to inform future mining strategy.	C	
Single Security					
8	The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future. The amount of the security deposit to be provided as a single security has been assessed by the Minister at \$4,364,000. The leases covered by the single security include: Mining Lease 1579 (Act 1992)	2016_01_19_DRE re review of Tarrawonga security.pdf	The security letter details review of security and outlines currently held security	C	
Cooperation Agreement					
9	The lease holder must make every reasonable attempt, and be able to demonstrate its attempt, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:	SoC -1-3 Common Boundary Integrated Management Plan	Environmental Officer considered that this is not triggered given that no leases 'overlap'.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	(i) access arrangements (ii) operational interaction procedures (iii) dispute resolution (iv) information exchange (v) well location (vi) timing of drilling (vii) potential resource extraction conflicts; and (viii) rehabilitation issues.				
Special Conditions					
10	The lease holder must submit a security review (in accordance with ESU guidelines and policy) within one month of the granting of the new mining lease.	Interview of Environmental Officer	Not related to this audit	NT	

Annex E

Table D.1 EPBC Assessment

Table C1 Compliance Assessment – EPBC Approval (2011/5923)

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Tarrawonga Coal Mine Extension EPBC 2001/5923					
Disturbance Areas					
1	The person taking the action must not clear more than 13ha of the EPBC listed White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland critically endangered ecological community within the Tarrawonga Coal Extension project area, as identified in Attachment A of these conditions.	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report – March 2016 Disturbance Limits Assessment – Tarrawonga Coal Mine (Ecoplanning 2016)	Disturbance Limits Assessment – Tarrawonga Coal Mine (Ecoplanning 2016) section 3.1.3 states activities will not clear the proposed 13 ha and that activities are therefore compliant with these limits.	C	
2	The person taking the action must not clear more than:- (a) 279ha of habitat for the regent honeyeater (<i>Anthochaera phrygia</i> : formerly <i>Xanthomyza phrygia</i>) (b) 54ha of habitat for the swift parrot (<i>Lathamus discolor</i>); and (c) 334ha of habitat for the greater long-eared bat (<i>Nyctophilus corbeni</i>) within the Tarrawonga Coal Extension project area.	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report – March 2016 Disturbance Limits Assessment – Tarrawonga Coal Mine (Ecoplanning 2016)	Disturbance Limits Assessment – Tarrawonga Coal Mine (Ecoplanning 2016) sections 3.2.4, 3.3.4 & 3.4.4 identify compliance.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
3	<p>The person taking the action must submit to the Minister for approval, by 30th June 2016, an approach that:</p> <p>(a) limits the maximum disturbance (in hectares) specified for each of the years 5, 10, 15, and 17 from the date of this approval of the White Box–Yellow Box–Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community and the habitat or potential habitat for the Regent Honeyeater, Swift Parrot and Greater Long-eared Bat;</p> <p>(b) incorporates an analysis, undertaken by independent ecological experts approved by the Department, that demonstrates the maximum disturbance limits which will minimise any impact on relevant Matters of National Environmental Significance;</p> <p>(c) demonstrates collaboration with the person taking the action to develop and operate the Boggabri Coal Project (EPBC 2009/5256) and the person taking the action to develop and operate the Maules Creek Coal Project (EPBC 2010/5566), in order to minimise progressive disturbance limits across all three sites. The progressive disturbance limits are to be reflected in the development of the Leard Forest Mining Precinct Biodiversity Strategy.</p>	EPBC1-2 Disturbance Limit Approach Submission (email WHC Group Superintendent – Environment (Compliance) to DoEE	TCPL submitted Disturbance Limits Assessments and Approach in accordance with this condition at 7:19am on 1 July 2017.	ANC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
4	The person taking the action must not clear more than the maximum project area disturbance limits specified for each of the years 5, 10, 15 and 17 as described in condition 3, unless otherwise approved by the Minister.	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016 Disturbance Limits Assessment - Tarrawonga Coal Mine (Ecoplanning 2016)	Disturbance Limit Assessment delineates the limits TCPL can disturb. The mine has not reached year 5 as defined (2018).	C	
5	The person taking the action must publish on their website both the approved approach and the analysis undertaken by independent ecological experts under condition 3.	Website review	The approach is yet to be approved by the Minister and as such has not been published on the website.	NT	
Direct Offsets					
6	The person taking the action must register a legally binding conservation covenant over offset areas of no less than: (a) 1055ha of an equivalent or better quality of habitat for the regent honeyeater (b) 397ha of an equivalent or better quality of habitat for the swift parrot (c) 1355ha of an equivalent or better quality of habitat for the greater long-eared bat; and (d) 232ha of an equivalent or better quality of the White Box-Yellow Box-Blakely's Red	Letter 0932_001.pdf DP&E to Group Superintendent - Environment (Whitehaven) 30/6/17 Interview: Specialist-Offsets	Timing requirement for this covenant is 5 years from approval (stated in condition 10), thus not require until 11 March 2018. This audit found this condition was in progress as Letter 0932_001.pdf from DP&E describes the status of correspondence between NPWS and Whitehaven acknowledging Whitehaven's intention to transfer some land to NPWS estate and	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Gum Grassy Woodland and Derived Native Grassland ecological community.</p> <p><i>Note: Offset areas described in condition 6 do not necessarily need to be separate if the same areas can meet the listing criteria for the EPBC listed threatened species or communities as defined in the EPBC listing advice for that threatened species or community and meet requirements of condition 6.</i></p>		secure all that residual land using a VCA. The letter states that it refers to this condition and that the DP&E is satisfied that Whitehaven is currently "demonstrating reasonable endeavours to secure the offsets".		
7	<p>The person taking the action must verify through independent review the quantity and condition class of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community and the quantity and quality of habitat for the regent honeyeater, swift parrot and greater long-eared bat within all proposed offset areas including those proposed in the Environmental Assessment and any additional offsets as required at condition 8.</p> <p>Details of all independently verified offset areas must be submitted to the Minister for approval by 31 January 2014.</p> <p>The findings of the independent review must be published on the proponent's website.</p>	SoC-1-1 Willeroi_Offset_Review_v1	<p>Offset review completed by Eco Logical Australia 2013 Review submitted 5 December 2013.</p> <p>TCPL will publish the findings of the independent review once approved, as such ANC.</p>	ANC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
8	If the independent review finds that the offset areas do not meet the requirements of conditions 6, 7 and 9 then additional areas must be included in the offset areas until all relevant criteria under these conditions are met.	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016 states that offset meets the requirements and therefore no additional offsets are required.	NT	
9	<p>The offset areas must be of an overall equivalent or better quality than the areas being cleared. This means:</p> <p>(a) for White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community, offset areas must meet the definition of the ecological community described in the listing advice, and must be of an overall equivalent or better condition class than the areas being cleared, based on the proportion of each condition class represented and other relevant ecological attributes</p> <p>(b) for the threatened species, the quality of the habitat for the species, taking account of its ecological requirements, must be equivalent to or better than the areas being cleared.</p>	<p>SoC-1-1 Willeroi_Offset_Review_v1</p> <p>Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016</p>	<p>Offset review completed by Eco Logical Australia 2013. Review submitted 5 December 2013.</p> <p>Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016 states the review found offsets met condition 9.</p>	C	
10	The mechanism/s for registering a legally binding covenant must provide protection for the offset areas in perpetuity and be registered within 5 years of the date of this	Letter 0932_001.pdf DP&E to Group Superintendent - Environment	<p>Not required until 11 March 2018.</p> <p>Letter 0932_001.pdf from DP&E</p>	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	approval. Evidence of registration must be provided to the Department within one month of registration of each legally binding covenant.	(Compliance) (Whitehaven) 30/6/17 Interview: Specialist-Offsets	describes the status of correspondence between NPWS and Whitehaven acknowledging Whitehaven's intention to transfer some land to NPWS estate and secure all that residual land using a VCA. The letter states that it refers to this condition and that the DP&E is satisfied that Whitehaven is currently "demonstrating reasonable endeavours to secure the offsets". Interview with Specialist-Offsets indicated no interim conservation agreement has been (or will be) pursued.		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
11	If the person taking the action proposes to undertake any action within areas secured under condition 6, other than those management activities related to managing the offset areas or as set out in the conditions of approval, then the approval to undertake that action must be obtained in writing from the Minister. In seeking the Minister's approval, the person undertaking the action must provide a detailed assessment of the area where the action is proposed to take place and an assessment of all associated adverse impacts on matters of national environmental significance. If the Minister agrees to the action within the offset areas, the area identified for the action must be excised from the offset area and alternative offsets secured by the person taking the action at a ratio of at least 20:1 in relation to the impact on matters of national significance.	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016 states that no stated activities are proposed.	NT	
Offset Management Plan					
12	The person taking the action must submit to the Minister for approval an Offset management plan for all of the offset areas, specified in condition 6, within 12 months of the date of this approval. The approved Offset management plan must be implemented.	EPBC-1-4 OMP Submission.PDF Interview: Group Superintendent - Environment (Compliance) Interview: Specialist-	Letter relating to Willeroi Offset Management Plan dated 7 April 2014 sighted by auditor, indicates the Offset Management Plan was submitted on this date to Department of Environment. Awaiting approval. Offset Management plan incorporated in to Biodiversity	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
		Offsets	Management Plan and submitted to NSW DP&E June 2015. A subsequent revision of the Biodiversity Management Plan for the Willeroi Offsets Area (Stage 2) is currently in preparation.		
13	<p>The <i>Offset management plan</i> must include, but not be limited to, the following:</p> <p>(a) a text description and map which clearly defines the location and boundaries of the offset areas. This must be accompanied by the offset attributed and shapefiles</p> <p>(b) a description of the methodology and results of surveys measuring the baseline ecological conditions in the offset areas. This must be consistent with the State and Transition Model and include but not be limited to:</p> <p>(i) the extent and condition of all vegetation communities, including a description of the structure, floristics and tree age class representation of each community</p> <p>(ii) the extent and condition class of all areas of the White Box-Yellow Box-Blakely's Red Gum and Derived Native Grassland ecological community</p> <p>(iii) surveys targeting the regent honeyeater, swift parrot and greater long-eared bat</p> <p>(iv) the extent and quality of all areas of</p>	<p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Interview: Specialist-Offsets</p>	<p>Brief detail partially addressing this condition contained in BMP (ELA April 2015) section 3.2. Not compliant because no plan was available for review containing such detail.</p> <p>In interview, Specialist-Offsets stated that more detailed biodiversity offset details will be contained in the forthcoming Willeroi Offsets Area (Stage 2) Plan (currently in draft form).</p>	NC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	habitat for the regent honeyeater, swift parrot and greater long-eared bat (v) the location of all survey sites (including co-ordinated) (vi) photo reference points at survey sites				
13c	clearly defined ecological management objectives for the offset area	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015) Interview: Specialist-Offsets	Brief detail partially addressing this condition contained in BMP (ELA April 2015) section 3.2. Not compliant because no plan was available for review containing such detail. In interview, Specialist-Offsets stated that more detailed biodiversity offset details will be contained in the forthcoming Willeroi Offsets Area (Stage 2) Plan (currently in draft form).	See above	
13d	detailed description of all ecological management activities proposed to be undertaken, including maps and/or diagrams showing areas to be managed and the timing of the proposed activities	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015) Interview: Specialist-Offsets	Brief detail partially addressing this condition contained in BMP (ELA April 2015) section 3.2. Not compliant because no plan was available for review containing such detail. In interview, Specialist-Offsets stated that more detailed biodiversity offset details will be contained in the forthcoming	See above	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
			Willeroi Offsets Area (Stage 2) Plan (currently in draft form).		
13e	<p>details of ongoing ecological monitoring programs, performance criteria, targets and provisions for adaptive management, including but not limited to:</p> <p>(i) a set of measurable ecological indicators for detecting changes to the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community, including those that may be ascribed to ongoing water stress</p> <p>(ii) a monitoring plan to assess the success of the management activities measured against the baseline condition. The monitoring must be statistically robust and able to quantify change in the condition of the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community and habitat for the regent honeyeater, swift parrot and greater long-eared bat. This should include the use of control sites and periodic ecological surveys to be undertaken by a qualified ecologist</p> <p>(iii) a list of performance criteria based on the ecological management objectives for the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native</p>	<p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Interview: Specialist-Offsets</p>	<p>Brief detail partially addressing this condition contained in BMP (ELA April 2015) section 3.2. Not compliant because no plan was available for review containing such detail.</p> <p>In interview, Specialist-Offsets stated that more detailed biodiversity offset details will be contained in the forthcoming Willeroi Offsets Area (Stage 2) Plan (currently in draft form).</p>	See above	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>Grassland ecological community and habitat for the regent honeyeater, swift parrot and greater long-eared bat</p> <p>(iv) measures to exclude weeds from all offset areas for the period covered by this approval</p> <p>(v) a description of the potential risks to successful management against the performance criteria, and a description of the contingency measures that would be implemented to mitigate against these risks</p> <p>(vi) a process by which to report to the Department to progress of management activities undertaken in the offset areas and the outcome of those activities, including identifying any need for improved management and activities to undertake such improvement</p>				
13f	details of all parties responsible for management, monitoring and implementing the management activities, including their position or status as a separate contractor	<p>Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015)</p> <p>Interview: Specialist-Offsets</p>	<p>Brief detail partially addressing this condition contained in BMP (ELA April 2015) section 3.2. Not compliant because no plan was available for review containing such detail.</p> <p>In interview, Specialist-Offsets stated that more detailed biodiversity offset details will be contained in the forthcoming Willeroi Offsets Area (Stage 2) Plan (currently in draft form).</p>	See above	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
13g	details of the funding requirements for the ongoing management activities, including an estimate of the costs of the activities and details of the parties responsible for funding the activities	Tarrawonga Biodiversity Management Plan (BMP) (ELA April 2015) Interview: Specialist-Offsets	Brief detail partially addressing this condition contained in BMP (ELA April 2015) section 3.2. Not compliant because no plan was available for review containing such detail. In interview, Specialist-Offsets stated that more detailed biodiversity offset details will be contained in the forthcoming Willeroi Offsets Area (Stage 2) Plan (currently in draft form).	See above	
14	Unless otherwise agreed to in writing by the Department, the baseline surveys for threatened species must be conducted in accordance with the Department's <i>Survey Guidelines for Australia's Threatened Bird's and the Survey guidelines for Australia's Threatened Bats</i> . Subsequent monitoring must be carried out annually at the same time of year as the baseline surveys, unless otherwise agreed to in writing by the Department.	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016 states this is not yet triggered as is contingent on DoEE approval of the offset management plan (not yet received).	NT	
Surface and Groundwater Management Plans					
15	The person taking the action must provide the <i>Surface and Groundwater Management Plans</i> , as identified in condition 39 of the NSW State Government Project Approval	Interview with Environment Officer	Refer to Condition 39 CoA. Not during audit period.	NT	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	dated 22 January 2013 (application number 11_0047), to the Minister for approval within one month of their approval by the NSW state government. The approved plans must be implemented.				
16	The <i>surface and groundwater management plans</i> must be consistent with the <i>National Water Quality Management Strategy</i> .	Interview with Environment Officer	Refer to Condition 39 CoA. Not during audit period.	NT	
17	The person taking the action must include with the <i>Surface and Groundwater Management Plans</i> (submitted for approval by the Minister as per condition 15) written advice demonstrating how the plans address the cumulative impact of groundwater drawdown as a result of mining and how this may impact on the consequent health of the remnant native vegetation in the Leard State Forest, the Leard State Conservation Area and surrounding areas. The advice must be developed in collaboration with the person taking the action to develop the Boggabri Coal Mine Extension (EPBC 2009/5256) and the Maules Creek Coal Mine (EPBC 2010/5566. The advice must address the following matters:	Interview with Environment Officer	Refer to Condition 39 CoA. Not during audit period.	NT	
17a	maximum amount of allowable drawdown in the alluvial aquifer;	-	As above	-	
17b	drawdown in hard rock;	-	As above	-	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
17c	trigger levels pertaining to drawdown in the alluvial aquifer when corrective actions will be required to be undertaken;	-	As above	-	
17d	identify the depth of the root zone of the native vegetation; and	-	As above	-	
17e	monitoring to assess the ongoing quality and quantity of both surface and groundwater to identify impacts on the native vegetation.	-	As above	-	
18	The person taking the action must, within 30 days of receiving a written request from the Minister, provide to the Minister a report on:	Interview with Environment Officer	No written request from the Minister during audit period.	NT	
18a	any updated modelling of surface and groundwater impacts that has been undertaken in preparing the <i>Surface and Groundwater Management Plans</i> ; and	-	As above	-	
18b	how the <i>Surface and Groundwater Management Plans</i> addressed groundwater and surface water impacts on matters of national environmental significance.	-	As above	-	
Goonbri Creek Diversion and Low Permeability Barrier					
19	The person taking the action must provide to the Minister for approval, before commencement of the construction of the permanent Goonbri Creek alignment, permanent flood bund and low permeability barrier, a <i>Goonbri Creek Diversion and Flood Bund Concept Design Plan</i> . No construction activities in relation to the permanent	Interview with Environment Officer Observations	Goonbri Creek Diversion and Low Permeability Barrier not implemented during the audit period.	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	Goonbri Creek alignment, permanent flood bund and/or low permeability barrier can commence until the <i>Goonbri Creek Diversion and Flood Bund Concept Design Plan</i> has been approved by the Minister. The approved plan must be implemented.				
20	The Goonbri Creek Diversion and Flood Bund Concept Design Plan must include:	Interview with Environment Officer Observations	Goonbri Creek Diversion and Low Permeability Barrier not implemented during the audit period.	NT	
20a	an assessment of the surface water and groundwater quality, ecology, hydrological and geomorphic baseline conditions within the creek	-	As above	-	
20b	a description of how restoration of the re-aligned riparian zone will be undertaken to best replicate the habitat of the existing creek, including plant species and fauna habitat features	-	As above	-	
20c	water quality, ecology, hydrological and geomorphic performance and completion criteria for the creek diversion and low-permeability barrier based on the assessment of the baseline conditions identified in condition 20 (a)	-	As above	-	
20d	a risk assessment of the environmental consequences of the proposed low permeability barrier and the proposed Goonbri Creek realignment including the potential for impacts on groundwater and	-	As above	-	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	surface discharge. The risk assessment must be peer-reviewed				
20e	details for ongoing monitoring and management of downstream impacts on the adjacent floodplains and Namoi River floodplain	-	As above	-	
21	The person taking the action must ensure that dispersed waters downstream of the Goonbri Creek re-alignment do not adversely affect the downstream environment and avoid any impacts on matters of national environmental significance.	Interview with Site Environmental Officer Observations	Goonbri Creek Diversion and Low Permeability Barrier not implemented during the audit period.	NT	
Leard Forest Mining Precinct Regional Biodiversity Strategy					
22	The person taking the action must implement the regional biodiversity strategy as required under condition 41 of the NSW state government project approval dated 22 January 2013 (application number 11_0047). The required scoping report for the development of the strategy must be submitted to the Minister for approval on or before 31 July 2013. The approved strategy must be implemented.	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016	Scoping report submitted to DPE in 2013. DP&E redeveloped Stage 1 and has been approved. Stage 2 is currently under review by DP&E.	C	
Mine Site Rehabilitation					
23	To mitigate the impacts to the White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland and the habitat of the regent honeyeater, swift parrot and greater long-eared bat, the	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MI	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) satisfies this	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	<p>person taking the action must, within six months of the date of this variation to conditions of approval, submit to the Minister for approval a <i>Mine Site Rehabilitation Plan</i> for the progressive rehabilitation and revegetation of no less than 752 ha of native forest and woodland in the Project area including 13 ha using species consistent with a White Box–Yellow Box–Blakely's Red Gum Grassy Woodland and Derived Native Grassland Ecological Community.</p> <p>This approved <i>Mine Site Rehabilitation Plan</i> must be implemented.</p>	NE SITE REHABILITATION PLAN) (dated 31 May 2016)	condition.		

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
24	The person taking the action must rehabilitate the site to be consistent with the proposed rehabilitation strategy as provided in the Environmental Assessment and, as required under the NSW State Government approval dated 22 January 2013 (Application 11_0047).	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016 MOP (2015-2020) (SLR 2016) (Amendment A) Field inspection	Progressive rehabilitation generally in accordance with the MOP Plans.	C	
25	The <i>mine site rehabilitation plan</i> must include, at a minimum, the following information:	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	Noted	NA	
25a	targets and performance indicators to achieve effective restoration of potential habitat for the regent honeyeater, swift parrot and greater long-eared bat and White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community, including weed management	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) section 3.6 (Table 3.4)	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
25b	details of the vegetation communities to be rehabilitated and the timing of progressive rehabilitation (commencing as soon as practicable following disturbance)	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) section 5.2.7	C	
25c	detailed soil depth surveys and analysis to inform the effective placement and restoration of soils underlying the proposed rehabilitation sites; including mapping of soils across the disturbance sites and soil sampling at no less than on sample point per 20ha of each soil type identified. Sampling must identify; type, depth, water holding capacity, structure and physio-chemical properties of each of the soil and subsoil layers	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) section 4.3	C	
25d	processes and methodologies for the removal, storage and re-laying of the top soil and sub soil layers underlying the disturbed sites being prepared for rehabilitation. These processes and methodologies must ensure the replacement of top soil and sub soil layers as provided in the Environmental Assessment	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) sections 4.1 and 4.2	C	
25e	a process to report annually to the department the rehabilitation management	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN)	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	actions undertaken and the outcome of those actions, and the mechanisms to be used to identify the need for improved management	Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	(dated 31 May 2016) section 8.2		
25f	a description of the potential risks to successful management and rehabilitation on the project site, including weed invasion, and a description of the contingency measures that would be implemented to mitigate these risks	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) section 6	C	
25g	details of long-term management and protection of the mine site, including details of the commitment of funds to achieve this.	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016)	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) sections 5 and 5.2.11	C	
26	The <i>Mine Site Rehabilitation Plan</i> must be subject to an Independent review by a qualified ecologist. The findings of the Independent review must be published on the website of the person taking the action at the same time as	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE	WHC_PLN_TAR_MINE SITE REHABILITATION PLAN) (dated 31 May 2016) Appendix A contains independent review. It is apparently not published on the website.	ANC	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	the approved <i>Mine Site Rehabilitation Plan</i> is published.	REHABILITATION PLAN) (dated 31 May 2016) Website			
Conservation Bond					
27	The person taking the action must submit details of the <i>Conservation and Biodiversity Bond</i> (required under condition 49 of the NSW state government project approval (dated 22 January 2013) and the Rehabilitation Security Deposit (required under the NSW mining Act 1992) to the Minister within one month of lodgement of the Bond and Deposit with the NSW state government. If the Minister is not satisfied that the Bond and Deposit lodged by the person taking the action is adequate to provide for the requirements referred to under conditions 19, 20, 22, 23 and 24, the Minister may require the person taking the action establish an additional bond or equivalent financial instrument in trust, under conditions approved in writing by the Minister.	Tarrawonga Coal Mine EPBC 2011/5923: Statement of Compliance Report - March 2016 Previous IEA (SMEC 2014)	The conservation and biodiversity bond has not been submitted to the NSW state government and therefore the details are not available to be submitted to the Commonwealth Department. This condition is timing dependent on that bond being submitted so therefore is not yet triggered.	NT	
Final Landform					
28	The person taking the action must undertake rehabilitation to ensure the final landform provides the optimum	Tarrawonga Coal Mine: Mine Site Rehabilitation Plan	The two documents and all component parts together satisfy this condition.	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	opportunity for the successful restoration of native forest and woodland including the critically endangered White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community.	(Final) (WHC_PLN_TAR_MI NE SITE REHABILITATION PLAN) (dated 31 May 2016) MOP (2015-2020) (SLR 2016) (Amendment A)			
29	<p>The person taking the action must undertake rehabilitation to ensure the final void and landform minimises the extent of any resulting pit lake, avoids salt scalding and ensures that drained waters do not adversely affect the downstream environment and avoids any impacts on matters of national environmental significance.</p> <p><i>Note: the State approval conditions for project 11_0047 require the preparation and implementation of a Final Void and Mine Closure Plan that considers interactions with the adjoining mines, including interaction between final voids, opportunities for integrated mine planning with adjoining mines to minimise environmental impacts, all reasonable and feasible landform options for the final void (including filling) and predicted hydrochemistry and hydrogeology (including long-term groundwater recovery and void groundwater quality).</i></p>	<p>Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MI NE SITE REHABILITATION PLAN) (dated 31 May 2016)</p> <p>MOP (2015-2020) (SLR 2016) (Amendment A)</p>	The two documents and all component parts together satisfy this condition. Mine closure is not within the time scope of the current MOP (2015-2020).	C	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
Survey Data					
30	<p>All survey data collected for the project must be recorded so as to conform to data standards notified from time to time by the Department.</p> <p>When requested by the Department, the person taking the action must provide to the Department all species and ecological survey data and related survey information from ecological surveys undertaken for matters of national environmental significance.</p> <p>This survey data must be provided within 30 business days of request, or in a timeframe agreed to by the Department in writing. The Department may use the survey data for other purposes.</p> <p>In the event that any additional Matters of National Environmental Significance are recorded within the Project area and a significant impact on the matter/s is likely, the Department must be notified in writing within 14 days of the matter/s being recorded. In accordance with condition 35, the Minister may request that the person taking the action revise any relevant plans to ensure better protection of the relevant matter/s.</p>	Interview with Site Environmental Officer	No requests from Department during audit period.	NT	
Reporting and Auditing					
31	Within 14 days after the commencement of construction, the person taking the action	Interview with	Letter dated 26 March 2014 providing notification to DoE of	C	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	must advise the Department in writing of the actual date of commencement of construction.	Environment Officer EPBC-1-7 Notification to DoE of commencement of construction	commencement of construction relating to commencement of construction of the Tarrawonga extension which commenced on 12 th March 2014.		
32	Within three months of every 12 month anniversary of Commencement of construction, the person taking the action must publish a report on their website addressing compliance with each of the conditions of this approval, including implementation of any management plans as specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the Department at the same time as the compliance report is published. The person taking the action must continue to comply with this condition until such time as approved in writing by the Minister.	EPBC1-8 Annual Reports 2011-5923-CMT Letter-NFA-Condition 32-signed-20161111	document review - EPBC Act compliance reporting and published on website interview - evidence of dates and timelines 2016 Annual Compliance Report issued 9 June 2017 to DoEE as required. 2015 Annual Compliance Report published 30 September 2016, administrative non-compliance as due 12 June 2016. Letter received from DoEE warning of contravention of the EPBC Act. No further action taken or required following late submission of 2015 report.	ANC	
33	Upon the direction of the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a	Interview with Environment Officer	Not triggered as no direction received to date from Minister to complete and independent audit.	NT	

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	report submitted to the Minister. The independent auditor must be approved by the Minister prior to the commencement of the audit. Audit criteria must be agreed to by the Minister and the audit report must address the criteria to the satisfaction of the Minister.				
34	The person taking the action may choose to revise a management plan approved by the Minister under conditions 12, 15, 19, or 23 without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised plan would not be likely to have a new or increased impact. If the person taking the action makes this choice they must:	Interview with Environment Officer	No plans revised under this condition.	NT	
34a	notify the Department in writing that the approved plan has been revised and provide the Department with an electronic copy of the revised plan;		Refer condition 34 above.		
34b	implement the revised plan from the date that the plan is submitted to the Department; and		Refer condition 34 above.		
34c	for the life of this approval, maintain a record of the reasons the approval holder considers that taking the action in accordance with the revised plan would not be likely to have a new or increased impact.		Refer condition 34 above.		
34A	The person taking the action may revoke their choice under condition 34 at any time by notice to the Department. If the person		Refer condition 34 above.		

Table C1

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	taking the action revokes the choice to implement a revised plan, without approval under section 143A of the EPBC Act, the plan approved by the Minister must be implemented.				
34B	If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised plan would be likely to have a new or increased impact, then:		Refer condition 34 above.		
34B (a)	condition 34 does not apply, or ceases to apply, in relation to the revised plan; and		Refer condition 34 above.		
34B (b)	the person taking the action must implement the plan approved by the Minister. To avoid any doubt, this condition does not affect any operation of conditions 34 and 34A in the period before the day the notice is given. At the time of giving the notice the Minister may also notify that for a specified period of time that condition 34 does not apply for one or more specified plans requires under the approval.		Refer condition 34 above.		
34C	Conditions 34, 34A, and 34B are not intended to limit the operation of section 143A of the EPBC Act which allows the person taking the action to submit a revised plan to the Minister for approval.	Note	Noted	Note	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
35	If the Minister believes that it is necessary or convenient for the better protection of listed threatened species and communities or listed migratory species to do so, the Minister may request that the person taking the action make specified revisions to the management plan specified in the conditions and submit the revised plan for the Minister's written approval. The person taking the action must comply with any such request. The revised approved plan must be implemented. Unless the Minister has approved the revised plan then the person taking the action must continue to implement the originally approved plan, as specified in the conditions.	Interview with Environment Officer	Not triggered as no direction received to date from Minister.	NT	
36	If, at any time after 5 years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the agreement of the Minister.	Interview with Environment Officer	Not triggered, construction commenced 12 March 2014.	NT	
Publication of plans					
37	The person taking the action must maintain accurate records substantiating all activities and outcomes associated with or relevant to the above conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the Department.	Interview with Environment Officer Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MI	No request from Department to date. Records maintained and would be made available on request. Tarrawonga Coal Mine: Mine Site Rehabilitation Plan (Final) (WHC_PLN_TAR_MINE SITE	ANC	

No	Assessment Requirement	Reference/ Evidence	Comments	Compliance Status	Recommendations
	The person taking the action must maintain accurate records. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the Environment Protection and Biodiversity Conservation Act 1999, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	NE SITE REHABILITATION PLAN) (dated 31 May 2016)	REHABILITATION PLAN) (dated 31 May 2016) contains monitoring requirements. Limited evidence available of monitoring occurring. Although a request has not been made by the Department accurate records substantiating said activities are not maintained. .		
38	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within 1 month of being approved.	Interview with Environment Officer	No plans approved at this time.	NT	

Annex F

Departmental Correspondence

Oliver Moore

From: David Ross <david.ross@phoenixstrategic.com.au>
Sent: Sunday, 9 July 2017 7:41 PM
To: Oliver Moore
Subject: Re: Tarrawonga Coal Mine 2017 Independent Environmental Audit and Independent Biodiversity Audit

Hi Oliver

for your information, I didn't receive any comments or questions from the CCC to your invitation. Generally, they have been very happy with the efforts at Tarrawonga by staff.

regards
David

On Tue, Jul 4, 2017 at 10:44 AM, David Ross <david.ross@phoenixstrategic.com.au> wrote:
Thank you, Oliver. I have invited CCC members to comment.

If anything comes back from them, I'll collate all responses and forward them to you by Friday.

regards
David

On Fri, Jun 30, 2017 at 5:08 PM, Oliver Moore <Oliver.Moore@erm.com> wrote:

Hi,

I am currently completing an independent environmental audit on the Conditions of Approval issued to Whitehaven Coal for the Tarrawonga Coal Mine. The project also holds EPL #12365.

One of the requirements of the audit is that it is to be undertaken in consultation with relevant agencies. To that end, this email invites the Community Consultative Committee (CCC) to raise any questions or concerns regarding this project from an environmental management aspect.

The attached Terms of Reference outlines the audit process, and also introduces the approved team of suitably qualified, experienced and independent experts who will be undertaking the audit. The site inspection will be completed over the period 10-12 July 2017, therefore it would be appreciated if there are any concerns, areas of focus etc, they are raised before this date.

I can be contacted at the details listed below to discuss further.

Kind regards

Olly

Oliver Moore

Principal Environmental Consultant

ERM

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Oliver Moore

From: Kate Walsh <kate.walsh@industry.nsw.gov.au>
Sent: Friday, 7 July 2017 3:08 PM
To: Oliver Moore
Subject: RE: FW: Tarrawonga Coal Mine 2017 Independent Environmental Audit and Independent Biodiversity Audit

Hi Olly,

The NSW Department of Planning and Environment - Division of Resources and Geoscience (DRG) received your email "Tarrawonga Coal Mine 2017 Independent Audit and Independent Biodiversity Audit" on 30 June 2017.

DRG suggests the audit address the following questions. Note further that this listing is not intended to be exhaustive and that the auditor should consider all matters he or she considers appropriate.

Audit Component - Desktop

Is there a current Mining Operations Plan (MOP) in place and has it been approved by DRG?

Has the MOP been prepared in consultation with the relevant agencies as outlined in the Project Approval?

Is the rehabilitation strategy as outlined in the MOP consistent with the Project Approval in terms of progressive rehabilitation schedule; and proposed final land use(s)?

Has the rehabilitation objectives and completion criteria as outlined in the MOP been developed in accordance with the proposed final land(s) as outlined in the Project Approval?

Has a rehabilitation monitoring program been developed and implemented to assess performance against the nominated objectives and completion criteria? – verified by reviewing monitoring reports and rehabilitation inspection records.

Has a rehabilitation care and maintenance program been developed and implemented based on the outcomes of monitoring program? – verified by reviewing Annual Rehabilitation Programs or similar documentation.

Audit Component - Site Inspection

Are mining operations being conducted in accordance with the approved MOP (production, mining sequence etc.), including within the designated MOP approval boundary? – to be verified by site plans and site inspection.

Is rehabilitation progress consistent with the approved MOP as verified by site plans and a site inspection? This should include an evaluation against rehabilitation targets and whether the final landform is being developed in accordance with conceptual final landform in Project Approval.

Based on a visual inspection, are there any rehabilitation areas that appear to have failed or that have incurred an issue that may result in a delay in achieving the successful rehabilitation?

In addition to the above, the audit should note observations where rehabilitation procedures, practices and outcomes represent best industry practice.

Regards,

Kate

Kate Walsh | Inspector Environment
Division of Resources and Geoscience
516 High Street | Maitland NSW 2320
GPO Box 344 | Hunter Region Mail Centre NSW 2310
T: +61 (02) 4931 6739 | M: +61 (0) 427 039 514



From: Oliver Moore [mailto:Oliver.Moore@erm.com]
Sent: Friday, 30 June 2017 5:08 PM
To: christie.jackson@dpi.nsw.gov.au; john.trotter@industry.nsw.gov.au
Cc: Lachlan Johnson; Michael Gaggin; Matthew Flower; Tim Haydon
Subject: Tarrawonga Coal Mine 2017 Independent Environmental Audit and Independent Biodiversity Audit

Hi,

I am currently completing an independent environmental audit on the Conditions of Approval issued to Whitehaven Coal for the Tarrawonga Coal Mine. The project also holds EPL #12365.

One of the requirements of the audit is that it is to be undertaken in consultation with relevant agencies. To that end, this email invites the Department of Primary Industries to raise any questions or concerns regarding this project from an environmental management aspect.

The attached Terms of Reference outlines the audit process, and also introduces the approved team of suitably qualified, experienced and independent experts who will be undertaking the audit. The site inspection will be completed over the period 10-12 July 2017, therefore it would be appreciated if there are any concerns, areas of focus etc, they are raised before this date.

I can be contacted at the details listed below to discuss further.

Kind regards

Olly

Oliver Moore

Principal Environmental Consultant

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Contact Alice Buckley
Phone (02) 6841 7469
Email alice.buckley@dpi.nsw.gov.au

Our ref OUT17/27833
Your ref

Mr Oliver Moore
Principal Environmental Consultant - ERM
Level 15, 309 Kent Street
Sydney NSW 2000

By email: Oliver.Moore@erm.com

10th July 2017

Dear Oliver

Tarrawonga Coal Mine – Independent Environmental Audit

Thank you for the opportunity to comment on the planned independent environmental audit of the Tarrawonga Coal Mine.

DPI Water understands that the scope of the assessment as outlined under the development consent extends at least to compliance with:

- the conditions of consent;
- the statements of commitments as appended to the consent;
- any reporting or requirements within any relevant management plans prepared under the consent; and,
- all trigger action response plans for surface and groundwater impacts.

DPI Water requests that the audit considers compliance with the relevant water licensing requirements for the mining operation, including:

- Assessment as to whether the project holds the required water entitlements and licences under the *Water Management Act 2000* or *Water Act 1912* (as applicable);
- Compliance with the conditions of any water licences/approvals held;
- Identification of all water storages for the mine and identification of their licensing status being either exempt, subject to harvestable rights or regulated via a Water Access Licence;
- Quantification of both active and passive take by the project from each relevant water source and a comparison against previous predictions; and,
- Compliance with the management, monitoring and contingency requirements in following plans for the site:
 - Water Management Plan
 - Goonbri Creek Diversion and Flood Bund Concept Design Plan
 - Goonbri Creek Diversion and Low Permeability Barrier – Design and Construction

- Goonbri Creek Diversion and Low Permeability Barrier – Monitoring and Management Plan
- Rehabilitation Management Plan.

For further clarification of our submission please contact Alice Buckley, Water Regulation Officer (Dubbo) on (02) 6841 7469 or alice.buckley@dpi.nsw.gov.au.

Yours sincerely



Vickie Chatfield
Regional Manager,
Water Regulatory Operations
DPI Water

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