

INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD

Rasp Mine 2019 Independent Environmental Audit Report

Broken Hill Operations Pty Ltd, Rasp Mine
Broken Hill, NSW

Project Approval 07_0018 (MOD 5)

11th – 15th February 2019



Prepared for
NSW Government
Department of Planning and Environment

Report Version

Version	Date	Prepared by
Final Report	18 April 2019	Kurt Hammerschmid B.App.Sc. (Chem), M.Sc. Principal Auditor Integrated Environmental Systems Pty Ltd 1/3251 Point Nepean Road (PO Box 192) Sorrento, Victoria 3943 Adam Jones B.Com. B.Ec. LLB Lawyer Suite 503, 9-13 Bronte Road Bondi Junction, NSW 2022

Document History

Version Number	Date	Description
First Draft	18 March 2019	Draft Report for client review
Second Draft	29 March 2019	Draft Report incorporating client review feedback
Final Report	18 April 2019	Final Report including client responses in Table 2

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Issued by:  (Kurt Hammerschmid)

Date: 18 April 2019

Independent Audit Certification Form	
Development Name	Rasp Mine
Development Consent No.	Project Approval 07_0018 (MOD 5)
Description of Development	Mining for minerals and related activities
Development Address	130 Eyre Street, Broken Hill NSW 2880
Operator	Broken Hill Operations Pty Ltd
Operator Address	130 Eyre Street, Broken Hill NSW 2880
Independent Audit	
Title of Audit	Rasp Mine 2019 Independent Environmental Audit Report
<p><i>I certify that I have undertaken the independent audit and prepared the contents of the attached independent audit report and to the best of my knowledge:</i></p> <ul style="list-style-type: none"> • <i>The audit has been undertaken in accordance with relevant approval condition(s) and in accordance with the auditing standard AS/NZS ISO 19011:2014 and Post Approval Guidelines – Independent Audits;</i> • <i>The findings of the audit are reported truthfully, accurately and completely;</i> • <i>I have exercised due diligence and professional judgement in conducting the audit;</i> • <i>I have acted professionally, in an unbiased manner and did not allow undue influence to limit or over-ride objectivity in conducting the audit;</i> • <i>I am not related to any owner or operator of the development as an employer, business partner, employee, sharing a common employer, having a contractual arrangement outside the audit, spouse, partner, sibling, parent, or child;</i> • <i>I do not have any pecuniary interest in the audited development, including where there is a reasonable likelihood or expectation of financial gain or loss to me or to a person to whom I am closely related (i.e. immediate family);</i> • <i>Neither I nor my employer have provided consultancy services for the audited development that were subject to this audit except as otherwise declared to the lead regulator prior to the audit; and</i> • <i>I have not accepted, nor intend to accept any inducement, commission, gift or any other benefit (apart from fair payment) from any owner or operator of the development, their employees or any interested party. I have not knowingly allowed, nor intend to allow my colleagues to do so.</i> <p><i>Note.</i></p> <p>a) <i>The Independent Audit is an ‘environmental audit’ for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p>b) <i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement – maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents – maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Signature	
Name of Lead / Principal Auditor	Kurt Hammerschmid (Lead/Principal Auditor)
Address	1/3251 Point Nepean Road (PO Box 192) Sorrento, Victoria 3943
Email Address	hammer@cdi.com.au
Date:	18 April 2019

Independent Environmental Audit – Scope and Limitations

The scope of this independent environmental audit was limited to reviewing how the Proponent (Broken Hill Operations Pty Ltd, a wholly-owned subsidiary of CBH Resources Limited) at its Rasp Mine operations (located at 130 Eyre Street, Broken Hill NSW 2880) is maintaining environmental compliance against applicable conditions specified in:

- Project Approval 07_0018 MOD 5 approved under the former Part 3A of the Environmental Planning and Assessment Act 1979 (which continues as an approval of a transitional Part 3A project under Schedule 6A of that Act) by the delegate of the NSW Minister of Planning ('Project Approval' or 'PA');
- Environment Protection Licence Number 12559 as at 21 December 2017 ('EPL'); and
- Consolidated Mining Lease Number 7 as renewed on 17 January 2007 ('CML7').

The period covered by this independent environmental audit ('audit period') is from 6 February 2016 (the day after the last day of on-site attendance referred to in the previous audit report of 9 March 2016) to 15 February 2019 (the last day of the on-site component of this audit).

Unless otherwise indicated, in this audit report a reference to 'Broken Hill Operations', 'BHOP Rasp Mine', 'BHOP', 'CBH Resources Limited', 'CBH Resources' or 'CBH', is a reference to the Proponent.

This independent environmental audit was conducted by: a) direct verification of compliance against relevant conditions in the field (except underground operations); and b) 'sampling' a range of the documents, records and data associated with the mine and related activities. The nature of sampling during any form of compliance audit is such that it may not necessarily identify everything that the operation is, or is not doing, in relation to an individual condition of the Project Approval, EPL or CML7.

This independent environmental audit and associated audit report was commissioned by CBH Resources to directly meet Conditions 7 and 8 in Schedule 4 of the Project Approval. No other warranty, expressed or implied, is made as to the professional advice indicated in this report. Note that it may not contain sufficient information for the purposes of other parties or for other uses.

The content of this report applies only to matters which were available to and/or evident to the auditor at the time of this Independent Environmental Audit and within the scope of the audit. The status of environmental compliance can change in a limited time, which may be important if the report is used after any protracted delay.

The content of this report is based on the observations made during field inspections (excluding underground operations) and the associated documents and records reviewed, that were provided by BHOP during the audit. Field inspection locations were both targeted in accordance with relevant conditions (of the Project Approval, EPL and CML7) and also selected at random by the auditors to ensure that a representative sample of field activities could be inspected/audited against relevant conditions.

Environmental compliance audits such as this independent environment audit are typically based on the selective testing of the information and data being examined. Non-compliances may exist and not be detected. An environmental compliance audit is not designed to identify and detect all instances of non-compliance against the Project Approval, EPL and CML7 conditions, as it is not performed continuously throughout the year. The findings and comments expressed in this audit report have been formed and are based on the above limitations.

No analytical samples were collected during this audit to verify any former or current monitoring programs in place or data collected.

This audit report does not, and does not purport to, give legal advice on the actual or potential liabilities of the operation, or draw conclusions as to whether any particular circumstances constitute a breach of relevant legislation. Only qualified legal practitioners who are retained to provide legal advice can provide this advice.

Broken Hill Operations Pty Ltd, Rasp Mine – Independent Environmental Audit – Details

Operation Audited:	Broken Hill Operations Pty Ltd (BHOP), Rasp Mine, Broken Hill NSW 2880
Date(s) of on-site attendance at Audit:	11 th – 15 th February 2019 (5 days)
BHOP Audit Contact:	Mr Devon Roberts – Senior Environmental Advisor
Lead Auditor:	Mr Kurt Hammerschmid B.App.Sc. (Chem), M.Sc. Principal Auditor Integrated Environmental Systems Pty Ltd 1/3251 Point Nepean Road (PO Box 192), Sorrento, Victoria 3943
Audit Team Member:	Mr Adam Jones B.Com. B.Ec. LLB Lawyer Suite 503, 9-13 Bronte Road, Bondi Junction, NSW 2022
Scope of the Audit:	<ol style="list-style-type: none"> 1. The scope of the audit was to conduct an independent environmental audit and provide a subsequent report of findings as required by Conditions 7 and 8 in Schedule 4 of Project Approval 07_0018 MOD 5. 2. The scope of the audit included all relevant conditions (but excluding Definitions and Appendices unless otherwise specified in this report) specified in Project Approval Number 07_0018 MOD 5 (approved by the delegate of the NSW Minister for Planning on 2 November 2018), Environment Protection Licence Number 12559 as at 21 December 2017 (issued by the NSW Environment Protection Authority), and Consolidated Mining Lease Number 7 as renewed on 17 January 2007. 3. The scope of the audit was limited to the site of the BHOP Rasp Mine at 130 Eyre Street, Broken Hill NSW 2880. 4. The audit period for this audit was from 6 February 2016 (the day after the last day of on-site attendance as noted in the previous audit report of 9 March 2016) to 15 February 2019 (the last day of on-site attendance at this audit).
BHOP personnel interviewed during the Audit:	<ul style="list-style-type: none"> • Mr Giorgio Dall'Armi – General Manager • Mr Joel Sulicich – Manager Health, Safety, Environment and Training • Mr Devon Roberts – Senior Environmental Advisor • Ms Georgina Seward – Environmental Technical Officer • Mr Peter Waterhouse – Manager Metallurgy • Mr Peter Campbell – Manager Maintenance • Mr Ben Taylor – Manager Mining • Mr Colby Butcher – Mill Superintendent • Mr Casey Howse – Electrical Superintendent • Ms Michelle Marks – Commercial Superintendent • Mr Chris Williams – Mechanical Superintendent • Mr Eamonn Dare – Technical Services Superintendent • Mr Daniel Hitchcock – Senior Metallurgist • Ms Jan Corey – Health Coordinator • Mr Evo Tognoli – Surface Maintenance Planner • Mr Dylan Bow – Mill Supervisor (Crew 3) • Mr Martin Kent – Senior Mine Geologist • Mr Joshua Harvey – Emergency Services Officer
BHOP Rasp Mine Operational Areas visited/inspected between 11th and 15th February 2019 (underground operations were not inspected):	<ul style="list-style-type: none"> • Mine water management system (i.e. Settlement Pond, Event Ponds, S22 Dam) • Light vehicle and heavy vehicle washbays • Main workshop and surrounding area • Bulk surface fuel storage facilities • Enclosed crusher building (not operating during audit attendance)

	<ul style="list-style-type: none">• Enclosed conveyors and transfer points (not operating during audit attendance)• Dust Collector/Baghouse (not operating during audit attendance)• Process Plant (Mill) Control Room• Workshop (including maintenance planning office)• Mill/processing plant• Concentrate container loading facility• Rail load out area• Concentrate container storage area• TSF1 and TSF2• Waste rock dumps• Kintore Pit and decline• Carparks and B Double Truck Waiting Area• Holten Drive access gate• TEOM dust units and representative dust deposition gauges• On-site meteorological station• Representative groundwater monitoring bores• Representative in-situ blast and vibration monitors• Ryan Street (S49) Dam
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Executive Summary

Overview

This environmental compliance audit of BHOP's Rasp Mine in Broken Hill was conducted by the auditors with an on-site attendance over 5 days from 11th to 15th February 2019. BHOP provided requested additional information after the on-site attendance to assist the auditors in preparing this audit report.

The scope of this independent environmental audit included all relevant conditions (but excluding definitions and appendices unless otherwise specified in this report) specified in:

- Project Approval Number 07_0018 MOD 5 as approved on 2 November 2018 by the delegate of the NSW Minister for Planning ('Project Approval' or 'PA');
- Environment Protection Licence Number 12559 as at 21 December 2017, issued by the NSW Environment Protection Authority ('EPL');
- Consolidated Mining Lease Number 7 as renewed on 17 January 2007 ('CML7'); and
- the sighting of environmental and operational documentation, records, monitoring data, operating and field conditions relating to the operation of the BHOP Rasp Mine and related activities and conducting a number of interviews with relevant BHOP environmental, occupational health and operational personnel.

There have been five Modifications to the Project Approval since original approval on 31 January 2011, being:

- MOD 1 (March 2012) – Ventilation Shaft;
- MOD 2 (August 2014) – 24 Hour Primary Crusher;
- MOD 3 (March 2015) – Block 7 Extension;
- MOD 4 (September 2017) – Tailings Storage Facility; and
- MOD 5 (November 2018) – Cement Silo and Warehouse Extension.

This audit did not directly audit any 'additional' legislative or regulatory requirements that were not directly included as existing conditions within the existing Project Approval, EPL or CML7.

Context

This independent environmental audit is intended to satisfy conditions 7 and 8 in Schedule 4 of the Project Approval.

This independent environmental audit essentially targeted and audited completed work and on-site field practices associated with the BHOP Rasp Mine within the last three years (i.e. since the completion of the previous on-site independent environmental audit by Integrated Environmental Systems Pty Ltd in February 2016). The audit period for this audit is 6 February 2016 to 15 February 2019.

This audit report is the third independent environmental audit report completed at the BHOP Rasp Mine and submitted to the NSW Department of Planning and Environment under Project Approval 07_0018 to demonstrate the operation's existing level of statutory environmental compliance.

The Secretary of the DPE endorsed the appointment of the audit team (specifically, the Lead Auditor, Kurt Hammerschmid) by letter of 27 November 2018. The DPE's letter of 27 November 2018 is reproduced in Appendix 1 of this audit report.

Consultation letters were sent to the relevant agencies and other stakeholders prior to the auditors' on-site attendance. The consultation letters and responses received are reproduced in Appendix 2 of this audit report. The auditors have considered these responses from agencies and other stakeholders in preparing this audit report.

A discussion of actions taken by BHOP in response to the previous independent environmental audit in February 2016 is presented in Appendix 3 of this audit report.

A discussion of incidents (including any penalty infringement notices) and complaints and BHOP's performance in relation to response and management of these incidents and complaints is presented in Appendix 4 of this audit report.

Overall Findings

The overall findings of this independent environmental audit of the BHOP Rasp Mine in February 2019 are as follows:

- It is the Lead Auditor's opinion that at the time of this February 2019 audit, BHOP has implemented all reasonable and feasible measures to prevent and/or minimise material harm to the environment that may result from the construction, operation or rehabilitation of the project.
- BHOP does not have a cohesive system under ISO14001 Environmental Management System or an Integrated Management System, but relies on an Environmental Management Strategy which provides context for the formal system(s) and processes utilised by the operation.
- No extensive systematic (i.e. widespread) issues of environmental concern were observed during field inspections conducted during this February 2019 audit.
- The environmental performance and operational control demonstrated by BHOP Rasp Mine in the field was observed to be maintained to high standards.
- A total of 174 conditions across the Project Approval, EPL and CML7 were audited. As recorded in Table 1 of this audit report, this audit identified 124 'compliant' findings, 4 'not verified' findings, 28 'non-compliant' findings (consisting of 28 'low' risk level, 0 'medium' risk level, 0 'high' risk level), 7 'administrative non-compliance' findings, 4 'not triggered' findings, and 7 'notes'.
- BHOP was compliant with 124 of the 170 applicable conditions (i.e. all conditions except those which were 'not triggered').
- BHOP's level of compliance with the applicable conditions (i.e. all conditions except those which were 'not triggered') in each instrument was as follows:
 - BHOP was compliant with 48 of the 67 applicable Project Approval conditions;
 - BHOP was compliant with 52 of the 75 applicable EPL conditions;
 - BHOP was compliant with 24 of the 28 applicable CML7 conditions.
- This audit report includes 102 observations. Observations are provided for BHOP's consideration to improve levels of compliance and enable continual improvement to be demonstrated in statutory compliance, environmental management and environmental practices across the operation.

Specific Findings

The non-compliances identified during this February 2019 are set out below and are also described in Table 2 of this audit report. Coloured text in the condition title indicates the relevant Modification to the Project Approval, as noted immediately above Table 2.

Project Approval 07 0018 MOD 5

Schedule 2 – Condition 8 – Structural Adequacy – Administrative non-compliance – At the time of this February 2019 audit, BHOP was unable to provide evidence (e.g. an occupation certificate) that the Concrete Batching Plant was constructed in accordance with the relevant requirements of the Building Code of Australia.

Schedule 2 – Condition 10 – Operation of Plant and Equipment – Non-compliant (low risk) – During the audit period there were several incidents involving failures in environmental monitoring equipment. For example, TEOM data for PM₁₀ was not collected from TEOM2 in April and May 2018 due to a storage card malfunction in TEOM2 and the data was not being downloaded or being reviewed on a daily basis. It is acknowledged that redundant/dual data acquisition has since been installed and daily data downloads are now occurring.

Schedule 3 – Condition 3 – Air Quality and Greenhouse Gas – Air Quality Criteria – Non-compliant (low risk) – During the audit period, some minor isolated exceedances were experienced in Total Suspended Particulates, PM₁₀ and total depositional dust, against limits defined in Tables 1, 2 and 3 of this condition.

Schedule 3 – Condition 10 – Air Quality and Greenhouse Gas – Operating Conditions – Non-compliant (low risk) – Given the inclusion of a definition of TSF2 as "tailing storage facility 2" in the MOD 4 Project Approval, it is considered that this condition applies to TSF2 and to any other tailings storage facility. No video recording equipment for management of emissions from TSF2 was in place during the audit period.

Schedule 3 – Condition 11 – Air Quality and Greenhouse Gas – Air Quality Management Plan – Non-compliant (low risk) – BHOP’s current AQMP (revision no. 5 issued on 28 September 2017) does not include the following details:

- There is no provision for triggering the automated water spray system referred to in the first dot point of paragraph (c) because the system has not yet been installed. It is acknowledged that section 5.9 of BHOP’s ‘Construction Environment Management Plan TSF2 Embankment Construction’ (BHO-PLN-ENV-012, revision no. 1 issued on 17 January 2019) states: “The spray system is to be installed once EMB2 has been completed and access to the Pit rim becomes available, and will be designed such that the piping and sprays can be activated at any time during operations.”
- There are no protocols in the AQMP for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions (paragraph (k)).
- There is no contingency plan in the AQMP should an incident, upset or other initiating factor lead to elevated dust impacts, whether above normal operating conditions or above environmental performance goals/limits (paragraph (l)).

Schedule 3 – Condition 18 – Noise and Vibration – Blasting Limits – Non-compliant (low risk) – In the audit period (relating to Table 9: Blasting Criteria (Block 7)) BHOP exceeded the allowable 5% above 3mm/s limit of the total number of blasts over a 12 month period at Block 7 (V5 blast monitor). A total of four blasts were recorded over 3 mm/sec and ranged from 3.07 mm/sec to 3.45 mm/sec. No external complaints from these blasts in Block 7 were received. The non-compliance with the 5% allowable limit is a result of the reduced number of blasts calculated in the 12 month rolling average.

Schedule 3 – Condition 20 – Noise and Vibration – Noise and Blast Management Plan – Non-compliant (low risk) – BHOP’s current BMPMP and TBMP do not address activities associated with the construction of the Concrete Batching Plant and TSF2 (i.e. the TSF2 Embankment Lift) and the capping and rehabilitation of TSF2 (paragraph (c)).

Schedule 3 – Condition 32 – Waste – Non-compliant (low risk) – Whilst most regulated waste and recyclable products are segregated at source, no formal program has been developed and implemented by BHOP to continue to proactively review, identify and implement additional programs to minimise waste going to landfill and the volume of waste being recycled (i.e. BHOP waste minimisation plans should formally include existing and planned programs to reduce waste in the future).

Schedule 3 – Condition 33A – Waste – Non-compliant (low risk) – In relation to the WMP:

- No documented record exists to demonstrate that BHOP submitted an updated WMP to the Secretary for approval prior to December 2017 (i.e. the current 2012 WMP was not submitted and the draft WMP (V4), dated January 2019, has not been issued).
- BHOP’s current 2012 WMP (Rev 2) does not define the action plan (i.e. actions, responsibilities and timeframes) for effective and improved waste management across the operation.

Schedule 3 – Condition 34A – Rehabilitation – Rehabilitation Strategy – Non-compliant (low risk) – BHOP did not submit a Rehabilitation Strategy to the DPE for approval by the end of June 2018.

Schedule 3 – Condition 35 – Rehabilitation – Rehabilitation Management Plan – Non-compliant (low risk) – At the time of this February 2019 audit, no Rehabilitation Management Plan has been developed by BHOP. The BHOP Rasp Mine 2017 – 2019 Mining Operations Plan and the September 2015 draft Mine Closure Plan do not clearly document how the requirements of this condition have been satisfied.

Schedule 4 – Condition 2 – Environmental Management – Management Plan Requirements – Non-compliant (low risk) – In relation to paragraphs (a), (e) and (f) of this condition:

- Not all of the EMPs include detailed baseline data (however Appendix E of the AQMPMP which forms part of the AQMP, includes baseline air quality monitoring data, and section 6.2 of the SWMP includes baseline data of surface water flows and quality).
- Not all of the EMPs include a contingency plan (or any reference to a contingency plan) to manage any unpredicted impacts and their consequences (however sections 7.1 and 7.2 of the CLMP identify ‘contingency’ measures where air quality trends indicate an increase in lead emissions which can be attributed to the Rasp Mine, and section 11.3.3 of the SWMP includes details of contingency measures in relation to unacceptable impacts to groundwater).
- None of the EMPs include information relating to programs to investigate and implement ways to improve the environmental performance of the project over time.

Schedule 4 – Condition 3 – Environmental Management – Annual Review – Administrative non-compliance – According to the DPE’s letter of 19 September 2018, the 2017 AEMR was submitted on 24 July 2018, which is outside the annual ‘by the end of June’ requirement.

Schedule 4 – Condition 4 – Environmental Management – Revision of Strategies, Plans & Programs – Non-compliant (low risk) – During the audit period there were several instances of BHOP not complying with the three month requirement in this condition. For example, a majority of the required strategies, plans and programs under the Project Approval have not been formally reviewed since the granting of the MOD 5 approval on 2 November 2018. Document control information (i.e. version history) for these strategies, plans and programs does not indicate whether these documents were reviewed after the MOD 5 approval.

Schedule 4 – Condition 5 – Reporting – Incident Notification – Non-compliant (low risk) – Whilst BHOP can demonstrate prompt notification of incidents to the EPA, there is no evidence that the DPE is being notified of incidents as required under the Project Approval.

Schedule 4 – Condition 9 – Access to Information – Administrative non-compliance – The following documents which this condition requires to be on the CBH website, were not on the CBH website as of February 2019:

- Statement of Environmental Effects for the MOD 5 application;
- Blasting Monitoring Program Management Plan;
- Technical Blasting Management Plan;
- the Conservation Management Plan which had not been formally issued as of February 2019;
- the Rehabilitation Management Plan which had not been formally issued as of February 2019; and
- the independent environmental audit report of November 2012 (Graham A Brown & Associates).

Environment Protection Licence Number 12559 as at 21 December 2017

Limit Conditions – Pollution of waters – Condition L1.1 – Non-compliant (low risk) – As noted in the 2016 Annual Return (page 27), on 5 October 2016 there was a seepage from the Ryan Street Dam (S49) following heavy rain which caused the Dam to overflow with water, and water seeped from the downstream toe of the Dam. Since this incident, the Dam has been lined.

Limit Conditions – Blasting – Condition L5.2 – Non-compliant (low risk) – In the audit period (relating to the table in this condition) BHOP exceeded the allowable 5% above 3mm/s limit of the total number of blasts over a 12 month period at Block 7 (V5 blast monitor). A total of four blasts were recorded over 3 mm/sec and ranged from 3.07 mm/sec to 3.45 mm/sec. No external complaints from these blasts in Block 7 were received. The non-compliance with the 5% allowable limit is a result of the reduced number of blasts calculated in the 12 month rolling average.

Operating Conditions – Maintenance of plant and equipment – Condition O2.1 – Non-compliant (low risk) – On 28 September 2018 BHOP was fined \$15,000 by the EPA for a breach of this condition. TEOM data for PM₁₀ was not collected from TEOM2 in April and May 2018 due to a storage card malfunction in TEOM2 and the data was not being downloaded or being reviewed on a daily basis.

Operating Conditions – Maintenance of plant and equipment – Condition O3.3 – Non-compliant (low risk) – BHOP is unable to ‘immediately’ suppress dust from TSF2, as a spray system or alternative dust control measure(s) have not yet been installed.

Operating Conditions – Maintenance of plant and equipment – Condition O3.4 – Non-compliant (low risk) – The use of a mobile crusher (as occurred once in the audit period) is not authorised under the EPL. Crushing of extracted material must only occur inside the existing crusher enclosure.

Operating Conditions – Processes and management – Condition O4.1 – Non-compliant (low risk) – Some surface water storage ponds are not being maintained to ensure that sedimentation does not reduce their capacity by more than 10% of the design capacity.

Monitoring and Recording Conditions – Requirement to monitor concentration of pollutants discharged – Condition M2.1 – Non-compliant (low risk) – TEOM data for PM₁₀ was not collected from TEOM2 in April and May 2018 due to a storage card malfunction in TEOM2 and the data was not being downloaded or being reviewed on a daily basis.

Monitoring and Recording Conditions – Requirement to monitor concentration of pollutants discharged – Condition M2.2 – Non-compliant (low risk) – During the audit period, BHOP did not collect the required number of surface and groundwater samples at all the monitoring points (i.e. as a result of dry climatic conditions) defined in the tables in this condition.

Monitoring and Recording Conditions – Requirement to monitor concentration of pollutants discharged – Condition M2.3 – Non-compliant (low risk) – During the audit period, BHOP did not satisfy the requirements of this condition as follows:

- For Monitoring Point 10, the required number of samples for Air Quality Monitoring (i.e. HVAS for TSP and Lead) did not occur at Monitoring Point 10.
- For Monitoring Points 11 and 12, the required number of samples for Air Quality Monitoring for PM₁₀ did not occur at: a) Monitoring Points 11 and 12 in 2018; and b) for Monitoring Point 11 in 2016.
- For Monitoring Point 14, the required number of daily samples for Air Quality Monitoring for PM₁₀ did not occur at Monitoring Point 14 in 2018.
- Data for the BHOP high volume air samplers (HVAS) was not available for May 2018, as filters were mislaid during transport to the external laboratory.

Monitoring and Recording Conditions – Weather monitoring – Condition M4.1 – Non-compliant (low risk) – From 2016 to 2018, BHOP’s meteorological station did not calculate Sigma Theta as required by this condition.

Monitoring and Recording Conditions – Blasting – Condition M7.1 – Non-compliant (low risk) – A blast monitor at V3 ceased operating in August 2018 and BHOP was unable to obtain permission to enter the property for a week to restart the monitor.

Reporting Conditions – Annual return documents – Condition R1.5 – Administrative non-compliance – BHOP submitted the November 2018 Annual Return by email on 21 December 2018 (i.e. not via eConnect EPA or by registered post).

Reporting Conditions – Annual return documents – Condition R1.6 – Non-compliant (low risk) – No additional report, which provides information required by paragraphs a) and b) of this condition, was submitted with the November 2016 or November 2017 Annual Returns. An Annual Blast Compliance Report was included as an appendix within the November 2018 Annual Return.

Reporting Conditions – Annual return documents – Condition R1.8 – Administrative non-compliance – In relation to the November 2016 and November 2017 Annual Returns:

- Section H of the November 2017 Annual Return was not signed and dated by BHOP’s Secretary; and
- Section H of the November 2016 Annual Return was not signed and dated by either a BHOP Director or BHOP’s Secretary.

Pollution Studies and Reduction Programs – Blast compliance management program – Condition U1.1 – Non-compliant (low risk) – BHOP failed to prepare and submit the required Production Blast Management Report with its November 2017 Annual Return (reporting period 2 November 2016 to 1 November 2017).

Consolidated Mining Lease Number 7

Notice to Landholders – Condition 1 – Administrative non-compliance – At the time of this February 2019 audit, BHOP was unable to provide evidence of written notification to landholders of the leased land or of a published notice in a newspaper circulating in the lease area.

Mining, Rehabilitation, Environmental Management Process (MREMP) – Mining Operations Plan – Condition 2 – Administrative non-compliance – In relation to paragraphs (a) and (b) of this condition:

- BHOP was unable to provide evidence of the Resources Regulator’s approval of the current MOP; and
- the current MOP does not identify how the mine will be managed to allow mine closure due to an apparent lack of agreement for end land use, which has continued to the time of this February 2019 audit.

Reports – Condition 7 – Non-compliant (low risk) – At the time of this February 2019 audit, BHOP was unable to provide evidence of exploration reports being prepared and provided to the DPE (Division of Resources & Geoscience) within the required 28 day period.

Exploratory drilling – Condition 15 – Non-compliant (low risk) – At the time of this February 2019 audit, BHOP was unable to provide evidence of having given the minimum 28 days’ notification of exploratory drilling to the DPE (Division of Resources & Geoscience).

Observations

Selected observations from this February 2019 audit are reproduced below. BHOP is encouraged to review all observations in Table 2 of this audit report.

- **Observation No. 1** – To enable significant environmental risks to be proactively determined and addressed to minimise material harm, BHOP could review and update the existing site Environmental Risk Register that was last revised in 2010. Once this review is completed, the updated Environmental Risk Register could form the basis for developing future Environmental Improvement Plans.
- **Observation No. 7** – To improve the ongoing status of compliance with monitoring requirements of the Project Approval and EPL, the servicing, maintenance and repair of BHOP's environmental monitoring equipment could be assigned a Priority 1 status in the Pronto system.
- **Observation No. 43** – During this February 2019 audit it was observed that BHOP workshop personnel could improve their waste segregation practices (i.e. there was evidence of hydrocarbon contaminated waste being incorrectly discarded in general waste skip bins) and timely replenishment of spill kits.
- **Observation No. 61** – BHOP could consider installing locks on all groundwater monitoring bores to prevent the risk of groundwater contamination from unauthorised access to those bores.
- **Observation No. 70** – For the purpose of environmental risk assessment, BHOP could investigate and determine the exact location and point in time when BHOP ceases to have responsibility for concentrate which is transported off-site (i.e. potentially referenced in the conditions of carriage or customer contracts).
- **Observation No. 78** – BHOP is encouraged to purchase a formal environmental database and discontinue the use of multiple spreadsheets for the retention of environmental monitoring data and records. Once purchased, BHOP could request ALS to submit this data as electronic CSV files for uploading into the on-site database.
- **Observation No. 92** – At least annually, and if sufficient monitors exist, BHOP could operate one new blast monitor (i.e. Micromate model) against an older blast monitor (i.e. Minimate model) as a QA/QC measure to confirm the accuracy and functionality of the older Minimate blast monitors.

Compliance Assessment Criteria

The compliance status for each condition of the Project Approval, EPL and CML7 was assessed in accordance with the following criteria in section 4.1 of the NSW Government's *Independent Audit Guideline (Post-approval requirements for State significant developments October 2015)*.

Assessment	Criteria
Compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit.
Not verified	Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement.
Non-compliant	Where the auditor has collected sufficient verifiable evidence to demonstrate that 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	A technical non-compliance with a regulatory approval that would not impact on performance and that 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. exceedance 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).
Not triggered	A regulatory approval requirement has an activation or timing trigger that had not been met at the time of the audit inspection, therefore a determination of compliance could not be made.
Observation	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. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
Note	A statement or fact, where no assessment of compliance is required.

Risk levels for Assessed Non-Compliances

Risk levels for assessed non-compliances were identified in accordance with the following risk levels in section 4.1 of the NSW Government's *Independent Audit Guideline (Post-approval requirements for State significant developments October 2015)*.

Risk level	Colour code	Description
High		Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium		Non-compliance with: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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)

Summary of Compliance Status

Table 1 below summarises the findings identified in this February 2019 audit against the Project Approval conditions, EPL conditions and CML7 conditions.

Table 1: BHOP Rasp Mine – Summary of Compliance Status as identified in the February 2019 Independent Environmental Audit

Condition and Audit Finding	Compliant	Not verified	Non-compliant Risk level			Administrative non-compliance	Not triggered (as at February 2019)	Note	Observation
			High	Medium	Low				
Project Approval 07_0018 (MOD 5) Schedule 2 – Administrative Conditions (12 conditions)	9	-	-	-	1	1	-	1	7
Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions (45 conditions)	35	-	-	-	9	-	-	1	43
Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing (11 conditions)	4	1	-	-	3	2	1	-	7
Environment Protection Licence Number 12559 (77 conditions)	52	3	-	-	13	2	2	5	39
Consolidated Mining Lease Number 7 (29 conditions)	24	-	-	-	2	2	1	-	6
Total (174 Conditions)	124	4	-	-	28	7	4	7	102

Details of Compliance Status

Table 2 below provides detailed information regarding the findings identified in this February 2019 audit against the Project Approval conditions, EPL conditions and CML7 conditions. Observations are provided for BHOP's consideration to improve levels of compliance and enable continual improvement to be demonstrated in statutory compliance, environmental management and environmental practices across the operation. 'Auditor's Notes' in Table 2 are for the relevant authority's consideration.

In relation to the Project Approval 07_0018 conditions as reproduced in Table 2 below:

- Black type represents the original Project Approval of 31 January 2011;
- Red type represents the March 2012 Modification (MOD 1 – Ventilation Shaft);
- Blue type represents the August 2014 Modification (MOD 2 – 24 Hour Primary Crusher);
- Green type represents the March 2015 Modification (MOD 3 – Block 7 Extension);
- Purple type represents the September 2017 Modification (MOD 4 – Tailings Storage Facility);
- Dark blue type represents the November 2018 Modification (MOD 5 – Cement Silo and Warehouse Extension).

Table 2: BHOP Rasp Mine – Detailed Compliance Status as identified in the February 2019 Independent Environmental Audit

Project Approval 07_0018 (MOD 5) Schedule 2 – Administrative Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Schedule 2 – Condition 1 – Obligation to Minimise Harm to the Environment</p> <p>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.</p>	<p>Compliant Observation</p>	<p>It is the Lead Auditor's opinion that at the time of this February 2019 audit, BHOP has implemented all reasonable and feasible measures to prevent and/or minimise material harm to the environment that may result from the construction, operation or rehabilitation of the project.</p> <p>BHOP has implemented a range of measures and controls (e.g. an Environmental Management Strategy, the Pronto asset management and preventative maintenance system, environmental monitoring programs) to prevent and/or minimise environmental harm that may result from the construction, operation or rehabilitation of the project.</p> <p>Observation No. 1 – To enable significant environmental risks to be proactively determined and addressed to minimise material harm, BHOP could review and update the existing site Environmental Risk Register that was last revised in 2010. Once this review is completed, the updated Environmental Risk Register could form the basis for developing future Environmental Improvement Plans.</p>	<p>Ob 1 – To be actioned by BHOP.</p>
<p>Schedule 2 – Condition 2 – Terms of Approval</p> <p>The Proponent must carry out the project: (a) generally in accordance with the EA; and</p>	<p>Compliant</p>	<p>There was evidence during this February 2019 audit that BHOP is managing the BHOP Rasp Mine project generally in accordance with the requirements specified in the documents defined in</p>	

Project Approval 07_0018 (MOD 5) Schedule 2 – Administrative Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
(b) in accordance with the conditions of this approval. <i>Note: The general layout of the project is shown in Appendix 2.</i>		<p>paragraphs (a) and (b) of this condition.</p> <p>At the time of this February 2019 audit:</p> <ul style="list-style-type: none"> The MOD 4 works have been partially completed with the construction and commissioning (in September 2018) of the Concrete Batching Plant. Subject to the appointment of a suitable contractor, BHOP expects to commence works for the TSF2 Embankment Lift in April 2019, with these works to be completed in approximately five months. The MOD 5 works (Cement Silo and Warehouse Extension) are still in design stage. 	
<p>Schedule 2 – Condition 3 – Terms of Approval</p> <p>If there is any inconsistency between the documents listed in condition 2 above, the most recent document in the relevant condition shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.</p>	Note	The potential for inconsistency between the documents listed in condition 2 of this Schedule, and the prevailing nature of the conditions of the Project Approval, is acknowledged by relevant BHOP personnel.	
<p>Schedule 2 – Condition 4 – Terms of Approval</p> <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 the conditions of this approval; and</p> <p>(b) the implementation of any actions or measures contained in these documents.</p>	Compliant	<p>Relevant BHOP personnel were aware of and understood this condition.</p> <p>In the audit period the DPE assessed BHOP's MOD 4 and MOD 5 applications. The DPE's assessment reports (with recommendations for approval of the MOD 4 application and the MOD 5 application) did not impose any requirements other than the proposed conditions of approval which were subsequently included in the Project Approval.</p>	
<p>Schedule 2 – Condition 5 – Limits on Approval – Mining Operations</p> <p>The Proponent may carry out mining operations on site until 31 December 2026.</p> <p><i>Note to Condition 5: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this approval will continue to apply in all respects – other than the right to conduct</i></p>	Compliant Observation	<p>Relevant BHOP personnel were aware of and understood the current end date of 31 December 2026 for mining operations.</p> <p>This end date is acknowledged in section 2.1 of the current Rasp Mine Mining Operations Plan (MOP) covering the period from 1 October 2017 to 30 September 2019.</p> <p>Observation No. 2 – BHOP could update the reference to “June 2026” in the final sentence in the first paragraph of section 2.1 of the MOP, which currently reads: “Currently the Project is in year 6 with a</p>	Ob 2 – To be actioned by BHOP.

Project Approval 07_0018 (MOD 5) Schedule 2 – Administrative Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<i>mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.</i>		projected 9 years to the end of mine life in June 2026, expiry of PA07_0018.”	
<p>Schedule 2 – Condition 6 – Limits on Approval – Production</p> <p>The Proponent shall not extract more than 750,000 tonnes of ore per annum, or more than 8,450,000 tonnes of ore over the life of the project.</p>	Compliant Observation	<p>As noted in BHOP’s Annual Environmental Management Reports (AEMRs) for 2016 (Table 4.4) and 2017 (Tables 4-4 and 4-6), production figures (i.e. tonnes of feed to the mill) on a calendar year basis in the audit period were:</p> <ul style="list-style-type: none"> • 2016 – 627,811 tonnes; • 2017 – 720,832 tonnes; • 2018 (predicted) – 721,573 tonnes. <p>It was stated that as of February 2019, BHOP had extracted approximately 3.6 million tonnes of ore since commissioning of the project in 2012.</p> <p>Observation No. 3 – BHOP could revise the production summaries in future AEMRs to refer to “extraction” as defined in this condition.</p>	Ob 3 – To be actioned by BHOP.
<p>Schedule 2 – Condition 7 – Limits on Approval – Transport</p> <p>Until ore processing facilities have been constructed and commissioned on the site, the Proponent is permitted to transport crushed ore by road to the Endeavour Mine, or such other location approved by the Secretary, for processing. Following commissioning of the ore processing facilities, the Proponent shall only transport zinc and lead concentrates from the site by rail, except in an emergency situation and with the prior written approval of the Secretary.</p>	Compliant	<p>It was stated that during the audit period BHOP has only used rail for the transportation of zinc and lead concentrates.</p> <p>Zinc concentrate is transported by rail by CBH’s Shiploader in Newcastle, NSW.</p> <p>It was stated that lead concentrate is usually transported by rail to Nystar at Port Pirie, South Australia. However at the time of this February 2019 audit, lead concentrate was being transported by rail to CBH’s Shiploader in Newcastle (not intended to be a permanent arrangement).</p>	
<p>Schedule 2 – Condition 8 – Structural Adequacy</p> <p>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.</p> <p><i>Notes to Condition 8:</i></p> <ul style="list-style-type: none"> • Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and 	Administrative non-compliance	<p>As noted in the 2015 AEMR (section 5.1), 2016 AEMR (section 7.1) and the 2017 AEMR (section 8.1): “There were no buildings erected or demolished during the year.”</p> <p>It was stated that the only new structure constructed on site in the audit period was the Concrete Batching Plant (commissioned in September 2018).</p> <p>Administrative non-compliance – At the time of this February 2019 audit, BHOP was unable to provide evidence (e.g. an occupation</p>	<p>NC – To be actioned by BHOP.</p> <p>A Building Certificate from the Broken Hill City Council will be sought for the Concrete Batching Plant.</p>

Project Approval 07_0018 (MOD 5) Schedule 2 – Administrative Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<ul style="list-style-type: none"> Part 8 of the EP&A Regulation sets out the requirements for the certification of the project. 		<p>certificate) that the Concrete Batching Plant was constructed in accordance with the relevant requirements of the Building Code of Australia.</p> <p>It was stated that asbestos removal is expected to occur in the future within some buildings on site, including roof replacement works that will occur as a result of hail damage from a previous storm.</p>	
<p>Schedule 2 – Condition 9 – Demolition</p> <p>The Proponent shall ensure that all demolition work is carried out in accordance with <i>Australian Standard AS 2601-2001: The Demolition of Structures</i>, or its latest version.</p>	Compliant	<p>As noted in the 2015 AEMR (section 5.1), 2016 AEMR (section 7.1) and the 2017 AEMR (section 8.1): “There were no buildings erected or demolished during the year.”</p> <p>It was stated that if any demolition work is to occur, BHOP would ensure that work is carried out in accordance with this condition.</p>	
<p>Schedule 2 – Condition 10 – Operation of Plant and Equipment</p> <p>The Proponent shall ensure that all the plant and equipment used on site, or to transport materials to and from the site, is:</p> <p>(a) maintained in a proper and efficient condition; and</p> <p>(b) operated in a proper and efficient manner.</p>	<p>Non-compliant (low risk)</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>BHOP uses the Pronto software system to record its plant and equipment assets, and for maintenance planning and scheduling.</p> <p>In relation to paragraph (a) of this condition, records which were sighted in this February 2019 audit included:</p> <ul style="list-style-type: none"> maintenance records (a history of scheduled services and unscheduled repairs) held in the Pronto system (including assigned work priorities from ‘1’ to ‘5’, with ‘1’ being immediate, ‘2’ within 24 hours, ‘3’ within 7 days, ‘4’ within 4 weeks and ‘5’ during shutdown) for assets including the Baghouse (Pronto item 310-DC-01), the BHOP-owned Isuzu water truck (Pronto item WT-03) and the washbay at the entrance to the mining area of the site (Pronto item RINFR-TW); completed Workshop Weekly Inspection Records (Work Order No. 0189880 for an inspection on 27 November 2018, and Work Order No.0192594 for an inspection on 18 December 2018); and completed Weather Station and TEOM Units Inspections Log Sheet Forms (BHO-FRM-ENV-009) for dates from 4 February 2019 to 13 February 2019, and 14 September 2018 to 25 September 2018. 	<p>Ob 4 – Noted.</p> <p>Ob 5 – Noted.</p> <p>Ob 6 – Noted.</p> <p>NC – Measures implemented to reduce risk of reoccurrence. Refer to show cause response of 27 July 2018.</p> <p>Ob 7 – To be actioned by BHOP.</p>

Project Approval 07_0018 (MOD 5) Schedule 2 – Administrative Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		 <p>Photos 1 and 2 – Example of repairs to concentrate shipping transport container (rail) (February 2019)</p> <p>Observation No. 4 – Completed hard copy inspection forms could be scanned and entered into the Pronto system:</p> <ul style="list-style-type: none"> to facilitate ease of reference in tracking relevant work orders from the date of inspection (as distinct from entry into the Pronto system) to date of completion; and as a back-up measure in the event that the original forms are mislaid. <p>Observation No. 5 – The operating manual for the Baghouse was sighted in the Pronto system (a PDF file in the Pronto item record). However the applicable operating manuals for the Isuzu water truck and the washbay were not available in the Pronto system, which would require the relevant workshop personnel to look elsewhere for the manufacturer's original instructions if these were required. BHOP could consider implementing a program to scan and include PDF versions of relevant operating manuals with the relevant Pronto items.</p> <p>Observation No. 6 – At the time of this February 2019 audit the number of spare bags held on site for use in the Baghouse could not be identified in the Pronto system or in hard copy. The Pronto system indicated that the site ordered 196 bags on 16 November 2016 but did not indicate the number of spare bags held on site at the time of this audit. BHOP could review the Pronto system to ensure it can provide information regarding the quantity of spare bags held on site.</p> <p>In relation to paragraph (b) of this condition, records which were sighted in this February 2019 audit included:</p> <ul style="list-style-type: none"> examples of the INX InTuition 'Person Status Report' which 	

Project Approval 07_0018 (MOD 5) Schedule 2 – Administrative Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>recorded the status of competencies (e.g. TRN-001-Rasp Mine Site Induction, PRO-SAF-006 Job Safety Analysis (JSA) Procedure) of a BHOP employee and of a employee of a long-term contractor (Jetcrete);</p> <ul style="list-style-type: none"> • a Monthly Role Requirements Training Status Report (Excel spreadsheet), which indicated the competency status of BHOP employees and contractors as at 6 February 2019; • emails of 4 September 2018 and 6 February 2019 from BHOP's Training Coordinator to relevant BHOP personnel and contractors regarding progress in achieving the respective Rasp Business Plan training targets for 2018 and 2019; and • a Change Management Training PowerPoint presentation (version no. 1 dated 26 December 2017, Doc ID: BHO-PPT-TRN-102) in relation to health, safety and environment. <p>Non-compliant (low risk) – During the audit period there were several incidents involving failures in environmental monitoring equipment. For example, TEOM data for PM₁₀ was not collected from TEOM2 in April and May 2018 due to a storage card malfunction in TEOM2 and the data was not being downloaded or being reviewed on a daily basis. It is acknowledged that redundant/dual data acquisition has since been installed and daily data downloads are now occurring.</p> <p>Observation No. 7 – To improve the ongoing status of compliance with monitoring requirements of the Project Approval and EPL, the servicing, maintenance and repair of BHOP's environmental monitoring equipment could be assigned a Priority 1 status in the Pronto system.</p>	
<p>Schedule 2 – Condition 11 – Staged Submission of any Strategy, Plan and Program</p> <p>With the approval of the Secretary, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.</p>	<p>Compliant</p>	<p>During the audit period BHOP has not requested the Secretary's approval for any strategy, plan or program to be submitted on a progressive basis.</p> <p>An "Options Analysis Study" for rehabilitation of the site is currently being prepared by external consultant, MineEarth (WA). At the time of this February 2019 audit the study was due for completion at the end of February 2019. It is possible that future rehabilitation activities could be progressive (to be determined by BHOP) depending on the outcome of the study.</p>	

Project Approval 07_0018 (MOD 5) Schedule 2 – Administrative Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Schedule 2 – Condition 12 – Surrender of Development Consents</p> <p>Within six months of the commencement of works the subject of this approval, the Proponent shall surrender all existing development consents applying to the site in accordance with sections 75YA and 104A of the EP&A Act.</p>	<p>Compliant</p>	<p>As noted in the 2016 audit report:</p> <p>“It was stated that no archive folder of former approvals is currently maintained by the operation.</p> <p>It was stated that BHOP would experience difficulty in surrendering Development Consents/Approvals that have expired.”</p>	

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Schedule 3 – Condition 1 – Air Quality and Greenhouse Gas – Odour</p> <p>The Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.</p>	Compliant	<p>During the audit period no odour-related complaints have been received by BHOP.</p> <p>The only source of known localised odours at the operation relates to the use of flotation chemicals within the process plant. It was stated that the quantity and scale of use of bulk flotation chemicals is insufficient to enable odours from these chemicals to be detected at the boundary of the site.</p>	
<p>Schedule 3 – Condition 2 – Air Quality and Greenhouse Gas – Greenhouse Gas Emissions</p> <p>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.</p>	<p>Compliant</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>BHOP has no formal ongoing program for the improvement of energy efficiency, reduced energy use or greenhouse abatement.</p> <p>It was stated that the primary consumers of energy at the operation include: a) electricity for the process plant; b) electricity for vent fans; and c) diesel consumed by the mining fleet.</p> <p>Electricity utilised by BHOP at the Rasp Mine is sourced from the state electricity network/grid.</p> <p>Greenhouse emissions for the operation are reported in the annual National Pollutant Inventory (NPI) that is submitted to the NSW NPI Team at the NSW Environment Protection Authority and annual NGERS reports that are submitted to the Commonwealth Government's Clean Energy Regulator.</p> <p>It was stated that BHOP is improving existing NPI and NGERS reporting/calculation requirements.</p> <p>As of February 2019, no formal or informal voluntary greenhouse gas emissions reduction program had been developed or implemented at BHOP.</p> <p>No known energy reduction audits have been completed to identify actual and potential reduction programs and opportunities available to BHOP.</p> <p>At the time of this February 2019 audit the Secretary had not prescribed any requirements in relation to minimising the release of greenhouse gas emissions from the site.</p> <p>Observation No. 8 – BHOP is encouraged to develop and implement a suitable greenhouse gas emissions reduction program, inclusive of</p>	<p>Ob 8 – Noted.</p> <p>Ob 9 – Noted.</p> <p>Ob 10 – To be actioned by BHOP.</p> <p>Ob 11 – Noted.</p>

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>formal programs for energy reduction and improved energy efficiency.</p> <p>Observation No. 9 – BHOP could potentially benefit in commissioning an independent energy audit at the operation to identify opportunities for energy and greenhouse reduction programs and potential reductions in operating costs.</p> <p>Observation No. 10 – Unit emissions of greenhouse, as CO₂ per tonne of lead and/or zinc concentrate produced, could be determined since the commencement of operations. This will provide suitable baseline data for any planned energy and emissions reduction program that may be progressed in the future.</p> <p>Observation No. 11 – BHOP could consider whether an agreement could be reached with AGL (i.e. the owner of the Broken Hill Solar Farm) to source a specified percentage of the power utilised by BHOP as renewable/green energy.</p>	
<p>Schedule 3 – Condition 3 – Air Quality and Greenhouse Gas – Air Quality Criteria</p> <p>The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not cause an exceedance of the criteria listed in Tables 1, 2 or 3 at any residence on privately-owned land.</p>	<p>Non-compliant (low risk)</p> <p>Observation</p> <p>Observation</p>	<p>BHOP's current 'Air Quality or Dust or Other Contaminants Management Plan' (AQMP) is revision no. 5, issued on 28 September 2017, Doc ID: BHO-PLN-ENV-001. Section 9 of the AQMP defines avoidance and mitigation measures to help ensure particulate matter emissions generated by the project do not cause an exceedance of the criteria listed in Tables 1, 2 or 3 of this condition at any residence on privately-owned land. Refer to condition 5 of this Schedule for examples of BHOP's dust management practices.</p> <p><u>High Volume Air Samplers (HVASs)</u></p> <p>BHOP operates and maintains three HVASs to measure ambient air quality at the Rasp Mine:</p> <ul style="list-style-type: none"> HVAS (EPL10) and HVAS1 (EPL11) are located at the Silver Tank, central and to the south of the mine lease; and HVAS2 (EPL12) is located adjacent to and north of Blackwood Pit (TSF2). <p>HVAS samples for total suspended particulates (TSP) and lead dust, and HVAS1 and HVAS2 sample for particulate matter less than 10 microns (PM₁₀) and lead dust.</p> <p>Selected BHOP Monthly Environmental Monitoring Reports were viewed to assess HVAS results against Table 1 of this condition.</p>	<p>NC – Non-compliance with PM₁₀ annual average criterion at TEOM2 in December 2018 is likely the result of high regional dust levels. BHOP continues a rigorous dust suppression program whilst investigating encapsulation methods of free areas. A review of dust monitoring data is being conducted.</p> <p>Ob 12 – Noted.</p> <p>Ob 13 – To be actioned by BHOP.</p>

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions																										
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response																							
<p>Table 1: Long Term Criteria for Particulate Matter</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>^d Criterion</th> </tr> </thead> <tbody> <tr> <td>Total solid particles (TSP)</td> <td>Annual</td> <td>^a 90 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>Annual</td> <td>^a 25 µg/m³</td> </tr> </tbody> </table> <p>Table 2: Short Term Criterion for Particulate Matter</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>^d Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24 hour</td> <td>^a 50 µg/m³</td> </tr> </tbody> </table> <p>Table 3: Long Term Criteria for Deposited Dust</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Maximum Project Contribution</th> <th>Maximum Total Deposited Dust Level</th> </tr> </thead> <tbody> <tr> <td>^c Deposited dust</td> <td>Annual</td> <td>^b 2 g/m²/month</td> <td>^a 4 g/m²/month</td> </tr> </tbody> </table> <p>Notes to Tables 1–3:</p> <ul style="list-style-type: none"> ^a Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to all other sources); ^b Incremental impact (i.e. incremental increase in concentrations due to the project on its own); ^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; ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, fire incidents, illegal activities or any other activity agreed by the Secretary in consultation with EPA. 	Pollutant	Averaging Period	^d Criterion	Total solid particles (TSP)	Annual	^a 90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	^a 25 µg/m ³	Pollutant	Averaging Period	^d Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³	Pollutant	Averaging Period	Maximum Project Contribution	Maximum Total Deposited Dust Level	^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month		<p>The Monthly Environmental Monitoring Report for January 2017 showed that:</p> <ul style="list-style-type: none"> for HVAS, averaged values for PM₁₀ in 2016 indicate that the annual average total suspended particles (TSP) at 36 µg/m³ is well below the 90 µg/m³ annual average criterion; for HVAS1, annual average PM₁₀ at 13 µg/m³ is well below the 25 µg/m³ annual average criterion; and at HVAS2, annual average PM₁₀ at 12 µg/m³ is well below the 25 µg/m³ annual average criterion. <p>The Monthly Environmental Monitoring Report for December 2017 showed that:</p> <ul style="list-style-type: none"> for HVAS, averaged values for TSP of approximately 34 ug/m³ are below the 90 ug/m³ annual average criterion; for HVAS1, the Rolling Annual Average for PM₁₀ of approximately 16 ug/m³ is below the 25 ug/m³ annual average criterion; and for HVAS2, the Rolling Annual Average for PM₁₀ of approximately 13 ug/m³ is below the 25 ug/m³ annual average criterion. <p>The Monthly Environmental Monitoring Report for December 2018 showed that:</p> <ul style="list-style-type: none"> for HVAS, averaged values for TSP to December 2018 is 62.89 µg/m³ which is below the 90 µg/m³ annual average criterion; for HVAS1, the PM₁₀ rolling annual average was 25.4 µg/m³ which is slightly above the PM₁₀ annual average criterion of 25 µg/m³. The increase in the PM₁₀ annual average was a result of severe drought conditions over this period; and for HVAS2, the rolling annual average PM₁₀ to December 2018 is 23.78 µg/m³ which is below the PM₁₀ annual average criterion of 25 µg/m³. <p><u>TEOM Samplers (PM₁₀)</u></p> <p>In addition to HVAS samplers, BHOP operates and maintains two Tapered Element Oscillating Microbalance (TEOM) sampling units to measure ambient air quality at the Rasp Mine:</p>	
Pollutant	Averaging Period	^d Criterion																								
Total solid particles (TSP)	Annual	^a 90 µg/m ³																								
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 25 µg/m ³																								
Pollutant	Averaging Period	^d Criterion																								
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³																								
Pollutant	Averaging Period	Maximum Project Contribution	Maximum Total Deposited Dust Level																							
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month																							

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<ul style="list-style-type: none"> TEOM1 (EPL13) is located off-site within the perimeter fence of Essential Water south of the mine lease; and TEOM2 (EPL14) is located on-site adjacent to Blackwood Pit to the north of the mine lease. <p>TEOM1 and TEOM2 operate continuously and sample for particulate matter less than 10 microns (PM₁₀) in size. No spare TEOM unit exists on site, but BHOP stated that a replacement unit is able to be sourced within three days.</p> <p>BHOP has commissioned service provider, Ecotech, to provide monthly monitoring and data reporting services for the Broken Hill Site 1 and Site 2 ambient air quality monitoring stations (i.e. TEOM1 and TEOM2 stations for monitoring ambient PM₁₀). Ecotech retains NATA Accreditation No. 14184.</p> <p>Selected Ecotech reports and BHOP Monthly Environmental Monitoring Reports were viewed to assess TEOM results against this condition.</p> <p>The Monthly Environmental Monitoring Report for December 2016 showed that:</p> <ul style="list-style-type: none"> for TEOM1, the PM₁₀ ug/m³ annual average was 13.7 ug/m³ (below the limits in Tables 1 and 2); and for TEOM2, the PM₁₀ ug/m³ annual average was 14.0 ug/m³ (below the limits specified in Tables 1 and 2). <p>The Monthly Environmental Monitoring Report for December 2017 showed that:</p> <ul style="list-style-type: none"> for TEOM1, the PM₁₀ ug/m³ annual average was 16.7 ug/m³ (below the limits in Tables 1 and 2); and for TEOM2, the PM₁₀ ug/m³ 12 annual average was 19.5 ug/m³ (below the limits specified in Tables 1 and 2). <p>The Monthly Environmental Monitoring Report for December 2018 stated that both Project Approval and Environment Protection Licence criteria exclude dust storms and other extraordinary events. If the results of 1, 8, 13, 20, and 29 – 31 December were not included in the calculations then the rolling annual average PM₁₀ results for TEOM1 and TEOM2 would be 20.9 µg/m³ and 25.2 µg/m³ respectively, which is below the PM₁₀ annual average criterion of 25 µg/m³ for TEOM1</p>	

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		<p>and slightly above the PM₁₀ annual average criterion of 25 µg/m³ for TEOM2 required at the nearest residence on privately-owned land. Taking this into consideration the Rasp Mine is compliant with this criterion at TEOM1 and non-compliant with this criterion at TEOM2.</p> <p><u>Dust Deposition Sampling</u></p> <p>BHOP operates and maintains seven dust deposition gauges to measure ambient air quality at the Rasp Mine – D1 to D7. D1 and D6 are located off-site, with D1 located near the St Johns training facility north of the Rasp Mine and D6 located in Casuarina Avenue south of the Rasp Mine. D2 to D5 and D7 are located on the mine lease in various locations. Dust samples are collected monthly and analysed for total deposited dust and deposited lead dust.</p> <p>Selected BHOP Monthly Environmental Monitoring Reports were viewed to assess dust deposition results against this condition.</p> <p>The Monthly Environmental Monitoring Report for December 2016 stated that with the exception of the background site (D6) in February 2016 and September 2016, depositional dust was within the maximum allowable total concentration of deposited dust of 4g/m²/month (annual average) with the maximum allowable contribution from the mine being 2g/m²/month (annual average).</p> <p>The Monthly Environmental Monitoring Report for December 2017 stated that the Rasp Mine is in compliance with criteria. Elevated total dust recorded at the offsite monitor at Casuarina Avenue appears to have been caused by motor bikes accessing the vacant lot at the rear of the property.</p> <p>The Monthly Environmental Monitoring Report for December 2018 stated that results for all dust gauges were elevated in December 2018. While the December results at D4 and D6 are above the background levels measured in 2010 they were impacted by particularly dry conditions resulting in dust storms on 1 and 13 December 2018. Results were highest at Junction Mine and Casuarina Ave. There are no Rasp Mine activities being undertaken at the Junction Mine and Casuarina Avenue is not on the Rasp Mine site. The Casuarina Avenue location returns consistently high dust readings which is likely due to it being located in the backyard of a residence adjacent to a bare block. The Junction Mine location is</p>	

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		<p>also surrounded by sparsely vegetated areas subject to vehicular traffic, which likely contributes to the elevated readings.</p> <p>Given the dust storms experienced in December 2018 and the erroneous/ unrepresentative location of the background sampling site D6 – Casuarina Ave, it is difficult to conclude the status of compliance with depositional dust limits in Table 3 for 2018.</p> <p>Non-compliant (low risk) – During the audit period, some minor isolated exceedances were experienced in Total Suspended Particulates, PM₁₀ and total depositional dust, against limits defined in Tables 1, 2 and 3 of this condition.</p> <p>Observation No. 12 – Given the unrepresentative/erroneous dust depositional dust results being obtained from background sampling site D6 – Casuarina Ave, BHOP could consider discussing with regulators the potential relocation of this monitoring site.</p> <p>Observation No. 13 – To improve the reproducibility and quality control of dust deposition results, BHOP could consider the collection of a duplicate sample for depositional dust once per quarter and submit as a blind sample to the laboratory (i.e. a total of four samples per year).</p>																
<p>Schedule 3 – Condition 4 – Air Quality and Greenhouse Gas – Air Quality Criteria</p> <p>The Proponent shall ensure that the project is operated in a manner that does not exceed the criteria listed in Tables 4 and 5.</p> <p><small>Table 4: Discharge Criteria for Point 1 – Ventilation Shaft</small></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>Concentration Limit</th> </tr> </thead> <tbody> <tr> <td>Oxides of nitrogen (as NO₂)</td> <td>Milligrams per cubic metre</td> <td>350</td> </tr> <tr> <td>Total solid particles (TSP)</td> <td>Milligrams per cubic metre</td> <td>20</td> </tr> <tr> <td>^a Type 1 and Type 2 substances</td> <td>Milligrams per cubic metre</td> <td>1</td> </tr> <tr> <td>Volatile organic compounds (as n-propane)</td> <td>Milligrams per cubic metre</td> <td>40</td> </tr> </tbody> </table>	Pollutant	Units of Measure	Concentration Limit	Oxides of nitrogen (as NO ₂)	Milligrams per cubic metre	350	Total solid particles (TSP)	Milligrams per cubic metre	20	^a Type 1 and Type 2 substances	Milligrams per cubic metre	1	Volatile organic compounds (as n-propane)	Milligrams per cubic metre	40	<p>Compliant</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>External air quality monitoring service provider, AMG/Assured Environmental (NATA Accreditation No. 19703), conducts on-site monitoring of pollutants listed in Table 4 of this condition.</p> <p>AMG/Assured Environmental utilises a NATA accredited laboratory (Envirolab Services, NATA Accreditation No. 2901) for the off-site testing of relevant pollutants (i.e. TVOCs and Type 1 and 2 Hazardous Substances) listed in Table 5 of this condition.</p> <p>The key sources of actual and potential point source air emissions from the BHOP site include:</p> <ul style="list-style-type: none"> • crusher baghouse in the mill; • transfer points on conveyor systems within the mill; • concentrate loading shed; and • main vent shaft (air emissions from underground ventilation). <p>Since late February 2013, stack testing has been completed at</p>	<p>Ob 14 – To be actioned by BHOP.</p> <p>Ob 15 – To be actioned by BHOP.</p> <p>Ob 16 – To be actioned by BHOP.</p> <p>Ob 17 – To be actioned by BHOP.</p>
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<p>Table 5: Discharge Criteria for Point 2 – Process Enclosure/ Baghouse Stack</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of Measure</th> <th>Concentration Limit</th> </tr> </thead> <tbody> <tr> <td>Total solid particles (TSP)</td> <td>Milligrams per cubic metre</td> <td>20</td> </tr> <tr> <td>^a Type 1 and Type 2 substances</td> <td>Milligrams per cubic metre</td> <td>1</td> </tr> </tbody> </table> <p>Notes to Tables 4–5:</p> <ul style="list-style-type: none"> ^a Total of Sb, As, Cd, Pb, Hg, Be, Cr, Co, Mn, Ni, Se, Sn and V; and reference conditions for the limits in Tables 4 and 5 are: dry, 273K and 101.3 kPa. 	Pollutant	Units of Measure	Concentration Limit	Total solid particles (TSP)	Milligrams per cubic metre	20	^a Type 1 and Type 2 substances	Milligrams per cubic metre	1		<p>quarterly intervals at two locations, being the mill process enclosure/baghouse stack, and the main ventilation shaft.</p> <p>In January 2017, external service provider, AMG/Assured Environmental, commenced air emissions testing at quarterly intervals at three defined locations (i.e. RP1 Main Ventilation Shaft, Process enclosure/baghouse stack and Vent Shaft 6). A total of eight quarterly emissions test reports have been received from this service provider in 2017 and 2018.</p> <p>The Q1 2017, Q3 2018 and Q4 2018 source emissions monitoring reports from AMG/Assured Environmental were reviewed during this February 2019 audit (i.e. as a representative sample of the eight completed quarterly emissions monitoring reports completed since January 2017).</p> <p>Observation No. 14 – BHOP could request AMG/Assured Environmental to improve the presentation of stack emission monitoring results within its quarterly reports (i.e. Section 5 Results Table 15: Results summary - Heavy Metals and Volatile organic compounds) to allow these results to be clearly presented as “<” (i.e. less than) the Limit of Detection (LOD) which is not clearly evident within submitted reports, due to the unsuitable formatting of Table 15.</p> <p>Observation No. 15 – Actual operating conditions of the mine and process plant (i.e. just prior and during the period selected for air emission sampling) could be sourced from BHOP and this information included within quarterly reports presented by AMG/Assured Environmental, inclusive of any abnormal operating conditions. This information could assist interpretation of the data, given that some recent emission test results were recorded to be highly variable and within 20% of the upper licence limit.</p> <p><u>Ventilation Shaft</u></p> <p>Since January 2017, no exceedances have been measured for the ventilation shaft against emission limits for pollutants listed in Table 4 (i.e. as determined quarterly by AMG/Assured Environmental).</p> <p>It was stated that stack emissions testing from this source is scheduled after a blast (i.e. as required) to identify any peaks under normal/adverse operating conditions.</p>	
Pollutant	Units of Measure	Concentration Limit										
Total solid particles (TSP)	Milligrams per cubic metre	20										
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		<p><u>Process Enclosure/Baghouse Stack</u></p> <p>Since January 2017, no exceedances have been measured for the process enclosure/baghouse stack against emission limits for pollutants listed in Table 5 (i.e. as determined quarterly by AMG/Assured Environmental).</p> <p>A TSP reading of 19.8 mg/m³ on 12 December 2018, which was compliant, was stated to be under investigation at the time of this February 2019 audit (i.e. given this reading approached the limit defined in Table 5).</p> <p>Observation No. 16 – BHOP would be expected to request that calibration certificates of stack testing equipment (i.e. inclusive of equipment serial numbers) are included by AMG/Assured Environmental within the appendix of submitted quarterly reports from this service provider.</p> <p>Observation No. 17 – BHOP is encouraged to review current service agreements with external suppliers to verify the status of supply and immediate availability of spare bags on site or within Broken Hill.</p>	
<p>Schedule 3 – Condition 5 – Air Quality and Greenhouse Gas – Operating Conditions</p> <p>The Proponent shall:</p> <p>(a) implement best practice dust management, including all reasonable and feasible measures to minimise dust emissions, including point source and fugitive emissions;</p> <p>(b) minimise any visible off-site dust generated by the project or the site; and</p> <p>(c) regularly assess real-time air quality monitoring and meteorological forecasting data and relocate, modify and/ or suspend operations to ensure compliance with the relevant conditions of this approval, to the satisfaction of the Secretary.</p>	Compliant	<p>Dust management is implemented in accordance with measures and controls defined in BHOP's AQMP. Refer to condition 11 of this Schedule regarding the content of the AQMP.</p> <p>Table 7 of the AQMP is an Air Quality Aspects Register, with Particulate Emission Risk Rankings and Management Strategies/Control Actions. Example of practices implemented by BHOP to comply with paragraphs (a) and (b) of this condition and which are referred to in Table 7 of the AQMP include:</p> <ul style="list-style-type: none"> • use of a chemical dust suppressant on 'Free Areas'; • concentrate is loaded to sealed containers within a walled and roofed structure with rubber curtains at entry and exit; and • crushing is carried out in a permanent full enclosure under negative pressure vented to a baghouse. <p>In relation to paragraph (c) of this condition, it was stated that in the audit period BHOP has not needed to modify and/or suspend operations to ensure compliance with the relevant conditions of this approval.</p>	

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<p>Schedule 3 – Condition 6 – Air Quality and Greenhouse Gas – Operating Conditions</p> <p>The Proponent shall seal and maintain the roads listed in Table 6 to the satisfaction of the Secretary. The roads shall be sealed prior to the commencement of ore extraction, unless otherwise agreed by the Secretary.</p> <p><i>Table 6: Roads to be Sealed and Maintained</i></p> <table border="1"> <thead> <tr> <th>Road Status</th> <th>Road</th> <th>Approximate Length (m)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Existing</td> <td>Front gate to truck wash</td> <td>292</td> </tr> <tr> <td>'Diamond' intersection to core shed</td> <td>360</td> </tr> <tr> <td>Front gate road to car park</td> <td>132</td> </tr> <tr> <td rowspan="5">New</td> <td>Truck wash to haul road connection from Kintore Pit</td> <td>690</td> </tr> <tr> <td>Kintore Pit intersection (truck wash and haul roads) to ROM pad (haul road for ore mine trucks)</td> <td>1,186</td> </tr> <tr> <td>ROM pad to and through mill</td> <td>354</td> </tr> <tr> <td>Mill to rail load out (concentrate trucks)</td> <td>910</td> </tr> <tr> <td>Truck wash road to workshop</td> <td>190</td> </tr> <tr> <td>Haul road to backfill plant</td> <td>400</td> </tr> </tbody> </table>	Road Status	Road	Approximate Length (m)	Existing	Front gate to truck wash	292	'Diamond' intersection to core shed	360	Front gate road to car park	132	New	Truck wash to haul road connection from Kintore Pit	690	Kintore Pit intersection (truck wash and haul roads) to ROM pad (haul road for ore mine trucks)	1,186	ROM pad to and through mill	354	Mill to rail load out (concentrate trucks)	910	Truck wash road to workshop	190	Haul road to backfill plant	400	<p>Compliant</p>	<p>All the roads listed in Table 6 of this condition were sealed prior to the commencement of ore extraction in 2012. Some repair and resealing works have been required across the site since 2012.</p>	
Road Status	Road	Approximate Length (m)																								
Existing	Front gate to truck wash	292																								
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<p>Schedule 3 – Condition 7 – Air Quality and Greenhouse Gas – Operating Conditions</p> <p>Ore crushing shall only be undertaken in a fully-enclosed structure that is designed, operated and maintained to ensure internal negative internal air pressure relative to ambient (external) conditions. The enclosure and associated emissions controls must be designed, constructed, operated and maintained to ensure that visible fugitive emissions from the enclosure are minimised.</p>	<p>Compliant</p>	<p>Ore crushing at BHOP is conducted within a fully-enclosed structure which is designed, operated and maintained to ensure internal negative air pressure is maintained.</p> <p>It was stated that daily inspections are conducted by operators at the mill to ensure that negative air pressure is maintained within this facility.</p> <p>Quarterly stack testing is conducted by service provider, AMG/Assured Environmental, at a dedicated sampling port on the emission point of the baghouse. This testing regime helps ensure that visible fugitive dust emissions from the enclosure are minimised relative to ambient (external) conditions and remain within limits defined within Table 5.</p>																								
<p>Schedule 3 – Condition 8 – Air Quality and Greenhouse Gas – Operating Conditions</p> <p>A chemical dust suppressant shall be applied as per the manufacturer's specification, or more often as required, to all</p>	<p>Compliant</p>	<p>In February 2019, BHOP was observed to be using the dust suppression product 'Total Ground Control', manufactured by RST.</p> <p>A list of Purchase Order numbers for dust suppressant from RST showed the most recent invoiced amount prior to February 2019 was</p>																								

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'free areas' identified in the figure in Appendix 4.		<p>\$74,503.00 on 3 August 2018 (Purchase Order number 62745).</p> <p>During site visits conducted during this February 2019 audit, extensive use of dust suppressant was observed for dust control.</p> <p>It was stated that dust suppressant is applied using a BHOP-owned water truck and is used as and when required.</p>   <p>Photos 3 and 4 – Storage and use of 1000L IBCs of Total Ground Control for dust suppression (February 2019)</p>   <p>Photos 5 and 6 – Examples of application of Total Ground Control for dust suppression at the Rasp Mine site (February 2019)</p>	
<p>Schedule 3 – Condition 9 – Air Quality and Greenhouse Gas – Operating Conditions</p> <p>All aboveground conveyors and transfer points prior to the grinding circuit (SAG and ball mills) shall be enclosed.</p>	Compliant	<p>All above ground conveyors and transfer points located prior to the grinding circuit (i.e. SAG and ball mills) were observed to be enclosed (i.e. incorporated into the original plant design and construction of the BHOP Rasp Mine mill).</p> <p>During this February 2019 audit there was no evidence of any visible fugitive dust emissions emanating from BHOP's above ground conveyors and transfer points within the mill.</p>	

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		 <p>Photos 7 and 8 – Examples of covered conveyors and enclosed transfer points within the BHOP mill (February 2019)</p>	
<p>Schedule 3 – Condition 10 – Air Quality and Greenhouse Gas – Operating Conditions</p> <p>Video recording equipment shall be installed to assist in the active management of emissions from the tailings storage facility.</p>	<p>Non-compliant (low risk)</p>	<p>As noted in the February 2016 audit report, it was stated that video recording equipment was previously installed for an embankment lift on TSF1.</p> <p>In the February 2016 audit report, BHOP noted (in response to PA Observation No. 9) that:</p> <ul style="list-style-type: none"> because TSF2 was an in-pit facility, dust take up from wind will not become an issue until tailings levels rise closer to the surface; and that it would confirm with the EPA, who requested the equipment be installed on TSF1, and if it is agreed that it is not required, apply to the DPE to have this condition removed. <p>Non-compliant (low risk) – Given the inclusion of a definition of TSF2 as “tailing storage facility 2” in the MOD 4 Project Approval, it is considered that this condition applies to TSF2 and to any other tailings storage facility. No video recording equipment for management of emissions from TSF2 was in place during the audit period.</p> <p>During this February 2019 audit it was stated that BHOP has secured a quotation for the supply and installation of a camera(s) for the planned TSF2 Embankment Lift (i.e. as a means of observing dust emissions from the mill Control Room).</p>	<p>NC – Video equipment has been purchased and is scheduled for installation prior to construction of embankments.</p>

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		 <p>Photos 9 and 10 – In-pit tailings in the Blackwood Pit (TSF2) (February 2019)</p>	
<p>Schedule 3 – Condition 11 – Air Quality and Greenhouse Gas – Air Quality Management Plan</p> <p>The Proponent shall prepare and implement a detailed Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with EPA and submitted to the Secretary for approval prior to the commencement of construction on the site;</p> <p>(b) identify all major sources of particulates and other air pollutants that may be emitted from the project, being both point source and diffuse emissions, including identification of the potential for lead contamination to be carried by these particulates;</p> <p>(c) include an air quality monitoring program that:</p> <ul style="list-style-type: none"> provides a real-time monitoring system of dust emissions around the perimeter of TSF2 that triggers an automated water spray system prior to adverse meteorological conditions occurring; is capable of measuring lead concentrations located in the prevailing down wind direction near the perimeter of TSF2; provides for periodic point source monitoring at Point 1 (Ventilation Shaft) and Point 2 (Process Enclosure/ Baghouse Stack); provides for continuous ambient monitoring across an ambient air quality and dust monitoring network comprising no fewer than ten monitoring locations 	<p>Non-compliant (low risk)</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>BHOP’s current ‘Air Quality or Dust or Other Contaminants Management Plan’ (AQMP) is revision no. 5, issued on 28 September 2017, Doc ID: BHO-PLN-ENV-001. A different version of the AQMP is on the CBH website (titled ‘Air Quality Management Plan’, version no. 2, issued on 28 July 2016, Doc ID: BHO-PLN-ENV-001).</p> <p>This audit finding relates to the AQMP revision no. 5, issued on 28 September 2017.</p> <p>During this February 2019 audit there was evidence that BHOP is implementing the AQMP. Refer to condition 5 of this Schedule for examples of implementation of the AQMP.</p> <p>In addition to the AQMP, BHOP has an Air Quality Monitoring Program Management Plan (AQMPMP), the current version being revision no. 2 issued on 28 July 2016, Doc ID: BHO-PLN-ENV-0010. The AQMPMP is on the CBH website.</p> <p>In relation to the paragraphs of this condition:</p> <p>(a) Appendix D to the AQMP reproduces email correspondence with the EPA circa March 2016. It is considered that the requirement for submission of the AQMP to the Secretary for approval prior to the commencement of construction on the site does not apply to subsequent revisions of the AQMP.</p> <p>(b) Section 7 of the AQMP identifies pollutants that may be emitted from the project, being both point source and diffuse emissions, including identification of the potential for lead contamination to be carried by these particulates.</p>	<p>NC – As per MOD4 the spray system is to be installed following construction of the embankments. Maintenance protocols and an incident contingency plan have been addressed in the current revision of the AQMP.</p> <p>Ob 18 – To be actioned by BHOP.</p> <p>Ob 19 – To be actioned by BHOP.</p> <p>Ob 20 – To be actioned by BHOP.</p>

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<p>(Points 3 to 12) for total suspended particulates, PM₁₀, lead and dust deposition. Monitoring locations shall be informed by the outcomes of the air quality assessments presented in the EA and PPR and identified in consultation with EPA; and</p> <ul style="list-style-type: none"> • provides for continuous meteorological monitoring using a meteorological monitoring station located on the site; • is consistent with the requirements of <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> (DECC, 2007), the <i>Protection of the Environment Operations Act 1997</i> and the <i>Protection of the Environment (Clean Air) Regulation 2010</i>. <p>(d) pro-active and reactive management and response mechanisms for particulates with specific reference to measures to be implemented and actions to be taken to minimise and prevent potential elevated air quality impacts (including ambient air and deposited dust impacts) on surrounding land uses as a consequence of meteorological conditions, upsets within the project, or the mode of operation of the project at any time;</p> <p>(e) procedures to review and refine the reactive management triggers for wind speed and dust concentrations;</p> <p>(f) procedures and processes for monitoring ambient dust and deposited dust impacts;</p> <p>(g) provision for regular review of dust monitoring data, with comparison of monitoring data with that assumed and predicted in the documents referred to under Condition 2 of Schedule 2;</p> <p>(h) details of measures to be implemented to address any situation in which monitored dust impacts exceed those assumed and predicted in the documents referred to under Condition 2 of Schedule 2;</p> <p>(i) specific complaints management procedures in the event that dust monitoring indicates elevated offsite impacts;</p> <p>(j) procedures for the minimisation of dust generation on the site;</p>		<p>(c) The AQMPMP (referred to in section 13 of the AQMP) references a number of Procedures for Air Quality Monitoring (section 8) and generally satisfies the points in paragraph (c). Refer to the non-compliance below.</p> <p>(d) Section 9 of the AQMP describes management strategies including measures to manage air quality impacts including: exposed areas (section 9.1), sealed roads (section 9.3), TSF wind erosion (section 9.5), transfer to/from crushed ore storage bin (section 9.6), ventilation exhaust (section 9.7), crusher circuit (section 9.10), vehicle wash facilities (section 9.15) and meteorological forecasting to guide dust management (section 9.18).</p> <p>(e) The AQMP or AQMPMP do not describe procedures to review and refine the reactive management triggers for wind speed and dust concentrations.</p> <p>(f) The AQMPMP includes procedures and processes for monitoring ambient dust and deposited dust impacts (e.g. reporting frequencies and selection of monitoring locations in Appendix D).</p> <p>(g) The AQMP or AQMPMP do not include provision for regular review of dust data. The AQMPMP does include baseline air quality monitoring data and some predicted impacts (Appendix E, Figure D6).</p> <p>(h) The AQMP or AQMPMP do not include details of measures to be implemented to address any situation in which monitored dust impacts exceed those assumed and predicted.</p> <p>(i) Section 11 of the AQMP describes complaints management procedures (in relation to documentation and recording of information).</p> <p>(j) Refer to comments for paragraph (d) above.</p> <p>(k) Appendix B to the AQMP includes air quality controls within Rasp Mine Procedures, including requirements to regularly inspect plant and equipment. However there are no protocols in the AQMP or AQMPMP for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions. Refer to the non-compliance below.</p> <p>(l) The AQMP does not include a contingency plan should an incident, upset or other initiating factor lead to elevated dust</p>	

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<p>(k) protocols for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions; and</p> <p>(l) a contingency plan should an incident, upset or other initiating factor lead to elevated dust impacts, whether above normal operating conditions or above environmental performance goals/ limits.</p>		<p>impacts, whether above normal operating conditions or above environmental performance goals/ limits. Section 9 of the AQMPMP deals with responses to community complaints and non-compliances (incident) and references the management strategies in the AQMP. Refer to the non-compliance below.</p> <p>Non-compliant (low risk) – BHOP’s current AQMP (revision no. 5 issued on 28 September 2017) does not include the following details:</p> <ul style="list-style-type: none"> • There is no provision for triggering the automated water spray system referred to in the first dot point of paragraph (c) because the system has not yet been installed. It is acknowledged that section 5.9 of BHOP’s ‘Construction Environment Management Plan TSF2 Embankment Construction’ (BHO-PLN-ENV-012, revision no. 1 issued on 17 January 2019) states: “The spray system is to be installed once EMB2 has been completed and access to the Pit rim becomes available, and will be designed such that the piping and sprays can be activated at any time during operations.” • There are no protocols in the AQMP for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions (paragraph (k)). • There is no contingency plan in the AQMP should an incident, upset or other initiating factor lead to elevated dust impacts, whether above normal operating conditions or above environmental performance goals/limits (paragraph (l)). <p>Observation No. 18 – BHOP should resolve any discrepancies between the Air Quality or Dust or Other Contaminants Management Plan (revision no. 5 issued on 28 September 2017) and the Air Quality Management Plan (revision no. 2 issued on 28 July 2016) and ensure the current version of the Plan is on the CBH website.</p> <p>Observation No. 19 – BHOP could consider including relevant material from its EAs into the AQMP. For example, the MOD 4 EA (section 10.2 and Appendix I) includes atmospheric dispersions modeling.</p> <p>Observation No. 20 – Section 3.7 of the MOD 4 EA refers to an ‘Air Quality Monitoring Protocol’ as a current Environmental Management Plan, but there is no BHOP document with this title. In the next</p>	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>revision of the AQMPMP, BHOP could reference 'Air Quality Monitoring Protocol' as referred to in the MOD 4 EA, to the AQMPMP.</p> <p>It is noted that BHOP is scheduled to discuss the required air quality monitoring associated with the TSF2 Embankment Lift with the EPA, prior to issuing a revised version of the AQMP in 2019.</p>	
<p>Schedule 3 – Condition 12 – Lead Awareness and Public Health – Contribution to Public Blood lead Monitoring & Public Education</p> <p>During the implementation of the project, the Proponent shall make a reasonable contribution towards the cost of:</p> <p>(a) public health monitoring, particularly in relation to child blood lead levels; and</p> <p>(b) public education campaigns about the health risks associated with lead, to the satisfaction of the Secretary.</p> <p><i>Note: The Secretary will consult with the Director-General of the NSW Department of Health on the reasonableness of the proposed contribution prior to making any decisions under this condition, and determine the date upon which the contributions shall commence.</i></p>	<p>Compliant</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>Appendix C of BHOP’s current Community Lead Management Plan (CLMP) as referred to in Project Approval Schedule 3, condition 13, provides “Information for Financial Contribution” under this condition. Appendix C of the CLMP states (in part):</p> <p>“In consultation with the Broken Hill Lead Reference Group, BHOP developed the Community Lead Management Plan which outlines the arrangements for the contribution and states that the ‘reasonable contribution’ will be up to \$50,000. Section 5 also states that the funds shall be made to the Broken Hill Child & Family Health Centre (BHCFC) annually for the purposes as outlined above.</p> <p>To obtain funding the BHCFC is requested to submit a proposal outlining the items for expenditure consistent with the requirements of the Project Approval. This proposal is required to be submitted by August each year to enable BHOP to make budgetary provisions for the following year (BHOP operates on a calendar year) and review the proposal to check it is in line with the Project Approval.”</p> <p>As stated in section 8 of the CLMP: “BHOP funding will be up to \$50,000 in any calendar year.” This annual amount does not accrue if the \$50,000 is not used in that year.</p> <p>In 2016 BHOP agreed to release \$50,000 in funding to the Far West Local Health District to assist with the Lead Screening Program in Broken Hill (refer to email of 1 July 2016 from BHOP’s then Environment/Community Liaison Officer to the District, and section 9.3 of the 2016 AEMR).</p> <p>In the absence of suitable formal proposals being received, BHOP did not provide funding under Appendix C of the CLMP in 2017 or 2018.</p> <p>Observation No. 21 – In Appendix C of the CLMP the reference to “Section 5” should instead refer to “Section 8”.</p>	<p>Ob 21 – To be actioned by BHOP.</p> <p>Ob 22 – Noted.</p> <p>Ob 23 – Noted.</p> <p>Ob 24 – Noted.</p>

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>Observation No. 22 – BHOP could review the CLMP to include details of any other public health monitoring and public education campaigns which BHOP supports.</p> <p>Observation No. 23 – In order to increase the likelihood of the funding being used, BHOP could consider amending section 8 and Appendix C of the CLMP to specify that other Department of Health agencies (i.e. apart from the BHCFHC) could submit a proposal for funding.</p> <p>Observation No. 24 – BHOP could consider the feasibility of establishing and administering a common ‘pool’ of funds (with BHOP and Perilya as the contributors) to enable the Department of Health and its agencies to lodge a proposal for a single contribution rather than having to separately approach BHOP and Perilya for funding.</p> <p>Auditor’s Note – The wording of this condition could be revised to be consistent with the wording in paragraph (c) of Project Approval Schedule 3, condition 13.</p>	
<p>Schedule 3 – Condition 13 – Lead Awareness and Public Health – Lead Management Plan</p> <p>The Proponent shall prepare and implement a Lead Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the Lead Reference Group, including the NSW Department of Health (Western NSW Local Health District) and Council;</p> <p>(b) be submitted to the Secretary for approval by 30 June 2011;</p> <p>(c) outline the proposed commitment towards the cost of:</p> <ul style="list-style-type: none"> • public health monitoring, particularly in relation to child blood lead levels, and tracking of this data over time; and • public education campaigns about the health risks associated with lead, including lead hygiene, lead and children, tank water lead risks and soil lead contamination risks. <p>(d) identify additional reasonable and feasible measures that could be implemented either on site or in the areas</p>	<p>Compliant Observation</p>	<p>BHOP’s current Community Lead Management Plan (CLMP) is ‘Final v2’, issued in August 2016, Doc ID: BHO-PLN-ENV-008. The CLMP is on the CBH website.</p> <p>An internal (i.e. not on the CBH website) Lead Management Plan (revision no. 3, issued on 16 February 2016, Doc ID: BHO-PLN-HLT-001) also exists to facilitate and describe management actions and controls for BHOP employees and contractors (i.e. a health and safety focus).</p> <p>In relation to the paragraphs of this condition:</p> <p>(a) Appendix D of the CLMP includes records of detailed consultation with the agencies named in this paragraph.</p> <p>(b) It is considered that the requirement for submission of the CLMP to the Secretary for approval by the end of June 2011 does not apply to subsequent revisions of the CLMP.</p> <p>(c) Section 8 and Appendix C of the CLMP outline BHOP’s proposed commitment towards the cost of public health monitoring and public education campaigns about the health risks of lead.</p> <p>(d) Sections 7.1 and 7.2 of the CLMP identify additional ‘contingency’ measures (e.g. provide capping over sections of the ‘free areas’)</p>	<p>Ob 25 – To be actioned by BHOP.</p>

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>adjoining the site to minimise the potential lead impacts of the project and “free areas”;</p> <p>(e) include a program for the staged implementation of the measures identified in (d) above in the event that dust emissions are higher than predicted or the public health monitoring suggests further action is required to reduce blood lead levels in the environment surrounding the site; and</p> <p>(f) include a detailed communication strategy, that outlines how the relevant dust and blood level monitoring data would be reported on the Proponent’s website along with any relevant public education material.</p>		<p>with inert waste rock) that could be implemented where air quality trends indicate an increase in lead emissions which can be attributed to the Rasp Mine.</p> <p>(e) Section 7.3 of the CLMP includes a four step program for the staged implementation of contingency measures in paragraph (d) (i.e. step 1 is triggers for an investigation, step 2 is the undertaking of the investigation, step 3 is to review relevant site operation(s) and implement applicable contingency measures, and step 4 is to review future data to monitor impact and [determine] if further actions are required.</p> <p>(f) Section 9.2 of the CLMP states that BHOP communicates:</p> <ul style="list-style-type: none"> air quality monitoring data on the CBH website (updated monthly) and raw air quality monitoring data to the Far West Local Health District; and blood lead level monitoring data for Broken Hill via a link on the CBH website to the Far West Local Health District information website (LeadSmart). <p>During this February 2019 audit there was evidence that BHOP was implementing the CLMP, inclusive of:</p> <ul style="list-style-type: none"> the release of \$50,000 in funding to the Far West Local Health District (as noted in condition 12 of this Schedule) in 2016; BHOP being represented at all meetings of the BHCC Lead Reference Group in 2017 (refer section 9.2 of the 2017 AEMR); and BHOP’s participation in the Child and Family Health Centre Lead Week program (section 9.2 of the 2016 and 2017 AEMRs). <p>Observation No. 25 – During this February 2019 audit, BHOP was unable to demonstrate that it has sufficient data (with analysis of trends) to identify whether public health monitoring suggests further action is required to reduce blood lead levels in the environment surrounding the site. If adverse trends in public health monitoring of blood lead levels are identified, this would warrant the development and implementation of additional annual Environmental Improvement Plans by BHOP in 2019 - 2021.</p> <p>It was stated that trends in public health monitoring of blood lead levels are being communicated at the quarterly Lead Reference</p>	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		Group meetings. The auditors sighted a record of the Minutes of the Broken Hill Lead Reference Group meeting held on 29 November 2018, which presented information on trends in public health monitoring of blood lead levels since Q1 2012.	
<p>Schedule 3 – Condition 14 – Lead Awareness and Public Health – Updated Human Health Risk Assessment</p> <p>Within one year of the commencement of operation of the project, and every five years thereafter, unless otherwise agreed by the Secretary, the Proponent shall update the human health risk assessment prepared for the project and presented in the EA to the satisfaction of the Secretary. The updated risk assessment shall:</p> <p>(a) be prepared by a suitably-qualified expert whose appointment has been endorsed by the Secretary;</p> <p>(b) take into account monitoring data collected under this approval, and such other information as may be relevant to the assessment; and</p> <p>(c) be submitted to the Secretary, EPA and the Western NSW Local Health District within one month of its completion.</p>	<p>Compliant Observation</p>	<p><u>2015 Human Health Risk Assessment</u></p> <p>BHOP has not commissioned a Human Health Risk Assessment Report during the audit period.</p> <p>A Human Health Risk Assessment Report was prepared by external consultant, Toxikos / Pacific Environment in 2014 - 2015. The HHRA Report (Revision 4) dated 2 April 2015 is on the CBH website. As noted in the 2016 audit report, revision 4 of the HHRA Report was submitted to:</p> <ul style="list-style-type: none"> the EPA on 23 April 2015; the DPE on 24 April 2015; and NSW Department of Health on 24 April 2015. <p>The HHRA Report was subsequently twice revised, with revision 5 dated 25 September 2015 and an 'updated compilation' on 8 August 2016.</p> <p>The HHRA Report takes into account monitoring data. For example, section 4.2 of the HHRA Report (revision 4, as published on the CBH website) states (in part):</p> <p>“The daily time series of Pb representative of receptor R27 has been computed based on the TEOM2 PM₁₀ data multiplied by the ratio of FY14 Pb/PM₁₀ recorded at HVAS2 (this monitor is co-located monitor with TEOM2).”</p> <p>“The daily time series of Pb representative of receptor R8 has been computed based on the TEOM2 PM₁₀ data multiplied by the ratio of the Pb deposition recorded at deposition gauges DG6 and DG1. Deposition gauge DG6 is co-located with HVAS2/TEOM2 while DG1 is located near receptor R8.”</p> <p><u>2019 Human Health Risk Assessment</u></p> <p>An additional Human Health Risk Assessment is planned in 2019 for Modification 6 Kintore Pit TSF3.</p>	<p>Ob 26 – To be actioned by BHOP.</p>

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		<p>BHOP has received a proposal dated 10 August 2018 from external consultant, ToxConsult, to complete the planned 2019 HHRA for Modification 6 Kintore Pit TSF3.</p> <p>Observation No. 26 – BHOP could confirm with ToxConsult that the planned 2019 HHRA for Modification 6 Kintore Pit TSF3 will meet the requirements of this condition for a HHRA to be completed at five-yearly intervals, or if an additional HHRA will be scheduled in mid-2020.</p>																	
<p>Schedule 3 – Condition 15 – Noise and Vibration – Hours of Operation</p> <p>Unless the Secretary agrees otherwise, the Proponent must comply with the operating hours in Table 6.1.</p> <p><i>Table 6.1: Operating Hours</i></p> <table border="1"> <thead> <tr> <th>Activity</th> <th>Hours</th> </tr> </thead> <tbody> <tr> <td>Construction</td> <td>7 am to 6 pm, Monday to Friday</td> </tr> <tr> <td>Capping and rehabilitation of TSF2</td> <td>8 am to 1 pm, Saturday</td> </tr> <tr> <td>Shunting of concentrate wagons</td> <td>No activities on Sundays or public holidays</td> </tr> <tr> <td>Production rock blasting</td> <td>7 am and 6 pm on any day</td> </tr> <tr> <td>Transporting cement to the cement silo</td> <td>6:45am and 7:15pm on any day</td> </tr> <tr> <td>Loading the cement silo</td> <td>7 am to 7 pm on any day</td> </tr> <tr> <td>All other activities</td> <td>24 hours a day, 7 days a week</td> </tr> </tbody> </table>	Activity	Hours	Construction	7 am to 6 pm, Monday to Friday	Capping and rehabilitation of TSF2	8 am to 1 pm, Saturday	Shunting of concentrate wagons	No activities on Sundays or public holidays	Production rock blasting	7 am and 6 pm on any day	Transporting cement to the cement silo	6:45am and 7:15pm on any day	Loading the cement silo	7 am to 7 pm on any day	All other activities	24 hours a day, 7 days a week	<p>Compliant Observation</p>	<p>Relevant BHOP personnel were aware of and understood this condition. As at this February 2019 audit, BHOP has not sought agreement from the Secretary to vary these operating hours.</p> <p>Crushing is now authorised to occur 24 hours a day, 7 days a week and is no longer restricted to daylight hours.</p> <p>The operating hours defined in Table 6.1 are available to external stakeholders via the availability of the Project Approval 07_0018 on the CBH website.</p> <p>Observation No. 27 – The requirements of this condition could be proactively communicated on the CBH website to allow these requirements to be known and understood by the community (i.e. in addition to being available via Table 6.1 in the Project Approval).</p>	<p>Ob 27 – To be actioned by BHOP.</p>
Activity	Hours																		
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<p>Schedule 3 – Condition 16 – Noise and Vibration Deleted.</p>	<p>Note</p>	<p>This condition has been deleted from the Project Approval.</p>																	
<p>Schedule 3 – Condition 17 – Noise and Vibration – Noise Limits</p> <p>The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 7.</p>	<p>Compliant Observation</p>	<p>During the audit period annual noise monitoring surveys were conducted, and reports issued by external noise consultant, EMM Consulting (EMM). The most recent noise surveys were completed from: a) 23rd to 25th October 2017; and b) 10th to 12th December 2018.</p> <p>The October 2017 and December 2018 noise surveys were conducted at 14 locations, including at the nearest residents to the Rasp Mine. Only night time noise was surveyed.</p> <p><u>October 2017 Annual Noise Survey</u></p> <p>In its 27th November 2017 report, EMM concluded that:</p>	<p>Ob 28 – To be actioned by BHOP.</p>																

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions																																																															
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<p>Table 7: Operational Noise Criteria</p> <table border="1"> <thead> <tr> <th>Location</th> <th>^a Day (dB(A))</th> <th>^b Evening (dB(A))</th> <th>^c Night (dB(A))</th> </tr> </thead> <tbody> <tr><td>A1 – Piper Street North</td><td>38</td><td>37</td><td>35</td></tr> <tr><td>A2 – Piper Street Central</td><td>38</td><td>37</td><td>35</td></tr> <tr><td>A3 – Eyre Street North</td><td>44</td><td>41</td><td>39</td></tr> <tr><td>A4 – Eyre Street Central</td><td>44</td><td>41</td><td>39</td></tr> <tr><td>A5 – Eyre Street South</td><td>44</td><td>41</td><td>39</td></tr> <tr><td>A6 – Bonanza and Gypsum Streets</td><td>48</td><td>41</td><td>39</td></tr> <tr><td>A7 – Carbon Street</td><td>35</td><td>35</td><td>35</td></tr> <tr><td>A8 – South Road</td><td>48</td><td>39</td><td>39</td></tr> <tr><td>A9 – Crystal Street</td><td>46</td><td>39</td><td>39</td></tr> <tr><td>A10 – Barnet and Blende Streets</td><td>42</td><td>41</td><td>35</td></tr> <tr><td>A11 – Crystal Street</td><td>46</td><td>39</td><td>39</td></tr> <tr><td>A12 – Crystal Street</td><td>46</td><td>39</td><td>39</td></tr> <tr><td>A13 – Eyre Street North 2</td><td>38</td><td>35</td><td>35</td></tr> <tr><td>A14 – Piper Street North</td><td>35</td><td>35</td><td>35</td></tr> </tbody> </table> <p>Notes to Condition 17:</p> <ul style="list-style-type: none"> Receiver locations are as identified in the noise assessments presented in the EA and PPR; Noise limits are to be measured in accordance with the NSW Industrial Noise Policy (EPA, 2000); ^a Day is defined as 7:00am to 6:00pm Mondays to Saturdays and 8:00am to 6:00pm on Sundays and public holidays; ^b Evening is defined as 6:00pm to 10:00pm on any day; and ^c Night is defined as 10:00pm to 7:00 am Mondays to Saturdays and 10:00pm to 8:00am on Sundays and public holidays. 	Location	^a Day (dB(A))	^b Evening (dB(A))	^c Night (dB(A))	A1 – Piper Street North	38	37	35	A2 – Piper Street Central	38	37	35	A3 – Eyre Street North	44	41	39	A4 – Eyre Street Central	44	41	39	A5 – Eyre Street South	44	41	39	A6 – Bonanza and Gypsum Streets	48	41	39	A7 – Carbon Street	35	35	35	A8 – South Road	48	39	39	A9 – Crystal Street	46	39	39	A10 – Barnet and Blende Streets	42	41	35	A11 – Crystal Street	46	39	39	A12 – Crystal Street	46	39	39	A13 – Eyre Street North 2	38	35	35	A14 – Piper Street North	35	35	35		<p>“The monitoring assessment found that site $L_{Aeq(15min)}$ noise contribution, including the relevant modification factor for low frequency noise, was estimated to be above the relevant limits during one of the measurements at locations A6, A8 and A14, where site $L_{Aeq(15min)}$ noise contribution was estimated to be above the relevant limits. It is noted that a second measurement at locations A6, A8 and A14 confirmed the exceedances were not sustained.</p> <p>Noise from site operations satisfies the noise limits at all other attended monitoring locations, when limits were applicable.”</p> <p><u>December 2018 Annual Noise Survey</u></p> <p>In its 22nd January 2019 report, EMM concluded that:</p> <p>“The monitoring assessment found that site $L_{Aeq,15min}$ noise contributions, including the relevant modification factor for low frequency noise, satisfied the relevant limits during the measurements at all assessment locations.”</p> <p>Calibration certificates for noise meters utilised during the noise surveys were correctly included within the appendices of the 27th November 2017 and 22nd January 2019 reports.</p> <p>Observation No. 28 – BHOP is encouraged to either: a) conduct an internal noise survey (i.e. using a calibrated internal noise meter); or b) commission a noise survey to an external service provider, during a representative period of construction of the TSF2 Embankment Lift. This could potentially be conducted at the same time as the scheduled annual 2019 noise survey.</p> <p>BHOP recognises that under the NSW Noise Policy for Industry, the Rasp Mine is required to comply with the maximum limit of amenity criteria of 65 dB $L_{Aeq(day)}$ specified for an urban/industrial interface area.</p> <p>Auditor’s Note – The NSW Industrial Noise Policy referred to in this condition was replaced in October 2017 by the NSW Noise Policy for Industry.</p>	
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Schedule 3 – Condition 17A – Noise and Vibration – Noise Limits	Compliant	Relevant BHOP personnel were aware of and understood this condition.																																																													

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>The daytime criteria in Table 7 of this approval do not apply when the following activities are being carried out:</p> <p>(a) construction of the concrete batching plant and associated noise bund;</p> <p>(b) construction of TSF2, including:</p> <ul style="list-style-type: none"> • embankment 2; • the spillway; • embankment 3; • embankment 1; <p>(c) capping and rehabilitation of TSF2; and</p> <p>(d) construction of the cement silo and warehouse extension.</p>		<p>In the audit period BHOP has only completed the construction of the Concrete Batching Plant and associated noise bund under paragraph (a) of this condition.</p> <p>At the time of this February 2019 audit the activities in paragraphs (b), (c) and (d) had not been carried out.</p>	
<p>Schedule 3 – Condition 17B – Noise and Vibration – Noise Limits</p> <p>With regard to the activities specified in condition 17A(a)-(d) of this approval, the Proponent must:</p> <p>(a) notify the Department prior to commencement and upon completion of each activity;</p> <p>(b) minimise the noise generated by these activities in accordance with the best practice requirements outlined in the <i>Interim Construction Noise Guideline</i> (DECC, 2009), or its latest version; and</p> <p>(c) ensure that the noise generated by the development does not cause exceedances of the amenity criteria of 65 dB $L_{Aeq,(day)}$ specified for an urban/industrial interface area under the <i>NSW Industrial Noise Policy</i>.</p>	<p>Compliant</p>	<p>At the time of this February 2019 audit the only activity that BHOP had carried out under Project Approval Schedule 3, condition 17A, was the construction of the Concrete Batching Plant and associated noise bund (i.e. under paragraph (a) of that condition).</p> <p>In relation to the paragraphs of this condition:</p> <p>(a) BHOP advised the DPE by letter dated 24 August 2018 that construction of the concrete batching plant and associated noise bund under paragraph (a) of this condition, was complete.</p> <p>(b) Section 8.1 in BHOP's Construction Environment Management Plan – Concrete Batching Plant (revision no. 1 dated 6 December 2017, Doc ID: BHO-PLN-ENV-011) states (in part):</p> <p>“Noise modeling results indicated that with all proposed mitigation measures in place [described in rows 2.1 to 2.6 of Table 8-2], the site noise from standard hours construction works is predicted to satisfy the ICNG Noise Management Levels at all assessment locations.”</p> <p>(c) It was stated that BHOP did not record any exceedances of the relevant amenity criteria during construction of the Concrete Batching Plant and associated noise bund.</p> <p>Auditor's Note – The NSW Industrial Noise Policy referred to in this condition was replaced in October 2017 by the NSW Noise Policy for Industry.</p>	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response																																					
<p>Schedule 3 – Condition 17C – Noise and Vibration – Noise Limits</p> <p>The Proponent must not carry out any of the activities specified in condition 17A(a)-(c) concurrently.</p>	Compliant	<p>Relevant BHOP personnel were aware of and understood this condition.</p> <p>At the time of this February 2019 audit the only activity that BHOP had carried out under Project Approval Schedule 3, condition 17A, was the construction of the Concrete Batching Plant and associated noise bund (i.e. under paragraph (a) of that condition).</p>																																						
<p>Schedule 3 – Condition 18 – Noise and Vibration – Blasting Limits</p> <p>The Proponent shall ensure that blasting on the site does not cause exceedances of the criteria in Tables 8 and 9.</p> <p><i>Table 8: Blasting Criteria (excluding Block 7)</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Airblast Overpressure (dB(Lin Peak))</th> <th>Ground Vibration (mm/s)</th> <th>^a Allowable Exceedance</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Residence on privately owned land</td> <td>115</td> <td>5</td> <td>^b 5% of the total number of blasts over a 12-month period</td> </tr> <tr> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td>Public Infrastructure</td> <td>-</td> <td>100</td> <td>0%</td> </tr> </tbody> </table> <p><i>Table 9: Blasting Criteria (Block 7)</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Airblast Overpressure (dB(Lin Peak))</th> <th>Ground Vibration (mm/s)</th> <th>^a Allowable Exceedance</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Residence on privately owned land</td> <td>115</td> <td>^c 3 (interim)</td> <td>5% of the total number of blasts over a 12-month period</td> </tr> <tr> <td>120</td> <td>10</td> <td>0%</td> </tr> <tr> <td>Broken Hill Bowling Club, Italo (Bocce) Club, Heritage Items within CML7</td> <td>-</td> <td>50</td> <td>0%</td> </tr> <tr> <td>Periya Southern Operations</td> <td>-</td> <td>100</td> <td>0%</td> </tr> <tr> <td>^d Public Infrastructure</td> <td>-</td> <td>100</td> <td>0%</td> </tr> </tbody> </table> <p>These criteria do not apply if the Proponent has a written agreement with the relevant owner to exceed these criteria, and has advised the Department in writing of this agreement.</p> <p><i>Notes to Tables 8 and 9:</i></p> <ul style="list-style-type: none"> ^a The allowable exceedance must be calculated separately for development blasts and production blasts; ^b The 5% allowable exceedance does not apply to production blasts until the Proponent has successfully completed a Pollution Reduction Program aimed at achieving this goal, as required by the EPA under the Proponent's EPL (No. 12559), or as otherwise agreed with the EPA; ^c The interim criteria applies unless and until such time that the Proponent has written consent from the Secretary to apply site specific criteria in accordance with condition 19 of this approval; and ^d The Proponent must close South Road to pedestrians if blasts are expected to exceed a peak particle velocity ground vibration of 65 mm/s at the road reserve surface, while the blast firing occurs. 	Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	^a Allowable Exceedance	Residence on privately owned land	115	5	^b 5% of the total number of blasts over a 12-month period	120	10	0%	Public Infrastructure	-	100	0%	Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	^a Allowable Exceedance	Residence on privately owned land	115	^c 3 (interim)	5% of the total number of blasts over a 12-month period	120	10	0%	Broken Hill Bowling Club, Italo (Bocce) Club, Heritage Items within CML7	-	50	0%	Periya Southern Operations	-	100	0%	^d Public Infrastructure	-	100	0%	<p>Non-compliant (low risk)</p> <p>Blast monitoring at the Rasp Mine is scheduled and conducted by personnel from BHOP's Environment Department. Personnel from BHOP's Technical Services Department are responsible for reviewing the blast vibration data.</p> <p>BHOP maintains six compliance blast monitors and an additional four roving blast monitors. These are listed in BHOP's Register of Blast Monitors.</p> <p>During the audit period there was no identified exceedance of blast noise and vibration criteria in Table 8: Blasting Criteria (excluding Block 7).</p> <p>Non-compliant (low risk) – In the audit period (relating to Table 9: Blasting Criteria (Block 7)) BHOP exceeded the allowable 5% above 3mm/s limit of the total number of blasts over a 12 month period at Block 7 (V5 blast monitor). A total of four blasts were recorded over 3 mm/sec and ranged from 3.07 mm/sec to 3.45 mm/sec. No external complaints from these blasts in Block 7 were received. The non-compliance with the 5% allowable limit is a result of the reduced number of blasts calculated in the 12 month rolling average.</p> <p>It was stated that BHOP has not blasted or mined Block 7 since July 2018. There is no known plan to recommence blasting or mining of Block 7 in 2019.</p>	<p>NC – Compliance has returned to 100% in Block 7.</p>
Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	^a Allowable Exceedance																																					
Residence on privately owned land	115	5	^b 5% of the total number of blasts over a 12-month period																																					
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^d Public Infrastructure	-	100	0%																																					
<p>Schedule 3 – Condition 19 – Noise and Vibration –</p>	Compliant	<p>Given that BHOP ceased to mine Block 7 in July 2018, the requirements specified in this condition have not applied since this</p>																																						

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Blasting Limits</p> <p>The Proponent may establish site specific ground vibration criteria for residential receivers that may be affected by blasting operations in Block 7, to the satisfaction of the Secretary. These criteria must:</p> <p>(a) be prepared by a suitably qualified mining engineer;</p> <p>(b) be prepared in consultation with the EPA;</p> <p>(c) protect the amenity of all residences on privately owned land; and</p> <p>(d) be based on blast monitoring data for the Block 7 mining area.</p>		<p>date.</p> <p>It was stated that BHOP is not aware of any site-specific ground vibration criteria being in place prior to the cessation of mining activities in Block 7 (in July 2018) for residential receivers that may have been affected by blasting operations in Block 7.</p>	
<p>Schedule 3 – Condition 19A – Noise and Vibration – Blast Frequency</p> <p>The Proponent may carry out a maximum of:</p> <p>(a) 1 production blast a day and 6 production blasts a week, averaged over a calendar year; and</p> <p>(b) 6 development blasts a day and 42 development blasts a week, averaged over a calendar year.</p>	Compliant	<p>An Excel spreadsheet titled, 'blast summary_v12', indicated that in 2018 BHOP conducted 1547 development blasts and 228 production blasts.</p> <p>The 2015, 2016 and 2017 AEMRs (with reporting periods from 1 January to 31 December) indicate compliance with this condition.</p> <p>In section 6.13 of the 2017 AEMR, it was stated (in part):</p> <p>“In accordance with Project Approval and EP Licence conditions:</p> <ul style="list-style-type: none"> All production-blasting times occurred between 6.45am and 7.15pm on any day. Production blasts averaged 4.3 per week over the previous calendar year Development blasts averaged 34.2 per week over the previous calendar year <p>A total of 2038 blasts were fired during the reporting period, 1858 for development and 226 for production.”</p> <p>In section 6.13 of the 2016 AEMR, it was stated (in part):</p> <p>“A total of 1787 blasts were fired during the reporting period with 1666 for development and 121 for production.”</p> <p>In section 3.12 of the 2015 AEMR, it was stated (in part):</p> <p>“A total of 121 production blasts and 1785 development blasts were fired at Rasp mine outside of Block 7 in the Western Mineralisation and the Main Lode mine site over the reporting</p>	

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		<p>period. ... 432 blasts [not defined] were conducted in Block 7 Zinc Lode”.</p> <p>Selected Excel spreadsheets with recorded blasting data were sighted, including:</p> <ul style="list-style-type: none"> • Report_byblast_RASP Mine_Nov 2016; • Report_byblast_RASP Mine_Jan 2017; • Report_byblast_RASP Mine_May 2018; • Report_byblast_RASP Mine_Dec 2018; • Report_byblast_RASP Mine_Jan 2019. <p>A blast vibration report dated 18 October 2014 by service provider, Prism Mining (Appendix B to the MOD 3 EA), defines the difference between development blasts (43mm diameter hole) and production blasts (76 or 89mm holes).</p>	
<p>Schedule 3 – Condition 19B – Noise and Vibration – Operating Conditions</p> <p>The Proponent shall:</p> <p>(a) implement best management practice to:</p> <ul style="list-style-type: none"> • protect the safety of people in the surrounding area; and • protect public or private infrastructure/property in the surrounding area from any damage; <p>(b) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site;</p> <p>(c) use reasonable endeavours to co-ordinate blasting at the site:</p> <ul style="list-style-type: none"> • to minimise cumulative blasting impacts associated with the operation of nearby mines; and • to avoid disturbing users of nearby recreational facilities, including the Broken Hill Bowling Club and the Italo (Bocce) Club; <p>to the satisfaction of the Secretary.</p>	<p>Compliant</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>Vibration management is implemented through BHOP’s Blasting Monitoring Program Management Plan (BMPMP) and Technical Blasting Management Plan (TBMP). Refer to condition 20 of this Schedule regarding the content of the BMPMP.</p> <p>Examples of best management practices implemented by BHOP to comply with paragraph (a) of this condition include:</p> <ul style="list-style-type: none"> • requirements described in section 7.2.2 of BHOP’s Technical Blasting Management Plan (revision no. 1, issued on 30 March 2015, Doc ID: BHO-PLN-MIN-002) to meet blasting and overpressure criteria and to minimise blasting impacts on the local community; and • analysis of potential causes of recorded exceedances and implemented corrective actions, as noted in the Memorandum (Re: 2017/2018 Blast Annual Compliance Report) dated 21 November 2018 from BHOP’s Technical Services Superintendent to the Senior Environmental Advisor. <p>In relation to paragraph (b) of this condition, the CBH website includes a Rasp Blasting Schedule page, which as of February 2019 was observed to be up-to-date. The Rasp Blasting Schedule page on the CBH website advises that production blasting is scheduled between</p>	<p>Ob 29 – All monitors have been calibrated in the last year as required.</p> <p>Ob 30 – Noted.</p> <p>Ob 31 – Noted.</p>

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		<p>6:45 am to 7:15 am and 6:45 pm to 7:15 pm on any day.</p> <p>In relation to paragraph (c) of this condition:</p> <ul style="list-style-type: none"> section 6 of the BMPMP refers to the existence of a 'general agreement' between BHOP and Perilya where the Rasp Mine aims to blast in the first 15 minute block (6:45 to 7:00) and Perilya aims to blast in the second 15 minute block (7:00 to 7:15); and during the audit period no complaints of disturbance were made by users of the Broken Hill Bowling Club or the Italo (Bocce) Club. <p>Observation No. 29 – At the time of this February 2019 audit, calibration dates for the eight Minimate blast monitors (in INX InControl records) ranged from the most recent calibration on 13 August 2018 (a calibration certificate issued by Saros for Minimate serial number BE22003) to the least recent calibration on 1 September 2017. BHOP could confirm the required frequency of calibration with the manufacturer (as noted in section 5.4 of the BMPMP).</p> <p>Observation No. 30 – BHOP could consider if it would be beneficial to include the number of planned 'development blasts' for any given week (i.e. in addition to the timing of any daily production blasts) on the CBH website.</p> <p>Observation No. 31 – BHOP could consider entering into a formal (i.e. written) agreement with Perilya regarding blasting times to limit cumulative blasting impacts from blasting at the same time.</p> <div style="display: flex; justify-content: space-around;">   </div> <p>Photos 11 and 12 – Example of blast vibration monitoring equipment utilised by BHOP (February 2019)</p>	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Schedule 3 – Condition 20 – Noise and Vibration – Noise and Blast Management Plan</p> <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><i>[Auditor’s Note: there is no paragraph (a).]</i></p> <p>(b) be prepared in consultation with EPA, and submitted to the Secretary for approval by the end of June 2011;</p> <p>(c) describe the noise mitigation measures that would be implemented to:</p> <ul style="list-style-type: none"> ensure compliance with the relevant conditions of this approval, including a real-time noise management system that employs both reactive and proactive mitigation measures; and address activities associated with the construction of the concrete batching plant and TSF2, and the capping and rehabilitation of TSF2; <p>(d) include a noise monitoring program that:</p> <ul style="list-style-type: none"> uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the project; and includes a protocol for determining exceedances of the relevant conditions of this approval; <p>(e) describe the blast management measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this approval; and</p> <p>(f) include a blast monitoring program that:</p> <ul style="list-style-type: none"> evaluates the performance of the project, including compliance with the applicable criteria; uses a combination of roving blast monitors (at least 1) and fixed blast monitors (at least 6); and includes a protocol for determining and responding to exceedances of the relevant conditions of this approval. 	<p>Non-compliant (low risk)</p>	<p>BHOP has prepared and implemented the following Management Plans in relation to this condition:</p> <ul style="list-style-type: none"> a Blasting Monitoring Program Management Plan (BMPMP) which currently is revision no. 3, issued on 4 November 2016, Doc ID: BHO-PLN-ENV-006; a Technical Blasting Management Plan (TBMP) which currently is revision no. 1, issued on 30 March 2015, Doc ID: BHO-PLN-MIN-002; a Noise Monitoring Management Plan (NMMP) which currently is revision no. 3, issued on 19 January 2018, Doc ID: BHO-PLN-ENV-009. Refer to observation below regarding the version number. <p>During this February 2019 audit there was evidence that BHOP is implementing the BMPMP, TBMP and NMMP. Refer to comments for condition 19B of this Schedule for examples of implementation of the BMPMP and TBMP.</p> <p>Implementation of ‘best management practices’ in section 8.2 of the NMMP observed during this February 2019 audit included noise awareness information in the BHOP Rasp Mine General Induction (page 94), and the use of enclosed conveyors and transfer stations prior to the grinding circuit.</p> <p>In relation to the paragraphs of this condition:</p> <p>(a) There is no paragraph (a) in the condition.</p> <p>(b) Section 9 of the BMPMP and Appendix A of the NMMP provide evidence of consultation with the EPA. It is considered that the requirement for submission of the BMPMP and NMMP to the Secretary for approval by the end of June 2011 does not apply to subsequent revisions of the BMPMP and NMMP.</p> <p>(c) Section 6.3 of the NMMP describes ‘Action Limits’ during attended noise monitoring and section 7.2 of the NMMP describes noise mitigation measures to reduce a noise exceedance to below the action limit (e.g. elimination by using a new design, plant or equipment). The NMMP includes sufficient content relating to the Concrete Batching Plant. Refer to non-compliance below in relation to the BMPMP and TBMP.</p>	<p>NC – Updated NMP addressing MOD4 requirements on website. MOD5 requirements addressed in current NMP with regulators for approval.</p> <p>Ob 32 – To be actioned by BHOP.</p> <p>Ob 33 – To be actioned by BHOP.</p>
	<p>Observation</p> <p>Observation</p>		

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		<p>(d) Sections 6.1 and 6.2 of the NMMP and section 6.1 of the BMPMP include details of noise monitoring programs (i.e. monitoring locations and frequency).</p> <p>(e) Section 6 of the BMPMP and sections 7.2.2 and 7.3 of the TBMP describe blast management measures that would be implemented to ensure compliance with the blast criteria and operating conditions of this approval, for example:</p> <ul style="list-style-type: none"> • instrumentation used and procedures will be in accordance with AS 2817.2-2006 (section 6.1 of the BMPMP); and • all blasting data is electronically uploaded from the monitors four times daily (section 6.3 of the BMPMP). <p>(f) The BMPMP and TBMP include a blast monitoring program that:</p> <ul style="list-style-type: none"> • evaluates the performance of the project, including compliance with the applicable blasting criteria (section 6.2 of the BMPMP); • uses a combination of at least one roving monitor and at least six fixed monitors (section 6.1 of the BMPMP); • includes a protocol for determining and responding to exceedances of the relevant conditions of this approval (sections 7.1 and 7.3 of the BMPMP and section 10 of the TBMP). <p>Non-compliant (low risk) – BHOP’s current BMPMP and TBMP do not address activities associated with the construction of the Concrete Batching Plant and TSF2 (i.e. the TSF2 Embankment Lift) and the capping and rehabilitation of TSF2 (paragraph (c)).</p> <p>Observation No. 32 – At the time of this February 2019 audit, the NMMP on the CBH website is labelled ‘version no. 1’. BHOP should review its document control procedure to ensure the current issued version of the NMMP (and other Management Plans) is on the CBH website.</p> <p>Observation No. 33 – BHOP should include the BMPMP and TBMP on the CBH website.</p>	
Schedule 3 – Condition 20A – Underground Mining – Performance Measures	Compliant	A Deed of Agreement (in relation to road infrastructure affected by the Rasp Mine Extension) was entered into with the RMS (undated, but likely to be circa June 2015), prior to the commencement of	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
The Proponent shall ensure that there are no measurable subsidence impacts caused by underground mining beneath South Road and other public infrastructure.		<p>production blasting in Block 7.</p> <p>Section 7.1 of the Deed of Agreement requires BHOP to monitor and inspect South Road at a frequency and in a manner in accordance with the 'Relevant Documents' (defined as the Ground Control Management Plan, Blasting Management Plan and any other documents required by RMS) and report to RMS on the condition of South Road in accordance with the Relevant Documents.</p> <p>Section 6.2.1 of the BMPMP refers to the use of extensometers for underground monitoring of potential ground movement for the 60m crown pillar beneath South Road and hanging wall (stopping) conditions.</p> <p>At the time of this February 2019 audit BHOP had not observed any measurable subsidence impacts caused by underground mining beneath South Road and other public infrastructure.</p> <p>Section 6.20 in the 2016 and 2017 AEMRs stated that no subsidence was detected in the respective reporting periods.</p>	
<p>Schedule 3 – Condition 21 – Soil and Water</p> <p>Except as may be expressly provided by an Environment Protection Licence issued under the <i>Protection of the Environment Operations Act 1997</i>, the Proponent shall comply with section 120 of that Act, which prohibits the pollution of waters.</p>	Compliant	<p>BHOP's current Site Water Management Plan (SWMP) is Golder Associates Report Number 097626108-007-R-Rev11, dated 30 April 2012.</p> <p>Surface water runoff layout plans are included within the SWMP.</p> <p>During rainfall, surface water management at the operation involves the diversion of surface runoff into either the Ryan Street Dam or Horwood Dam.</p> <p>In January 2016, the Ryan Street S49 Dam was recontoured to contain a 1 in 20 year ARI 24 hour storm event; and the dam embankment was lined with HDPE.</p> <p>Given the low rainfall and high evaporation rates in the region surrounding Broken Hill, the presence of standing water is rare. A significant number of shallow basins and depressions are utilised around the site to capture surface runoff from disturbed areas when this occurs.</p> <p>Underground dewatering, surface runoff and any runoff from TSF1 is diverted to the lined S22 Dam. This water is then pumped to the mill</p>	

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		<p>as processing water.</p> <p>It was stated that the nearest waterway/creek to the operation with environmental value is Stephens Creek (located 18 km to the east of Broken Hill). No surface runoff from the BHOP is known to drain into or reach this receiving water.</p>	
<p>Schedule 3 – Condition 22 – Soil and Water – Water Supply</p> <p>The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations to match its water supply.</p> <p><i>Note: The Proponent is required to obtain the necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.</i></p>	Compliant	<p>BHOP currently utilises underground water that is dewatered and pumped to the lined S22 Dam on site.</p> <p>At this location, the water is clarified for the removal of sediment and is then utilised around the operation for mining, processing and related activities.</p> <p>Water sourced from underground is occasionally used for dust suppression on the haul roads. Other activities associated with dust suppression utilise raw water.</p> <p>The Rasp Mine utilises raw water within its washdown bays, fire hydrants etc. Raw water is currently sourced from the Menindee Lakes.</p> <p>Potable water, utilising a second pipeline and chlorination processes, is also currently sourced from the Menindee Lakes. In 2019, raw water for the operation is expected to be sourced from the Murray River as a result of the final stages of construction of a water pipeline to Broken Hill from this source.</p> <p>There was no evidence during this February 2019 audit that insufficient water exists for all aspects of mining, processing and related activities.</p>	
<p>Schedule 3 – Condition 23 – Soil and Water – Water Management Plan</p> <p>The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Secretary. This plan must be consistent with the Stormwater Management Plan presented as Annexure K to the EA, incorporate any changes to reflect the final detailed design of the project, and be prepared in consultation with EPA, Dol L&W and DRG. The plan must: be submitted to the</p>	Compliant	<p>BHOP's current Site Water Management Plan (SWMP) is Golder Associates Report Number 097626108-007-R-Rev11, dated 30 April 2012. The SWMP has not been updated since 30 April 2012. The SWMP is on the CBH website.</p> <p>During this February 2019 audit there was evidence that BHOP is implementing the SWMP, including the following measures:</p> <ul style="list-style-type: none"> • use of a Site Water Monitoring Procedure (BHO-ENV-PRO-011); • surface water and groundwater monitoring results in Monthly Environmental Monitoring Reports on the CBH website (from 	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Secretary for approval by the end of June 2011, and must include:</p> <p>(a) a Site Water Balance, which must:</p> <ul style="list-style-type: none"> • include details of: <ul style="list-style-type: none"> ○ sources and security of water supply; ○ water use on site; ○ water management on site; ○ any off-site water transfers; and • investigate and implement all reasonable and feasible measures to minimise water use by the project; <p>(b) an Erosion and Sediment Control Plan, which must:</p> <ul style="list-style-type: none"> • identify activities that could cause soil erosion, generate sediment or affect flooding; • describe measures to minimise soil erosion and the potential for transport of sediment to downstream waters, and manage flood risk; • describe the location, function and capacity of erosion and sediment control structures and flood management structures; and • describe what measures would be implemented to maintain the structures over time; <p>(c) a Surface Water Management Plan, which must include:</p> <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the project; • surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts; • a program to monitor and assess: <ul style="list-style-type: none"> ○ surface water flows and quality; ○ impacts on water users; ○ stream health; and ○ channel stability. <p>(d) a Groundwater Monitoring Program, which must:</p> <ul style="list-style-type: none"> • provide a program to monitor seepage movement within and adjacent to the tailings storage facility; • include details of parameters and pollutants to be 		<p>January 2014 to December 2018 at the time of this February 2019 audit); and</p> <ul style="list-style-type: none"> • surface water and groundwater monitoring results in AEMRs on the CBH website (from 2012 to 2017 at the time of this February 2019 audit). <p>Section 1.0 of the SWMP states that a draft SWMP was submitted to the Department of Planning in June 2011.</p> <p>In relation to the paragraphs of this condition:</p> <p>(a) The SWMP includes a 'Water Balance' in section 13 and Appendix B. The Water Balance Model in Appendix B is a schematic of Year 5 of the Rasp Mine. The Water Balance:</p> <ul style="list-style-type: none"> • includes details of: <ul style="list-style-type: none"> ○ sources and security of water supply (section 13.2 and Appendix B); ○ water use on site (section 13.3 and Appendix B); ○ water management on site (section 13.3 and Appendix B); ○ any off-site water transfers (section 13.1 and Appendix B); and • investigates and implements all reasonable and feasible measures to minimise water use by the project (section 13.3 and Appendix B). <p>(b) The SWMP includes a 'Catchment Runoff and Sediment Management Plan' (i.e. an Erosion and Sediment Control Plan) which:</p> <ul style="list-style-type: none"> • identifies activities that could cause soil erosion, generate sediment or affect flooding (section 10.0); • describes measures to minimise soil erosion and the potential for transport of sediment to downstream waters, and manage flood risk (sections 10.0, 10.1, 10.2, 10.3 and 10.4); • describes the location, function and capacity of erosion and sediment control structures and flood management structures (section 10.5); and • describes what measures would be implemented to maintain the structures over time (sections 10.1, 10.2, 10.3 and 10.4). 	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>monitored for:</p> <ul style="list-style-type: none"> ○ water from mine dewatering; ○ groundwater locations to the east of TSF1; ○ surface water represented by Horwood Dam; ○ water captured by the toe drains of the tailings storage facility; ○ water seepage from the tailings storage facility; and ○ the background local groundwater system. <ul style="list-style-type: none"> • outline performance parameters against monitoring data will be compared to determine whether seepage is occurring, and whether an unacceptable impact on local groundwater may be occurring; • include details of contingency measures to be implemented in the event that an unacceptable impact is identified. 		<p>(c) The SWMP includes a Surface Water Management Plan which includes:</p> <ul style="list-style-type: none"> • detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the project (section 12.1); • surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts (section 12.4); • a program to monitor and assess: <ul style="list-style-type: none"> ○ surface water flows and quality (sections 12.1 and 12.4); ○ impacts on water users (section 12.1); ○ stream health (section 12.1); and ○ channel stability (section 12.1). <p>(d) The SWMP includes a Groundwater Monitoring Program which:</p> <ul style="list-style-type: none"> • provides a program to monitor seepage movement within and adjacent to the tailings storage facility (section 11.2, section 11.2.2 for TSF1 and section 11.2.4 for TSF2); • includes details of parameters and pollutants to be monitored for: <ul style="list-style-type: none"> ○ water from mine dewatering (sections 11.2.7 and 11.3.2); ○ groundwater locations to the east of TSF1 (sections 11.2.2 and 11.3.2); ○ surface water represented by Horwood Dam (sections 11.2, 11.2.3 and 11.3.2); ○ water captured by the toe drains of the tailings storage facility (sections 11.3 and 11.3.2); ○ water seepage from the tailings storage facility (sections 11.2.2, 11.2.4 and 11.3.3); and ○ the background local groundwater system (section 11.1). • outlines performance parameters against monitoring data which will be compared to determine whether seepage is occurring, and whether an unacceptable impact on local groundwater may be occurring (section 11.3.3 and Appendix A); • includes details of contingency measures to be implemented in the event that an unacceptable impact is identified (section 11.3.3). 	

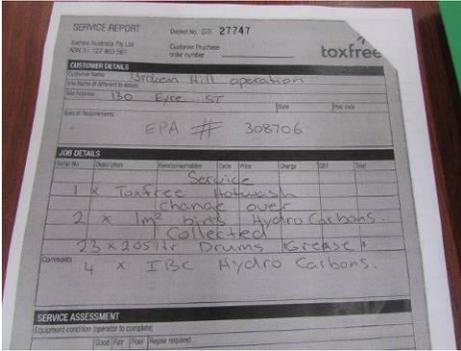
Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Schedule 3 – Condition 24 – Transport</p> <p>The Proponent shall maintain the existing 66 carparking spaces, or an equivalent number elsewhere on the site, for the duration of the project.</p>	Compliant	During this February 2019 audit there was evidence that BHOP maintains a suitable carpark for employees and contractors, inclusive of an overflow carpark. The number of car spaces provided by BHOP across these two carparks is at least 92 car spaces.	
<p>Schedule 3 – Condition 25 – Transport</p> <p>The Proponent shall consult with the RMS and BHCC in relation to the footpath modifications required at the Eyre Street site access and shall address the design requirements of those agencies in relation to those works. All footpath works shall be completed prior to the commencement of operation of the project, and shall be undertaken at no cost to the RMS or BHCC.</p>	Compliant	<p>BHOP received a letter dated 3 September 2012 from Broken Hill City Council regarding the completion of works for 130 Eyre Street.</p> <p>This letter confirmed that these works were completed and complied with all relevant standards and Council requirements.</p>	
<p>Schedule 3 – Condition 26 – Transport</p> <p>A truck waiting area with capacity to accommodate at least two B-Double vehicles at any time shall be provided inside the Eyre Street site access to avoid trucks queuing into Eyre Street.</p>	Compliant	BHOP has provided and maintains a suitable truck waiting area with capacity to accommodate at least two B-Double vehicles at any time inside the Eyre Street site access.	
<p>Schedule 3 – Condition 27 – Transport</p> <p>If the Holten Road site access is required during construction of the project, the Proponent shall, prior to using this access, consult with and address the requirements of the RMS and Council with respect to traffic access at this location.</p>	Compliant Observation	<p>Relevant BHOP personnel were aware of and understood this condition.</p> <p>It was stated that the Holten Drive (i.e. Holten Road) access may be required for bringing in construction materials from the quarry for the TSF2 Embankment Lift works, and could be used again in 2019. At the time of this February 2019 audit, a decision on the possible use of Holten Drive has not been made.</p> <p>Observation No. 34 – BHOP is encouraged to secure written approval from RMS and Broken Hill City Council prior to reopening the Holten Drive site access for potential use during construction of the TSF2 Embankment Lift in 2019.</p>	Ob 34 – Noted.
<p>Schedule 3 – Condition 28 – Transport</p> <p>The Proponent shall commission dilapidation reports for roads likely to be affected by the construction of the project,</p>	Compliant Observation	It was stated that since 2015, BHOP has not commissioned any additional dilapidation reports for roads likely to be affected by any scheduled construction project (i.e. prior to the commencement of	Ob 35 – Noted.

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
prior to the commencement of construction and immediately prior to completion of construction. The Proponent shall fund rectification of any deterioration of road pavement quality as a result of construction-related traffic.		construction and immediately after completion of any construction). Observation No. 35 – If BHOP decides to use Holten Drive for the transport of construction materials for the TSF2 Embankment Lift, or if any other use of this road is intended in 2019, BHOP could commission an updated dilapidation report for Holten Drive and any other roads to be used, to reduce the likelihood of ‘condition’ disputes with RMS and Broken Hill City Council.	
Schedule 3 – Condition 28A – Transport The Proponent must enter into a Deed of Agreement with the RMS for the protection and management of South Road, to the satisfaction of the RMS, prior to the commencement of production blasting in Block 7.	Compliant	A Deed of Agreement (in relation to road infrastructure affected by the Rasp Mine Extension) was entered into with the RMS (undated, but likely to be circa June 2015), prior to the commencement of production blasting in Block 7.	
Schedule 3 – Condition 29 – Transport – Traffic Management Plan The Proponent shall prepare and implement a traffic management plan to the satisfaction of the Secretary . The plan shall focus on traffic management during construction of the project, and must be developed in consultation with the RMS and Council. The plan must be submitted for the approval of the Secretary prior to the commencement of construction.	Compliant Observation Observation	BHOP’s current Traffic Management Plan (TMP) is dated July 2011 and was prepared by service provider, GR Engineering Services. It was stated that the TMP will need to be reviewed and updated if a future Project Approval modification is issued which incorporates any additional major construction works at the site. Observation No. 36 – The TMP is currently labelled as a GR Engineering Services document. When reviewing and updating the TMP, BHOP could consider issuing the revised TMP as a BHOP document. Observation No. 37 – Section A1.3 of the TMP could be amended to refer to “no trucking will take place during heavy winds” instead of “no trucking will take place during wet weather”.	Ob 36 – Noted. Ob 37 – Noted.
Schedule 3 – Condition 30 – Heritage The Proponent shall prepare and implement a Conservation Management Plan for the site to the satisfaction of the Secretary . This plan must provide a strategic framework for all heritage items located on the Lease, based on the principles of the Burra Charter, and developed in consultation with the Heritage Council and Council. The plan must be submitted for the approval of the Secretary by	Compliant Observation	BHOP’s draft Conservation Management Plan (CMP) was developed by external consultant, GML Heritage, and issued to BHOP in September 2015. The CMP remains issued as a ‘draft’ version. It is considered that the requirement to submit the plan for the approval of the Secretary by December 2011 does not apply to this draft CMP. In addition to the draft CMP, BHOP commissioned the development of a Rasp Mine Conservation Management Strategy (August 2015) to integrate the findings and policies of the draft CMP with the current management framework for Rasp Mine, to provide for appropriate	Ob 38 – Noted.

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
December 2011.		<p>management of the large number of individual heritage items, to align with BHOP's planning for mine closure and lease relinquishment and to form the basis for preparation of a revised CMP.</p> <p>It is considered that the draft CMP provides a strategic framework for all heritage items located on the lease. There was evidence during this February 2019 audit that heritage items were not being harmed by BHOP's mining operations and related activities.</p> <p>BHOP also maintains a register of all heritage items on the site.</p> <p>Observation No. 38 – BHOP is encouraged to request GML Heritage to finalise the draft September 2015 CMP or (if it has been previously finalised) provide a final issue of the CMP. Once received, this final version is required to be submitted for approval of the Secretary.</p>	
<p>Schedule 3 – Condition 30A – Heritage</p> <p>If any unexpected heritage items are identified over the life of the project, the Proponent must cease works and contact the Heritage Council in writing prior to works continuing in the affected areas,</p>	Compliant Observation	<p>It was stated that there have been no unexpected heritage items identified at the site in the audit period.</p> <p>As a result, there has been no need for any correspondence with the Heritage Council relating to unexpected heritage items in the audit period.</p> <p>The most recent archeology survey and report at the site was completed in 2012 by Austral Archaeology (i.e. presented as heritage inventory forms within the draft CMP developed by external consultant, GML Heritage).</p> <p>Observation No. 39 – BHOP is encouraged to review existing General Induction material for employees and contractors to ensure that the information for communicating the finding of a heritage item is formally included within the induction presentation.</p>	Ob 39 – To be actioned by BHOP.
<p>Schedule 3 – Condition 31 – Visual Amenity</p> <p>The Proponent shall:</p> <p>(a) minimise the visual impacts, and particularly the off-site lighting impacts, of the project;</p> <p>(b) take all practicable measures to further mitigate off-site lighting impacts from the project; and</p> <p>(c) ensure that all external lighting associated with the project complies with <i>Australian Standard AS4282 (INT)</i></p>	Compliant	<p>It was stated that since the commencement of mining and processing operations in 2012, there have been no lighting-related complaints received by BHOP from any external stakeholders.</p> <p>The BHOP "Contact Us" form/page is available on the CBH website for any concerns that may be raised by local residents or the public, inclusive of any concerns relating to lighting used at the Rasp Mine site at night.</p>	

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
1995 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version, to the satisfaction of the Secretary.			
<p>Schedule 3 – Condition 32 – Waste</p> <p>The Proponent shall:</p> <p>(a) minimise the waste generated by the project; and</p> <p>(b) ensure that the waste generated by the project is appropriately stored, handled, and disposed of, to the satisfaction of the Secretary.</p>	<p>Non-compliant (low risk)</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>Regulated waste inclusive of: a) waste oils; b) waste grease; c) hydrocarbon contaminated rags; d) oil filters etc, are removed by external service provider, Toxfree (i.e. part of the Cleanaway network of companies).</p>  <p>Photos 13 and 14 – Toxfree maintenance and service personnel on-site (February 2019)</p> <p>Batteries are temporarily stored and removed of site for recycling.</p>  <p>Photo 15 – Example of temporary battery storage on-site (February 2019)</p> <p>Used heavy vehicle tyres are either repaired or used for demarcation of haul and access roads around the site. Used light vehicle tyres are</p>	<p>NC – BHOP will develop waste reduction strategies.</p> <p>Ob 40 – To be actioned by BHOP.</p> <p>Ob 41 – To be actioned by BHOP.</p> <p>Ob 42 – To be actioned by BHOP.</p> <p>Ob 43 – To be actioned by BHOP.</p>

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>removed off site to commercial suppliers that manage this waste stream.</p>  <p>Photos 16 and 17 – Heavy equipment tyres (February 2019)</p>  <p>Photos 18 and 19 – Heavy equipment tyres used around the Rasp Mine site (February 2019)</p> <p>External provider, Broken Hill Skip Bins, is contracted to supply and remove general domestic waste to landfill.</p>  <p>Photos 20 and 21 – Broken Hill Skip Bins around the Rasp Mine site (February 2019)</p>	

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>It was stated that a glass and aluminum/steel can recycler has recently reopened in Broken Hill which may be utilised by BHOP.</p> <p>Some waste cardboard and paper is segregated and transported to the Broken Hill City Council (BHCC) facilities for collection.</p> <p>Septic waste from the site is collected by a third-party contractor (i.e. Silver Sweep) and transported to the BHCC Sewerage Treatment Plant (STP).</p> <p>Licensed waste contractors that remove regulated waste off-site utilise the NSW EPA on-line waste tracking process and define the relevant electronic EPA Tracking Numbers on the submitted service reports/invoices. These records are received by BHOP stores and forwarded to BHOP accounts in hard copy.</p>  <p>Photo 22 – EPA Tracking Number on a submitted service report (February 2019)</p> <p>Non-compliant (low risk) – Whilst most regulated waste and recyclable products are segregated at source, no formal program has been developed and implemented by BHOP to continue to proactively review, identify and implement additional programs to minimise waste going to landfill and the volume of waste being recycled (i.e. BHOP waste minimisation plans should formally include existing and planned programs to reduce waste in the future).</p> <p>Observation No. 40 – On an annual frequency, BHOP could proactively verify that the licences of all regulated waste contractors</p>	

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>utilised by BHOP are valid (i.e. verified using on-line sources/references).</p> <p>Observation No. 41 – BHOP is expected to review existing processes that are being utilised by licensed waste contractors that remove regulated waste off-site (i.e. defining the relevant electronic EPA Tracking Numbers on submitted invoices). BHOP should ensure that processes for retaining these records are consistent and effectively utilised.</p> <p>Observation No. 42 – Annual reports defining all regulated waste removed from site and the relevant waste tracking numbers could be requested from all external contractors that remove regulated waste from the Rasp Mine site.</p> <p>Observation No. 43 – During this February 2019 audit it was observed that BHOP workshop personnel could improve their waste segregation practices (i.e. there was evidence of hydrocarbon contaminated waste being incorrectly discarded in general waste skip bins) and timely replenishment of spill kits.</p> <div style="display: flex; justify-content: space-around;">   </div> <p>Photos 23 and 24 – Hydrocarbon contaminated waste being incorrectly discarded in general waste skip bins (February 2019)</p>	

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		 <p>Photos 25 and 26 – Spill kits within the main mobile equipment workshop require scheduled inspection and replenishment in a timely manner (February 2019)</p>	
<p>Schedule 3 – Condition 33 – Waste</p> <p>The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared in consultation with DRG, and submitted the Secretary for approval by the end of March 2011; (b) identify the various waste streams of the project; (c) estimate the volumes of tailings and other waste material that would be generated by the project; (d) describe and justify the proposed strategy for disposing of this waste material; (e) describe what measures would be implemented to meet the requirements set out above in condition 32; and (f) include a program to monitor the effectiveness of these measures. 	<p>Compliant</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>BHOP’s current Waste Management Plan – Version 2 was updated and issued in April 2012, and is on the CBH website.</p> <p>BHOP has developed a draft Waste Management Plan (Version 4) that is dated January 2019, but this has not been issued/document controlled to allow it to be submitted to the secretary.</p> <p>Observation No. 44 – BHOP would benefit in clearly defining its January 2019 Waste Management Plan as being: a) a Mineral Waste Management Plan; or b) a Non-mineral Waste Management Plan; or c) both.</p> <p>Observation No. 45 – To improve the understanding, generation, management and minimisation of waste from each area of the site, BHOP could consider conducting a comprehensive internal waste audit or utilise a specialist external service provider.</p> <p>Observation No. 46 – As of February 2019, BHOP is unaware of the PCB status/concentrations of oil within redundant transformers held on site. BHOP is encouraged to sample and test all redundant transformers for PCB concentrations. Once complete, BHOP could establish and maintain a formal register defining PCB concentrations within both in-service transformers and redundant transformers. If laboratory results identify that PCB concentrations within redundant transformers are higher than statutory limits, BHOP should apply an identification/asset number to those transformers, label those transformers with their PCB concentrations and ensure effective</p>	<p>Ob 44 – To be actioned by BHOP.</p> <p>Ob 45 – To be actioned by BHOP.</p> <p>Ob 46 – To be actioned by BHOP.</p> <p>Ob 47 – A procedure exists outlining disposal methods and has been addressed at shift start meetings and through a Mine Manager’s Memo.</p> <p>Ob 48 – Noted.</p> <p>Ob 49 – To be actioned by BHOP.</p>

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>secondary containment of those transformers.</p> <p>Observation No. 47 – Detonator boxes are being incorrectly disposed of into general bulk rubbish skip bins which are potentially removed off-site to landfill.</p>  <p>Photos 27 and 28 – Used detonator boxes are being incorrectly removed off-site within general rubbish skip bins (February 2019)</p> <p>Observation No. 48 – BHOP could consider surveying bulk waste skip bins prior to their scheduled collection, and determine if these are being charged by volume or weight, by external service providers. If charged by weight, BHOP should confirm that accurate waste records are being received from the service provider (i.e. via the BHCC landfill weighbridge).</p> <p><u>Mineral Waste</u></p> <p>Mineral waste generated at the Rasp Mine site includes: a) waste rock from underground; and b) tailings.</p> <p>Observation No. 49 – No current TSF Operating Manual exists or is being maintained by BHOP to accurately reflect required operating and disposal practices as of February 2019. This could be updated and reissued at the completion of the scheduled TSF2 Embankment Lift.</p> <p>It was state that the Resources Regulator and Dam Safety Committee visited the Rasp Mine site and existing/former tailings dams in December 2018. At the time of this February 2019 audit, no inspection report has been received from the Resources Regulator.</p>	

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Schedule 3 – Condition 33A – Waste</p> <p>The Proponent must update the Waste Management Plan required by condition 33 of this approval by December 2017, unless the Secretary agrees otherwise. The updated plan must include:</p> <p>(a) a long-term waste management strategy; and (b) an action plan for the implementation of the key measures proposed to achieve the strategy.</p> <p>Following approval, the Proponent must implement the plan.</p>	<p>Non-compliant (low risk)</p> <p>Observation</p>	<p>It was stated that BHOP only had a period of three months to lodge a suitable Waste Management Plan (WMP) when MOD4 was approved in September 2017.</p> <p>Non-compliant (low risk) – In relation to the WMP:</p> <ul style="list-style-type: none"> No documented record exists to demonstrate that BHOP submitted an updated WMP to the Secretary for approval prior to December 2017 (i.e. the current 2012 WMP was not submitted and the draft WMP (V4), dated January 2019, has not been issued). BHOP's current 2012 WMP (Rev 2) does not define the action plan (i.e. actions, responsibilities and timeframes) for effective and improved waste management across the operation. <p>Observation No. 50 – The updated WMP should include actions, responsibilities and timeframes for the implementation of the key measures proposed to achieve BHOP's waste management strategy.</p>	<p>NC – Updated WMP has been submitted to regulator in Feb 2019 for review.</p> <p>Ob 50 – To be actioned by BHOP.</p>
<p>Schedule 3 – Condition 34 – Rehabilitation – Progressive Rehabilitation</p> <p>The Proponent must rehabilitate the site progressively, that is, as soon as is practicable following disturbance, to the satisfaction of the Secretary.</p>	<p>Compliant</p>	<p>As at this February 2019 audit, no formal progressive rehabilitation program had commenced at the BHOP Rasp Mine.</p> <p>The entire lease is essentially in a disturbed state. Limited opportunities currently exist at the site to conduct any progressive or final rehabilitation. BHOP's focus to date has been on soil stabilisation and the use of commercially available dust suppressants on disturbed areas to minimise fugitive dust emissions from the site.</p> <p>To date, there has been no agreed methodology approved by regulatory bodies defining how the site will be either be progressively rehabilitated or the methods to be adopted for final rehabilitation.</p> <p>No community consultation meetings are known to have occurred to date to receive feedback on the preferred land use for the site, post rehabilitation.</p> <p>It was stated that an intergovernmental committee (the Line of Lodge Working Group, chaired by the Department of Premier and Cabinet) has been formed to discuss future options for the rehabilitation of the entire Line of Lode. Although requested by BHOP, terms of reference or information (e.g. minutes of meetings) regarding the Working Group have not been provided, for the apparent reason that the</p>	

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>Working Group is not a public committee.</p> <p>At the time of this February 2019 audit, an “Options Analysis Study” for mine site rehabilitation is in the process of being completed by external consultant, MineEarth.</p> <p>Apart from the above, limited additional work has been completed relating to mine rehabilitation and closure since the previous (February 2016) audit.</p>	
<p>Schedule 3 – Condition 34A – Rehabilitation – Rehabilitation Strategy</p> <p>The Proponent must prepare a Rehabilitation Strategy for the site to the satisfaction of the Secretary. This strategy must:</p> <p>(a) be prepared in consultation with DRG, EPA, DoI L&W, the Heritage Council and Council;</p> <p>(b) define the rehabilitation objectives for the mine site, with consideration of heritage values, dust management, water and leachate management, subsidence, visual impacts and public safety;</p> <p>(c) include a final landform plan which builds on the rehabilitation objectives and reflects the aims of rehabilitation and closure required by condition 35(d) of this approval; and</p> <p>(d) be submitted to the Secretary for approval by the end of June 2018, unless the Secretary agrees otherwise.</p>	<p>Non-compliant (low risk)</p>	<p>Non-compliant (low risk) – BHOP did not submit a Rehabilitation Strategy to the DPE for approval by the end of June 2018.</p> <p>No rehabilitation strategy for the Rasp Mine had been developed as of February 2019, as the preferred method of rehabilitation has not been determined to date by the Line of Lode Working Group.</p> <p>It was stated that the Rehabilitation Strategy submission date of June 2018 was not met, partially as a result of delays experienced with the Line of Lode Working Group.</p> <p>A draft Mine Closure Plan (318 pages) for the period 1st November 2015 to 31st October 2018 was developed for the Rasp Mine in September 2015. This Plan was not finalised or issued as a final version. External consultant, Corrine Unger, progressed some closure options and draft strategies for the Rasp Mine which were included in the September 2015 draft Mine Closure Plan.</p>	<p>NC – An Options Analysis study has been conducted and a draft report provided in February 2019.</p> <p>Feedback is yet to be provided by Line of Lode interagency panel and required for completion of Strategy.</p>
<p>Schedule 3 – Condition 35 – Rehabilitation – Rehabilitation Management Plan</p> <p>The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the Department, DRG, EPA, DoI L&W, the Heritage Council and Council;</p> <p>(b) be prepared in accordance with relevant DRG guidelines;</p> <p>(c) be consistent with the rehabilitation objectives defined under the Rehabilitation Strategy required by condition</p>	<p>Non-compliant (low risk)</p>	<p>Limited information relating to mine site rehabilitation is included in section 5 of the BHOP Rasp Mine 2017 – 2019 Mining Operations Plan. This information is unable to be defined as a suitable Rehabilitation Management Strategy/Plan.</p> <p>Some additional information relating to mine rehabilitation is included in sections 2, 4, 5, 7, 8 and 9 of the September 2015 draft Mine Closure Plan.</p> <p>Non-compliant (low risk) – At the time of this February 2019 audit, no Rehabilitation Management Plan has been developed by BHOP. The BHOP Rasp Mine 2017 – 2019 Mining Operations Plan and the</p>	<p>NC – As for Schedule 3 – Condition 34A.</p>

Project Approval 07_0018 (MOD 5) Schedule 3 – Environmental Performance Conditions			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>34A of this approval;</p> <p>(d) reflect the aims of rehabilitation and closure to:</p> <ul style="list-style-type: none"> • retain and/or manage heritage items, as agreed by relevant regulatory authorities; • manage stormwater to minimise erosion and restrict the potential for off-site pollution; • provide final landforms that are safe, stable and sympathetic to the mining heritage of Broken Hill; • minimise the generation of dust and adequately contain potentially hazardous materials within the landform; and • install barriers to restrict access to potentially hazardous locations (eg decline, shafts or open cut pits); <p>(e) build, to the maximum extent practicable, on the other management plans required under this approval; and</p> <p>(f) be submitted to the Secretary for approval within 6 months of approval of the Rehabilitation Strategy required by condition 34A of this approval.</p> <p><i>Note: The Mine Operations Plan (MOP) may be used to address the requirements of the Rehabilitation Management Plan required under this condition. However, the MOP must clearly document how the requirements of this condition have been met.</i></p>		September 2015 draft Mine Closure Plan do not clearly document how the requirements of this condition have been satisfied.	

Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Schedule 4 – Condition 1 – Environmental Management – Environmental Management Strategy</p> <p>The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must:</p> <p>(a) be submitted to the Secretary for approval by the end of June 2011;</p> <p>(b) provide the strategic framework for the 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, handle, respond to, and record complaints; • resolve any disputes that may arise during the course of the project; • respond to any non-compliance; and • 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 required to be carried out under the conditions of this approval. 	<p>Compliant Observation</p>	<p>During this February 2019 audit the auditors viewed two versions of BHOP's Environment Management Strategy (EMS), Doc ID: BHO-ENV-SYS-001. There is a version of the EMS dated December 2015 (no number assigned) on the CBH website. Another version of the EMS was provided to the auditors (revision no. 3, issue date: 14 December 2018).</p> <p>This audit finding relates to version no. 3 of the EMS.</p> <p>In relation to the paragraphs of this condition:</p> <p>(a) It is considered that this paragraph only applies to the original version of the EMS.</p> <p>(b) Section 1.1 of the EMS describes the purpose of the EMS as providing the strategic framework for environmental management at the Rasp Mine. It is considered the EMS as a whole provides a basic strategic framework for the environmental management of the project.</p> <p>(c) Section 1.3 of the EMS includes statutory approvals that apply to the project.</p> <p>(d) Section 6.1 of the EMS describes the environmental management responsibility, authority and accountability for the roles of General Manager, Department Managers, HSET Manager, Senior Environmental Advisor, Environmental Technical Officer, Supervisors, and BHOP Personnel and Contractors. Section 9 of the EMS states that compliance with all approvals, plans and procedures is the responsibility of all personnel and contractors, with the General Manager holding overall accountability.</p> <p>(e) The EMS describes 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 (sections 6.3 and 7); • receive, handle, respond to, and record complaints (section 6.4); • resolve any disputes that may arise during the course of the project (final paragraph in section 6.4); • respond to any non-compliance (section 9); and 	<p>Ob 51 – To be actioned by BHOP.</p>

Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<ul style="list-style-type: none"> respond to emergencies (section 8). <p>(f) The EMS sufficiently references related environmental strategies, plans and programs approved under the conditions of this approval, and lists the environmental monitoring required to be carried out under the conditions of this approval in Appendix C – Summary of Environmental Monitoring Program and Locations.</p> <p>Observation No. 51 – Formal processes (i.e. via internal or external audit) could be established to demonstrate ‘implementation’ of the approved Environmental Management Strategy.</p>	
<p>Schedule 4 – Condition 2 – Environmental Management – Management Plan Requirements</p> <p>The Proponent shall ensure that the management plans required under this approval are prepared in accordance with 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; and the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures; <p>(c) a description of the measures 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; and 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>Non-compliant (low risk)</p> <p>Observation</p> <p>Observation</p>	<p>The Environmental Management Plans (EMPs) required under this Project Approval are as follows:</p> <ul style="list-style-type: none"> Air Quality Management Plan (AQMP); Community Lead Management Plan (CLMP); Noise and Blasting Management Plan, which BHOP has divided into a Noise Monitoring Management Plan (NMMP), a Blast Monitoring Plan Management Plan (BMPMP) and a Technical Blasting Management Plan (TBMP); Site Water Management Plan (SWMP); Conservation Management Plan (CMP); Traffic Management Plan (TMP); Waste Management Plan (WMP); Rehabilitation Management Plan (RMP). <p>The Conservation Management Plan (Project Approval Schedule 3, condition 30), and the Rehabilitation Management Plan (Project Approval Schedule 3, condition 35) have not been formally issued as of February 2019, and hence could not be assessed for compliance with this condition.</p> <p>It is considered that the other EMPs in the above list generally satisfy the requirements in paragraphs (b), (c), (d), (g) and (h) of this condition.</p> <p>Non-compliant (low risk) – In relation to paragraphs (a), (e) and (f) of this condition:</p> <p>(a) Not all of the EMPs include detailed baseline data (however</p>	<p>NC – EMP’s to be updated with relevant information eg. AQMP updated with 2014 model.</p> <p>Ob 52 – To be actioned by BHOP.</p> <p>Ob 53 – To be actioned by BHOP.</p>

Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>(g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> incidents; complaints; non-compliances with the conditions of this approval and statutory requirements; and exceedances of the impact assessment criteria and/or performance criteria; and <p>(h) a protocol for periodic review of the plan.</p> <p><i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>		<p>Appendix E of the AQMPMP which forms part of the AQMP, includes baseline air quality monitoring data, and section 6.2 of the SWMP includes baseline data of surface water flows and quality).</p> <p>(e) Not all of the EMPs include a contingency plan (or any reference to a contingency plan) to manage any unpredicted impacts and their consequences (however sections 7.1 and 7.2 of the CLMP identify ‘contingency’ measures where air quality trends indicate an increase in lead emissions which can be attributed to the Rasp Mine, and section 11.3.3 of the SWMP includes details of contingency measures in relation to unacceptable impacts to groundwater).</p> <p>(f) None of the EMPs include information relating to programs to investigate and implement ways to improve the environmental performance of the project over time.</p> <p>Observation No. 52 – Appendix 2 in BHOP’s current Mining Operations Plan (1 October 2017 to 30 September 2019) lists the management plans required under the Project Approval, but:</p> <ul style="list-style-type: none"> incorrectly identifies BHOP’s Environment Management Strategy and Rehabilitation Strategy as Environmental Management Plans; does not include the required Technical Blasting Management Plan; and does not include the required Conservation Management Plan. <p>Observation No. 53 – BHOP could consider whether paragraph (f) of this condition could potentially be satisfied by preparing information that could be included as a section or appendix in all of the EMPs.</p>	
<p>Schedule 4 – Condition 3 – Environmental Management – Annual Review</p> <p>By the end of June 2012, and annually thereafter, the Proponent shall review the environmental performance of the project 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 year, and the development that is proposed to be carried out over the</p>	<p>Administrative non-compliance</p> <p>Observation</p>	<p>It was stated that during the audit period BHOP submitted AEMRs (Annual Environmental Management Reports) to the DPE as follows:</p> <ul style="list-style-type: none"> the 2015 AEMR (for the reporting period from 16 December 2014 to 31 December 2015); the 2016 AEMR (for the reporting period from 1 January 2016 to 31 December 2016); and the 2017 AEMR (for the reporting period from 1 January 2017 to 	<p>ANC – procedure developed for future AEMR/Annual Review reports to be submitted on time to appropriate authority.</p> <p>Ob 54 – To be actioned by BHOP.</p>

Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>next 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 documents referred to in Conditions 2 of Schedule 2; <p>(c) identify any non-compliance over the past 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 significant discrepancies; and</p> <p>(f) describe what measure will be implemented over the next year to improve the environmental performance of the project.</p>		<p>31 December 2017).</p> <p>Evidence was sighted of the DPE’s letter dated 19 September 2018 regarding its acceptance the 2017 AEMR as submitted on 24 July 2018. The DPE’s letter stated (in part): “The Department has reviewed the AEMR and considers it to generally satisfy the requirement of the approval in relation to the AEMR.”</p> <p>It is considered that each of the above AEMRs satisfy the requirements in paragraphs (a) to (f) of this condition. Refer to observation below in relation to the 2016 AEMR.</p> <p>Administrative non-compliance – According to the DPE’s letter of 19 September 2018, the 2017 AEMR was submitted on 24 July 2018, which is outside the annual ‘by the end of June’ requirement.</p> <p>Observation No. 54 – The CBH website version of the 2016 AEMR contains ‘draft’ watermarked pages after page 57, and the whole document consists of 92 pages. The copy of the 2016 AEMR provided during this February 2019 audit (which was reviewed against this condition) does not have ‘draft’ watermark pages and the whole document consists of 103 pages. BHOP should ensure the correct version of the 2016 AEMR is on the CBH website.</p>	
<p>Schedule 4 – Condition 4 – Environmental Management – Revision of Strategies, Plans & Programs</p> <p>Within three months of:</p> <p>(a) the submission of an annual review under Condition 3 above;</p> <p>(b) the submission of an incident report under Condition 5 below;</p> <p>(c) the submission of an audit report under Condition 7 below, or</p> <p>(d) any modification of the conditions of this approval (unless the conditions require otherwise),</p> <p>the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary.</p> <p><i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended</i></p>	<p>Non-compliant (low risk)</p>	<p>Non-compliant (low risk) – During the audit period there were several instances of BHOP not complying with the three month requirement in this condition. For example, a majority of the required strategies, plans and programs under the Project Approval have not been formally reviewed since the granting of the MOD 5 approval on 2 November 2018. Document control information (i.e. version history) for these strategies, plans and programs does not indicate whether these documents were reviewed after the MOD 5 approval.</p> <p>There was evidence during this February 2019 audit that since the appointment of the current Senior Environmental Advisor in 2018, BHOP has made progress in reviewing and updating relevant strategies, plans and programs. For example, an updated draft Environmental Management Strategy document (including MOD 5 information) dated November 2018 was sighted.</p>	<p>NC – BHOP to develop process and standard to review and submit strategies, plans and programs within required timeframe.</p>

Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<i>measures to improve the environmental performance of the project.</i>			
<p>Schedule 4 – Condition 5 – Reporting – Incident Notification</p> <p>The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the project (including the application number and the name of the project if it has one), and set out the location and nature of the incident.</p>	<p>Non-compliant (low risk)</p> <p>Observation</p>	<p>'Incident' is a defined word in the Project Approval. In the MOD 5 Project Approval the definition of 'incident' was amended and a new definition of 'non-compliance' inserted. Prior to the MOD 5 Project Approval (i.e. up to and including the MOD 4 Project Approval), 'non-compliance' was included in the definition of 'incident'.</p> <p>Notifiable incidents that occurred during the audit period have included:</p> <ul style="list-style-type: none"> • 28 March 2018 – Blockage of HVAS monitoring equipment; • 19 April 2018 – Failure of TEOM2; • 30 May 2018 – Loss of HVAS filter papers; • 20 August 2018 – Failure of blast monitor V3 Air Express (for 9 days); and • 8 November 2018 – Exceedance of blast limit. <p>It was stated that reportable environmental incidents are reported to external regulators via phone, email or the relevant website of regulators.</p> <p>Internally within BHOP, environmental incidents and exceedances of licence limits are entered into INX InControl with email notification to BHOP's Senior Environmental Advisor. All reporting requires the BHOP employee to enter the incident into INX InControl, as no hard copy form exists for the internal reporting of incidents.</p> <p>It was stated that BHOP is only able to determine and locate notifiable incidents via the use of INX InControl.</p> <p>It was stated that no environmental incidents have been reported to the DPE in the last 12 months, only to the EPA.</p> <p>Non-compliant (low risk) – Whilst BHOP can demonstrate prompt notification of incidents to the EPA, there is no evidence that the DPE is being notified of incidents as required under the Project Approval.</p> <p>Observation No. 55 – Ideally, BHOP could develop an incident reporting form template for external regulators, which could be attached as an appendix to the Pollution Incident Response</p>	<p>NC – EMP's and procedures to be updated to include reporting to DPE.</p> <p>Ob 55 – To be actioned by BHOP.</p>

Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		Management Plan (PIRMP). No procedure exists or is maintained by BHOP that describes the process for the reporting of environmental incidents and non-compliances to external regulators.	
<p>Schedule 4 – Condition 5A – Reporting – Non-Compliance Notification</p> <p>The Department must be notified in writing to compliance@planning.nsw.gov.au within 7 days after the Proponent becomes aware of any non-compliance with the conditions of this approval. The notification must identify the project and the application number for it, set out the condition of approval that the project is noncompliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been done, or will be, undertaken to address the non-compliance.</p>	<p>Not verified Observation</p>	<p>This condition was inserted in the Project Approval on 2 November 2018 (MOD 5). Prior to MOD 5, 'non-compliance' was included in the definition of 'incident' in condition 5 of this Schedule.</p> <p>Not verified – Due to the recent inclusion of this condition in MOD 5, it could not be verified during this February 2019 audit whether BHOP has reported a 'non-compliance' with the conditions of this approval to the EPA but not the DPE.</p> <p>Observation No. 56 – BHOP could review its INX InControl system to ensure:</p> <ul style="list-style-type: none"> there are separate fields for 'incident' and 'non-compliance' (now separately identified in conditions 5 and 5A of this Schedule); and the DPE is identified as a regulator (in addition to the EPA) to be notified of incidents and non-compliances. 	Ob 56 – To be actioned by BHOP.
<p>Schedule 4 – Condition 6 – Reporting – Regular Reporting</p> <p>The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any approved plans or programs of the conditions of this approval.</p>	<p>Compliant</p>	<p>At the time of this February 2019 audit the following reports relating to environmental performance of the project were on the CBH website:</p> <ul style="list-style-type: none"> the February 2016 independent environmental audit of the project; a Toxikos / Pacific Environment Report titled: "Health Risk Assessment Rasp Mine Broken Hill", dated 2 April 2015 (Job No. 08844); Monthly Environmental Monitoring Reports from January 2014 to December 2018; and AEMRs from 2012 to 2017. 	
<p>Schedule 4 – Condition 7 – Independent Environmental Audit</p> <p>By the end of December 2011, and every three years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an</p>	<p>Compliant</p>	<p>The previous independent environmental audit of the project was conducted in February 2016.</p> <p>This independent environmental audit (of February 2019) satisfies the requirements in paragraphs (a) to (e) of this condition as follows:</p>	

Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Independent Environmental Audit of the project. This audit must:</p> <p>(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</p> <p>(b) include consultation with the relevant agencies;</p> <p>(c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);</p> <p>(d) review the adequacy of any approved strategies, plans or programs required under these approvals; and, if appropriate</p> <p>(e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.</p> <p><i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.</i></p>		<p>(a) The Secretary's nominee approved the engagement of the Audit Team (specifically, the Lead Auditor, Kurt Hammerschmid) by letter dated 27 November 2018. Refer to Appendix 1 of this audit report.</p> <p>(b) This audit has included consultation with the relevant agencies. Refer to Appendix 2 of this audit report.</p> <p>(c) This audit has assessed the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals). Refer to the audit findings and comments in this audit report.</p> <p>(d) This audit has reviewed the adequacy of any approved strategies, plans or programs required under these approvals. Refer to audit findings and comments in this audit report.</p> <p>(e) This audit has recommended measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals. Refer to observations in this audit report.</p>	
<p>Schedule 4 – Condition 8 – Independent Environmental Audit</p> <p>Within six weeks of the completing of 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.</p>	<p>Not triggered (as at February 2019)</p>	<p>This audit report is not due for submission until 29 March 2019 (i.e. six weeks after completion of the auditors' on-site attendance), unless otherwise agreed by the Secretary.</p>	
<p>Schedule 4 – Condition 9 – Access to Information</p> <p>From the end of March 2011, the Proponent shall:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> the documents referred to in Condition 2 of Schedule 2; all current statutory approvals for the project; all approved strategies, plans and programs required under the conditions of this approval; 	<p>Administrative non-compliance</p> <p>Observation</p>	<p>At the time of this February 2019 audit, the vast majority of documents which this condition requires to be on the CBH website were identified to be on the CBH website.</p> <p>Administrative non-compliance – The following documents which this condition requires to be on the CBH website, were not on the CBH website as of February 2019:</p> <ul style="list-style-type: none"> Statement of Environmental Effects for the MOD 5 application; Blasting Monitoring Program Management Plan; 	<p>ANC – All required plans to be uploaded to the website.</p> <p>Ob 57 – Noted.</p>

Project Approval 07_0018 (MOD 5) Schedule 4 – Environmental Management, Reporting and Auditing			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<ul style="list-style-type: none"> the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans or programs; a complaints register, updated on a monthly basis; the annual reviews of the project; any independent environmental audit of the project, and the Proponent’s response to the recommendations in any audit; and any other matter required by the Secretary; <p>(b) keep this information up-to-date, to the satisfaction of the Secretary.</p>		<ul style="list-style-type: none"> Technical Blasting Management Plan; the Conservation Management Plan which had not been formally issued as of February 2019; the Rehabilitation Management Plan which had not been formally issued as of February 2019; and the independent environmental audit report of November 2012 (Graham A Brown & Associates). <p>Observation No. 57 – Although CML7 is on the CBH website by virtue of being included as an Appendix to the MOD 4 EA, for ease of access CML7 could be identified as a separate document on the CBH website.</p>	
<p>Schedule 4 – Condition 10 – Independent Review</p> <p>If an owner of privately-owned land considers the development 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 development on his/her land.</p> <p><i>[Auditor’s Note: The opening words in the next paragraph are repeated.]</i></p> <p>If the Secretary is satisfied that an independent review is warranted, then 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 development is complying with the relevant impact assessment criteria in schedule 3; and if the development is not complying with these criteria then 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 within 2 months of the Secretary’s decision, unless the Secretary agrees otherwise.</p>	Compliant	It was stated that during the audit period BHOP has not been contacted by the DPE in relation to a request from an owner of privately-owned land for an independent review of the impacts of the development (i.e. the project) on his/her land.	

Environment Protection Licence Number 12559 as at 21 December 2017												
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response									
1 Administrative Conditions												
A1 What the licence authorises and regulates												
<p>A1.1 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> <table border="1"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Crushing, grinding or separating</td> <td>Crushing, grinding or separating</td> <td>> 500000 - 2000000 T annual processing capacity</td> </tr> <tr> <td>Mining for minerals</td> <td>Mining for minerals</td> <td>> 500000 - 2000000 T annual production capacity</td> </tr> </tbody> </table>	Scheduled Activity	Fee Based Activity	Scale	Crushing, grinding or separating	Crushing, grinding or separating	> 500000 - 2000000 T annual processing capacity	Mining for minerals	Mining for minerals	> 500000 - 2000000 T annual production capacity	Compliant	<p>As noted in BHOP’s Annual Environmental Management Reports (AEMRs) for 2016 (Table 4.4) and 2017 (Tables 4-4 and 4-6), production figures (i.e. tonnes of feed to the mill) on a calendar year basis in the audit period were:</p> <ul style="list-style-type: none"> • 2016 – 627,811 tonnes; • 2017 – 720,832 tonnes; • 2018 (predicted) – 721,573 tonnes. <p>Auditor’s Note – The maximum scale specified in this condition is expressed as a ‘greater than’ amount, which contradicts the words, “must not exceed”. It is also unclear whether “production” in the condition refers to the amount of ore processed in the plant or the amount of saleable product (i.e. concentrate).</p>	
Scheduled Activity	Fee Based Activity	Scale										
Crushing, grinding or separating	Crushing, grinding or separating	> 500000 - 2000000 T annual processing capacity										
Mining for minerals	Mining for minerals	> 500000 - 2000000 T annual production capacity										
A2 Premises or plant to which this licence applies												
<p>A2.1 The licence applies to the following premises:</p> <table border="1"> <thead> <tr> <th>Premises Details</th> </tr> </thead> <tbody> <tr> <td>CONSOLIDATED MINING LEASE 7</td> </tr> <tr> <td>EYRE STREET</td> </tr> <tr> <td>BROKEN HILL</td> </tr> <tr> <td>NSW 2880</td> </tr> <tr> <td>WILLYAMA COMMON, RESERVE 2421</td> </tr> </tbody> </table>	Premises Details	CONSOLIDATED MINING LEASE 7	EYRE STREET	BROKEN HILL	NSW 2880	WILLYAMA COMMON, RESERVE 2421	Note	<p>Relevant BHOP personnel were aware of and understood that the EPL applies to CML7.</p>				
Premises Details												
CONSOLIDATED MINING LEASE 7												
EYRE STREET												
BROKEN HILL												
NSW 2880												
WILLYAMA COMMON, RESERVE 2421												
A3 Other activities												
<p>A3.1 This licence applies to all other activities carried on at the premises, including:</p>	Note	<p>Relevant BHOP personnel were aware of and understood this condition.</p>										

Environment Protection Licence Number 12559 as at 21 December 2017								
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response					
<table border="1"> <tr><td>Ancillary Activity</td></tr> <tr><td>Chemical storage</td></tr> <tr><td>Concrete batching</td></tr> <tr><td>Metallurgical activities</td></tr> <tr><td>Railway system activities</td></tr> </table>	Ancillary Activity	Chemical storage	Concrete batching	Metallurgical activities	Railway system activities			
Ancillary Activity								
Chemical storage								
Concrete batching								
Metallurgical activities								
Railway system activities								
A4 Information supplied to the EPA								
<p>A4.1 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.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <ol style="list-style-type: none"> 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 the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence. 	Compliant	<p>It was stated that works and activities are being carried out across the operation in accordance with the conditions of the EPL.</p> <p>In addition to requirements specified in the EPL, BHOP also operates under a Mining Operations Plan (MOP) and commitments made in other submitted Environmental Management Plans.</p>						
<p>A4.2 For the purposes of condition A3.1 the licence application includes: <i>[Auditor's Note: incorrect cross-reference.]</i></p> <ol style="list-style-type: none"> The Project Approval issued by the Department of Planning and Infrastructure on 31 January 2011; The Project Approval modification titled "Rasp Mine Mod 1" issued by the Department of Planning and Infrastructure issued on 16 March 2012; The Environmental Assessment titled "Final 	Compliant Observation	<p>BHOP has submitted the necessary documents and plans to secure approval for the issuing of the EPL and variations of the EPL.</p> <p>Observation No. 58 – A level of risk exists if BHOP does not operate its existing TSF2 in accordance with the approved "Construction and Operations Manual for Tailing Storage in Blackwood Pit" that was submitted to the EPA in April 2012. In the event that operating practices in 2019 differ to practices adopted in 2012, an updated Operations Manual for Tailing Storage in Blackwood Pit could be issued and submitted to the EPA.</p> <p>Auditor's Note – This condition refers to documents which may have been superseded by more recent documents.</p>	Ob 58 – To be actioned by BHOP.					

Environment Protection Licence Number 12559 as at 21 December 2017			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Report - Rasp Mine" dated July 2010;</p> <p>4) The Environmental Assessment titled "Rasp Mine - Preferred Project Report" dated September 2010;</p> <p>5) Broken Hill Operations Pty Ltd Rasp Mine "Noise and Blast Management Plan" submitted to the EPA on the 14 October 2011.</p> <p>6) The Environmental Assessment titled "Rasp Mine - Relocation of Ventilation Shaft" dated November 2011;</p> <p>7) Broken Hill Operations Pty Ltd Rasp Mine "Air Quality Management Plan" submitted to the EPA in March 2011;</p> <p>8) The Broken Hill Operations Pty Ltd Rasp Mine "Site Water Management Plan" dated 20 March 2012 and;</p> <p>9) The Broken Hill Operations Pty Ltd Rasp Mine "Construction and Operations Manual for Tailing Storage in Blackwood Pit" submitted to the EPA in April 2012.</p>			
2 Discharges to Air and Water and Applications to Land			
P1 Location of monitoring/discharge points and areas			
<p>P1.1 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.</p>	<p>Compliant Observation</p>	<p>BHOP can demonstrate that dust and/or dust and blast monitoring is conducted at the locations defined in the table in this condition.</p> <p>It was stated that an additional discharge point (i.e. No. 57) will be included in the planned current variation application of the EPL in 2019. Also, monitoring site No. 56 for dust and blasting monitoring is scheduled to be removed from the EPL.</p> <p>Observation No. 59 – BHOP is encouraged to secure written approval from the EPA relating to the planned changes in air monitoring stations (i.e. temporary relocation of point nos. 14, 12, 57 and 9) for the five month TSF2 Embankment Lift construction period</p>	<p>Ob 59 – To be actioned by BHOP.</p>

Environment Protection Licence Number 12559 as at 21 December 2017				
Condition Number and Requirement		Audit Finding	Supporting Evidence/Comments	BHOP Response
<i>Air</i>			associated with the approved MOD 4 works.	
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	
1	Dust and blast monitoring		Ventilation shaft labelled 'Proposed exhaust shaft location' in Figure 2 titled 'Ventilation rise alternate location' in the environmental assessment titled 'Rasp Mine Variation to Project - Relocation of Ventilation Shaft' dated November 2011	
2	Dust process plant monitoring		Process enclosure/Baghouse stack labelled 'Primary crusher & Dust extraction unit' in Figure 2-4 titled 'Plant Layout' in the environmental assessment titled 'Rasp Mine - Preferred Project Report' dated September 2010.	
3	Dust monitoring		Dust deposition gauge labelled D1 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
4	Dust monitoring		Dust deposition gauge labelled D2 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
5	Dust Monitoring		Dust deposition gauge labelled D3 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
6	Dust Monitoring		Dust deposition gauge labelled D4 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
7	Dust monitoring		Dust deposition gauge labelled D5 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
8	Dust monitoring		Dust deposition gauge labelled D6 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
9	Dust monitoring		Dust deposition gauge labelled D7 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
10	Dust monitoring		High volume dust sampler labelled TSP-HVAS on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
11	Dust monitoring		High volume dust sampler labelled PM10-HVAS1 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
12	Dust monitoring		High volume dust sampler labelled PM10-HVAS2 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
13	Dust monitoring		Tapered element oscillating microbalance sampler labelled TEOM1 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
14	Dust monitoring		Tapered element oscillating microbalance sampler labelled TEOM2 on map 'Figure 1' submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06	
56	Dust and blast monitoring		Shaft 8 as described in Project Approval Modification 3 Schedule 3 - Environmental Performance Conditions - Condition 4 - Point 6 ventilation shaft and Appendix 3 - Project Layout Approval Point 8 Old No.8 Shaft.	

Environment Protection Licence Number 12559 as at 21 December 2017																														
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response																											
P1.2	Note	Relevant BHOP personnel were aware of and understood the requirements specified in the Table to EPL condition P1.3.																												
<p>P1.3 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.</p> <table border="1"> <thead> <tr> <th colspan="4">Water and land</th> </tr> <tr> <th>EPA Identification no.</th> <th>Type of Monitoring Point</th> <th>Type of Discharge Point</th> <th>Location Description</th> </tr> </thead> <tbody> <tr> <td>29</td> <td>Surface water monitoring</td> <td></td> <td>Storm water pond labelled "S31-1" as shown in Figure 3 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06</td> </tr> <tr> <td>31</td> <td>Surface water monitoring</td> <td></td> <td>Storm water pond labelled "S49" as shown in Figure 2 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06</td> </tr> <tr> <td>32</td> <td>Surface water monitoring</td> <td></td> <td>Storm water pond labelled "S1-A" as shown in Figure 2 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06</td> </tr> <tr> <td>33</td> <td>Surface water monitoring</td> <td></td> <td>Storm water pond labelled "S9B-2" as shown in Figure 5 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06</td> </tr> <tr> <td>34</td> <td>Surface water monitoring</td> <td></td> <td>Storm water pond labelled "Horwood Dam" as shown in Figure 6 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06</td> </tr> </tbody> </table>	Water and land				EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	29	Surface water monitoring		Storm water pond labelled "S31-1" as shown in Figure 3 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	31	Surface water monitoring		Storm water pond labelled "S49" as shown in Figure 2 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	32	Surface water monitoring		Storm water pond labelled "S1-A" as shown in Figure 2 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	33	Surface water monitoring		Storm water pond labelled "S9B-2" as shown in Figure 5 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	34	Surface water monitoring		Storm water pond labelled "Horwood Dam" as shown in Figure 6 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	<p>Compliant Observation Observation</p> <p>BHOP can demonstrate that groundwater monitoring is conducted at the locations defined in the table in this condition (i.e. for the 18 groundwater monitoring bores defined in this table).</p> <p>All monitoring points listed in this table remain in use in February 2019.</p> <p>Observation No. 60 – If any scheduled drilling of groundwater monitoring bores occurs in the future, BHOP could consider the installation and monitoring of a suitable background (i.e. control) groundwater bore to establish baseline groundwater quality that is not directly or indirectly influenced by the Rasp Mine.</p> <p>Observation No. 61 – BHOP could consider installing locks on all groundwater monitoring bores to prevent the risk of groundwater contamination from unauthorised access to those bores.</p> <div style="display: flex; justify-content: space-around;">   </div> <p>Photos 29 and 30 – Examples of existing BHOP groundwater monitoring bores (February 2019)</p>	<p>Ob 60 – Noted.</p> <p>Ob 61 – To be actioned by BHOP.</p>
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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
35	Off site receiving waters	Ephemeral drainage line upstream of the Rasp Mine shown as "Monitoring location 1 upstream" on Map 1 in the email to the EPA on 3 April 2012 and kept on EPA file LIC07/2213-06	
36	Off site receiving waters	Ephemeral drainage line downstream of the Rasp Mine shown as "Monitoring location 2 downstream" on Map 1 in the email to the EPA on 3 April 2012 and kept on EPA file LIC07/2213-06	
37	Groundwater monitoring	Groundwater monitoring bore labelled "GW01" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
38	Groundwater monitoring	Groundwater monitoring bore labelled "GW02" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
39	Groundwater monitoring	Groundwater monitoring bore labelled "GW03" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
40	Groundwater monitoring	Groundwater monitoring bore labelled "GW04" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
41	Groundwater monitoring	Groundwater monitoring bore labelled "GW05" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
42	Groundwater monitoring	Groundwater monitoring bore labelled "GW06" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
43	Groundwater monitoring	Groundwater monitoring bore labelled "GW07" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
44	Groundwater monitoring	Groundwater monitoring bore labelled "GW08" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
45	Groundwater monitoring	Groundwater monitoring bore labelled "GW09" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
46	Groundwater monitoring	Groundwater monitoring bore labelled "GW10" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
47	Groundwater monitoring	Groundwater monitoring bore labelled "GW11" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
48	Groundwater monitoring	Groundwater monitoring bore labelled "GW12" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
49	Groundwater monitoring	Groundwater monitoring bore labelled "GW13" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
50	Groundwater monitoring	Groundwater monitoring bore labelled "GW14" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
51	Groundwater monitoring	Groundwater monitoring bore labelled "GW15" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
52	Groundwater monitoring	Groundwater monitoring bore labelled "GW16" in Figure 8 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
53	Groundwater monitoring	Surface water pond for Shaft 7 mine water labelled "Mine Settlement Ponds" as shown in Figure 3 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
54	Groundwater monitoring	Surface water pond for Kintore Pit mine water labelled "Mine Settlement Ponds" as shown in Figure 3 of the Site Water Management Plan dated 20 March 2012 and kept on EPA file LIC07/2213-06	
P1.4	The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.	<p>Compliant</p> <p>Observation</p> <p>Observation</p> <p>The noise and weathering monitoring points (i.e. monitoring points 15 to 28 and 55) defined in the Table of this EPL condition remain valid and applicable and are utilised as BHOPs existing noise and meteorological monitoring points.</p> <p>Observation No. 62 – For BHOP to demonstrate high levels of transparency to external stakeholders, the 'original' annual air emission test reports for BHOP's baghouse and vents (i.e. generated</p>	<p>Ob 62 – Noted.</p> <p>Ob 63 – To be actioned by BHOP.</p>

Environment Protection Licence Number 12559 as at 21 December 2017				
Condition Number and Requirement		Audit Finding	Supporting Evidence/Comments	BHOP Response
<i>Noise/Weather</i>				
EPA identification no.	Type of monitoring point	Location description		
15	Noise monitoring	Point labelled "A1" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.	by an external consultant) could either be provided: a) directly on the CBH website; and/or b) as an appendix in an AEMR. Observation No. 63 – With the next scheduled variation/update of the EPL, the "location description" (i.e. EPA Identification No. 55) for the meteorological station commissioned in January 2019 could be defined in the table of this condition.	
16	Noise monitoring	Point labelled "A2" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.		
17	Noise monitoring	Point labelled "A3" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.		
18	Noise monitoring	Point labelled "A4" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.		
19	Noise monitoring	Point labelled "A5" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.		
20	Noise monitoring	Point labelled "A6" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.		

Environment Protection Licence Number 12559 as at 21 December 2017				
Condition Number and Requirement		Audit Finding	Supporting Evidence/Comments	BHOP Response
21	Noise monitoring			
	Point labelled "A7" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.			
22	Noise monitoring			
	Point labelled "A8" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.			
23	Noise monitoring			
	Point labelled "A9" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.			
24	Noise monitoring			
	Point labelled "A10" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.			
25	Noise monitoring			
	Point labelled "A11" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.			
26	Noise monitoring			
	Point labelled "A12" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.			
27	Noise monitoring			
	Point labelled "A13" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.			
28	Noise monitoring			
	Point labelled "A14" in Figure 1 of the report at Appendix C of the Rasp Mine Environmental Assessment titled "Modification 3 Mining Extension" dated November 2014 kept at DOC14/279713-01 on EPA file EF13/4102.			
55	Meteorological Station – to determine meteorological conditions for noise monitoring			

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response																																				
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.	Non-compliant (low risk)	Relevant BHOP personnel were aware that it is an offence under section 120 of the Protection of the Environment Operations Act 1997 to pollute waters, except as expressly provided in any other condition of the EPL. Non-compliant (low risk) – As noted in the 2016 Annual Return (page 27), on 5 October 2016 there was a seepage from the Ryan Street Dam (S49) following heavy rain which caused the Dam to overflow with water, and water seeped from the downstream toe of the Dam. Since this incident, the Dam has been lined.	NC – Dam wall now lined.																																				
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.	Compliant	Refer to supporting evidence/comments for Project Approval Schedule 3, condition 4. The air concentration limits in the table for EPL condition L2.2 are the same as the discharge criteria limits in Tables 4 and 5 of Project Approval Schedule 3, condition 4.																																					
L2.2 Air Concentration Limits POINT 1,56 <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>100 percentile concentration limit</th> <th>Reference conditions</th> <th>Oxygen correction</th> <th>Averaging period</th> </tr> </thead> <tbody> <tr> <td>Nitrogen Oxides</td> <td>milligrams per cubic metre</td> <td>350</td> <td>dry, 273 K, 101.3 kPa</td> <td></td> <td></td> </tr> </tbody> </table> POINT 1,2,56 <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>100 percentile concentration limit</th> <th>Reference conditions</th> <th>Oxygen correction</th> <th>Averaging period</th> </tr> </thead> <tbody> <tr> <td>Total Solid Particles</td> <td>milligrams per cubic metre</td> <td>20</td> <td>dry, 273 K, 101.3 kPa</td> <td></td> <td></td> </tr> </tbody> </table> POINT 1,56 <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>100 percentile concentration limit</th> <th>Reference conditions</th> <th>Oxygen correction</th> <th>Averaging period</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period	Nitrogen Oxides	milligrams per cubic metre	350	dry, 273 K, 101.3 kPa			Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period	Total Solid Particles	milligrams per cubic metre	20	dry, 273 K, 101.3 kPa			Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period							Compliant	Refer to supporting evidence/comments for Project Approval Schedule 3, condition 4. External air quality monitoring service provider, AMG/Assured Environmental (NATA Accreditation No. 19703), conducts on-site monitoring of pollutants listed in the table of this condition. AMG/Assured Environmental utilises a NATA accredited laboratory (Envirolab Services, NATA Accreditation No. 2901) for the off-site testing of relevant pollutants (i.e. TVOCs and Type 1 and 2 Hazardous Substances) listed in the table of this condition.	
Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period																																		
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Environment Protection Licence Number 12559 as at 21 December 2017																			
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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.	Compliant	<p>Relevant BHOP personnel were aware of and understood that BHOP is not authorised to accept any externally generated waste, for disposal in any location within the mining lease.</p> <p>The EPL does not currently permit any exception to the requirements of this condition.</p>																	
L4 Noise Limits																			
L4.1 Operational activities associated with the project are permitted to occur at any time, subject to compliance with the noise limits specified at condition L4.2 and subject to the following restrictions: <ul style="list-style-type: none"> a) Shunting of the concentrate wagons must only occur between 7.00am and 6.00pm on any day; and b) Production rock blasting must only occur between 6.45am and 7.15pm on any day. 	Compliant	<p>Relevant BHOP personnel were aware of and understood the restrictions in relevant activities associated with: a) the authorised times that shunting of the concentrate wagons can occur; and b) the authorised times that underground production rock blasting can occur.</p> <p>It was stated that operational activities associated with the shunting of concentrate wagons and underground production rock blasting has only occurred during the authorised times listed in this condition.</p>																	
L4.2 Noise from the Rasp Mine premises must not exceed the limits presented in the table below at the monitoring locations listed in column 1.	Compliant Observation	During the audit period annual noise monitoring surveys were conducted, and reports issued by external noise consultant, EMM Consulting (EMM). The most recent noise surveys were completed from: a) 23 rd to 25 th October 2017; and b) 10 th to 12 th December 2018.	Ob 64 – To be actioned by BHOP.																

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>EMM's 27th November 2017 report also stated that: "Noise from site operation satisfies the noise limits at all other attended monitoring locations, when limits were applicable".</p> <p><u>December 2018 Annual Noise Survey</u></p> <p>A total of 28 operator-attended noise measurements were completed, including two measurements at each of the 14 monitoring locations. For 11 out of the 28 samples (39%), the wind speed was above 3 m/s and therefore the noise limits did not apply for these samples according to the EPL.</p> <p>Based on the noise surveys completed in December 2018, EMM concluded in its 22nd January 2019 report that:</p> <p>"The monitoring assessment found that site $L_{Aeq,15min}$ noise contributions, including the relevant modification factor for low frequency noise, satisfied the relevant limits during the measurements at all assessment locations."</p> <p>Observation No. 64 – Submitted EMM annual noise survey reports state the status of compliance (i.e. as Yes, No or NA). It is unclear what the compliance status in Table 4.1 (22nd January 2019 report) and Table 2 (27th November 2017 report) relates to (i.e. either the actual noise limits or that noise monitoring has been completed under the correct meteorological conditions). Any non-compliant data provided in these reports should be presented in the colour red for ease of interpretation of the report findings.</p>	
<p>L4.3 Noise from the premises is to be measured at the most affected point within the boundary of the nominated premises, or at the most affected point within 30 metres of a dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Condition L4.2 unless otherwise stated.</p> <p>Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.</p>	<p>Compliant Observation</p>	<p>Noise is monitored annually by external noise consultant, EMM at 14 receiver locations (i.e. residential dwellings) in accordance with the locations defined in the EPL (i.e. Point 15 to Point 28).</p> <p>The 22nd January 2019 EMM annual noise survey report stated that:</p> <p>"The NPfl methodology has been applied to this assessment as presented in Section 4 [of the report, in relation to the application of modification factors]."</p> <p>Observation No. 65 – BHOP could review the October 2017 NSW EPA Noise Policy for Industry (or discuss with the consultant, EMM) to verify whether the Policy identifies: a) if an alternate noise monitoring survey regime is required to be adopted; and b) if the Policy defines only night time noise survey monitoring is required to</p>	<p>Ob 65 – To be actioned by BHOP.</p>

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The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.		be conducted by the relevant industrial sites to which the Policy applies. Auditor's Note – The NSW Industrial Noise Policy referred to in this condition was replaced in October 2017 by the NSW Noise Policy for Industry.	
L4.4 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) 55 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.	Compliant	The results recorded in Table 4.1 (Attended noise monitoring results – December 2018) of the 22 nd January 2019 EMM annual noise survey report, clearly identified that: <ul style="list-style-type: none">• meteorological data was obtained from the site's automatic weather station (at 10 m above ground);• where a 2 dB penalty was added to RASP Mine's $L_{Aeq,15min}$ contribution due to low frequency noise as per Fact Sheet C of the NPfl (EPA 2017) in accordance with the INP (EPA 2000);• where the relevant EPL noise limit does not apply due to wind speed above 3 m/s at 10 m above ground; and• where a measurement result was inaudible. The 22 nd January 2019 EMM annual noise survey report stated that: "The presence or otherwise of stability category F or G temperature inversion conditions was not able to be determined with available weather data. These conditions generally occur during the winter months, however in some areas they can frequently occur outside this period during calm atmospheric conditions (ie when wind speeds are below 3 m/s) at night. Although temperature inversion conditions are not typical of the summer season, they could have affected the results herein and hence the assessment is deemed to be conservative." Auditor's Note – The NSW Industrial Noise Policy referred to in this condition was replaced in October 2017 by the NSW Noise Policy for Industry.	
L5 Blasting			
L5.1 The overpressure sound level and ground vibration peak particle velocity from blasting operations carried out in or on the premises, excluding Block 7,	Compliant	Blast monitoring at the Rasp Mine is scheduled and conducted by personnel from BHOP's Environment Department. Personnel from BHOP's Technical Services Department are responsible for reviewing	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response												
<p>for the period 7am to 7pm must not exceed the limits in the table below unless expressly provided by a condition of this licence.</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Airblast Overpressure (dB - Lin Peak)</th> <th>Ground Vibration (mm/s)</th> <th>Allowable Exceedance</th> </tr> </thead> <tbody> <tr> <td>Residence on privately owned land</td> <td>115</td> <td>5</td> <td>5% of the total number of blasts in any 12 month annual return reporting period</td> </tr> <tr> <td>Residence on privately owned land</td> <td>120</td> <td>10</td> <td>0%</td> </tr> </tbody> </table> <p>Note: • The allowable exceedance must be calculated separately for development blasts and production blasts; • The 5% allowable exceedance does not apply to the production blasts until the licensee has completed a Pollution Studies and Reduction Program at condition U5.1 aimed at achieving the limit or as otherwise agreed with the EPA; and • 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.</p>	Location	Airblast Overpressure (dB - Lin Peak)	Ground Vibration (mm/s)	Allowable Exceedance	Residence on privately owned land	115	5	5% of the total number of blasts in any 12 month annual return reporting period	Residence on privately owned land	120	10	0%		<p>the blast vibration data.</p> <p>BHOP maintains six compliance blast monitors and an additional four roving blast monitors. These are listed in BHOP's Register of Blast Monitors.</p> <p>During the audit period there was no identified exceedance of blast noise and vibration criteria at Rasp Mine excluding Block 7.</p>	
Location	Airblast Overpressure (dB - Lin Peak)	Ground Vibration (mm/s)	Allowable Exceedance												
Residence on privately owned land	115	5	5% of the total number of blasts in any 12 month annual return reporting period												
Residence on privately owned land	120	10	0%												
<p>L5.2 The overpressure sound level and ground vibration peak particle velocity from blasting operations carried out in or on the premises at Block 7 for the period 7am to 7pm must not exceed the limits in the table below unless expressly provided by a condition of this licence.</p> <table border="1"> <thead> <tr> <th>Location</th> <th>Airblast Overpressure - dB Lin Peak</th> <th>Ground Vibration - mm/s</th> <th>Allowable Exceedance</th> </tr> </thead> <tbody> <tr> <td>Residence of privately owned land</td> <td>115</td> <td>3 (interim)</td> <td>5% of the total number of blasts over the 12 month annual return reporting period</td> </tr> <tr> <td>Residence of privately owned land</td> <td>120</td> <td>10</td> <td>0%</td> </tr> </tbody> </table> <p>Note: • The allowable exceedance must be calculated separately for development and production blasts; • The interim limit applies unless the licensee has written consent from the Department of Planning and Environment to apply an alternative site specific criteria for Block 7; and • 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.</p>	Location	Airblast Overpressure - dB Lin Peak	Ground Vibration - mm/s	Allowable Exceedance	Residence of privately owned land	115	3 (interim)	5% of the total number of blasts over the 12 month annual return reporting period	Residence of privately owned land	120	10	0%	<p>Non-compliant (low risk)</p>	<p>On 8 November 2018 by email to the EPA, BHOP reported details of non-compliance with the allowable exceedance number of 5% of the total number of blasts over the 12-month Annual Return reporting period at Block 7.</p> <p>BHOP reviewed the blast results for the Annual Return reporting period from 2 November 2017 to 1 November 2018 and determined that the number of Block 7/Zinc Lodes Ore Production blasts exceeding the ground vibration peak particle velocity limit of 3 mm/s was above the allowable exceedance number of 5% of the total number of blasts over the 12-month Annual Return reporting period.</p> <p><u>2016 Annual Return</u></p> <p>No exceedances against blasting limits were reported in the 2016 BHOP Annual Return (2 November 2015 to 1 November 2016).</p> <p><u>2017 Annual Return</u></p> <p>No exceedances against blasting limits were reported in the 2017 BHOP Annual Return (2 November 2016 to 1 November 2017).</p> <p><u>2018 Annual Return</u></p> <p>The 2018 BHOP Annual Return (2 November 2017 to 1 November 2018) identified that: "The number of Block 7 production blasts exceeding the 3mm/sec limit is greater than the 5% allowable." The dates when this non-compliance occurred were recorded in the 2018 Annual Return as 5/12/17, 6/12/17, 25/1/18, and 27/1/18 and the</p>	<p>NC – BHOP now 100% compliant in Block 7.</p>
Location	Airblast Overpressure - dB Lin Peak	Ground Vibration - mm/s	Allowable Exceedance												
Residence of privately owned land	115	3 (interim)	5% of the total number of blasts over the 12 month annual return reporting period												
Residence of privately owned land	120	10	0%												

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		<p>monitoring location was monitor V5 at 80 Eyre Street.</p> <p>Non-compliant (low risk) – In the audit period (relating to the table in this condition) BHOP exceeded the allowable 5% above 3mm/s limit of the total number of blasts over a 12 month period at Block 7 (V5 blast monitor). A total of four blasts were recorded over 3 mm/sec and ranged from 3.07 mm/sec to 3.45 mm/sec. No external complaints from these blasts in Block 7 were received. The non-compliance with the 5% allowable limit is a result of the reduced number of blasts calculated in the 12 month rolling average.</p> <p>It was stated that BHOP has not blasted or mined Block 7 since July 2018. There is no known plan to recommence blasting or mining of Block 7 in 2019.</p>	
<p>L5.3 The licensee may carry out a maximum of:</p> <p>a) 1 production blast each day and 6 production blasts each week, averaged over a calendar year; and</p> <p>b) 6 development blasts each day and 42 development blasts each week, averaged over a calendar year.</p>	Compliant	<p>The blast frequency limits in this condition are the same as the blast frequency limits in Project Approval Schedule 3, condition 19A.</p> <p>Refer to supporting evidence/comments for Project Approval Schedule 3, condition 19A.</p>	
<p>L5.4 The overpressure level from blasting operations at the premises must not exceed 105dB (Lin Peak) for the period 7pm to 10pm at any noise sensitive location:</p> <p>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.</p>	Not verified	<p>This condition applies to both development and production blasting. In relation to production blasting, the 105dB (Lin Peak) limit in this condition applies to production blasting conducted from 7:00pm to 7:15pm.</p> <p>Not verified – On page 3 of the Memorandum (Re: 2017/2018 Blast Annual Compliance Report) dated 21 November 2018 from BHOP's Technical Services Superintendent to the Senior Environmental Advisor it was reported that: "two blasts (13th and 14th January 2018) reported excessive overpressure of between 115-120 dB (Linear) ... These high overpressure readings may be related to a wind event or due to ground vibration shaking the microphone stand." It could not be verified during this February 2019 audit where these exceedances of 13th and 14th January 2018 were recorded and/or whether the exceedances were related to a wind event or ground vibration.</p>	

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<p>L5.5 The overpressure level from blasting operations at the premises must not exceed 95dB (Lin Peak) for the period 10pm to 7am at any noise sensitive locations.</p> <p>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.</p>	Compliant	<p>This condition applies to both development and production blasting. In relation to production blasting the 95dB (Lin Peak) limit in this condition applies to production blasting conducted from 6:45am to 7:00am.</p> <p>In the audit period there were occasions when the overpressure 95dB (Lin Peak) limit was exceeded, but it is difficult to accurately confirm the influence and impact of wind during these periods (i.e. waveform information from the monitors indicates overpressure to be higher than background in the minutes before and after the blasts). As a result, the identified exceedances in the following reports may be attributed to wind influences at the time of blasting:</p> <ul style="list-style-type: none"> In BHOP's 'Report_byblast_RASP Mine_Dec 2018' Excel spreadsheet, on 31 December 2018 for a production blast at 6:45am (Blast Number 17_147_DH_SHOT4), exceedances of the 95dB (Lin Peak) limit were measured at 51 Argent Street (95.9dB (L), cell BD174) and 221 Wills Street (96.9dB (L), cell CN174). In BHOP's 'V5 Dec17 Jan18' Excel spreadsheet, on 21 December 2017 for a production blast at 6:45am (Blast Number ZL_D_LODE_LIFT2_330 DHshot5&6) an exceedance of the 95dB (Lin Peak) limit was measured at 80 Eyre Street (100dB (L), cell AL125). 	
<p>L5.6 Conditions L5.1, L5.2, L5.3, L5.4 and L5.5 apply at any point within 1 metre of any noise sensitive location including residential premises, school, hospital or any blasting monitoring location specified in this licence.</p>	Compliant	<p>Relevant BHOP personnel were aware of and understood the requirements of this condition relating to noise sensitive locations.</p>	
L6 Hours of Operation			
<p>L6.1 Standard construction hours</p> <p>Unless otherwise specified by any other condition of this licence, all construction activities are:</p> <p>a) restricted to between the hours of 7:00am and 6:00pm Monday to Friday;</p>	<p>Compliant</p> <p>Observation</p> <p>Observation</p>	<p>It was stated that these standard construction hours are relevant to the scheduled 2019 TSF2 Embankment Lift.</p> <p>It was stated that these operating hours are to be included in the Construction Environment Management Plan (CEMP) for the TSF2 Embankment Lift.</p>	<p>Ob 66 – Noted.</p> <p>Ob 67 – To be actioned by BHOP.</p>

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<p>b) restricted to between the hours of 8:00am and 1:00pm Saturday; and</p> <p>c) not to be undertaken on Sundays or Public Holidays.</p>		<p>Observation No. 66 – BHOP could ensure that these construction hours are formally included in the contractor induction for the TSF2 Embankment Lift, to enable all construction personnel to be fully aware of these conditions.</p> <p>Observation No. 67 – BHOP is encouraged to include an audit checklist within the CEMP for the TSF2 Embankment Lift, to demonstrate that the CEMP has been audited at least once during construction.</p>	
L7 Potentially Offensive Odour			
<p>L7.1 No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.</p> <p>Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.</p>	Compliant	<p>It was stated that during the audit period no odours were emitted from the site which have been offensive to the local community.</p> <p>During the audit period no odour-related complaints have been received by BHOP.</p> <p>The only source of known localised odours at the operation relate to the use of flotation chemicals within the process plant. The quantity and scale of use of bulk flotation chemicals is insufficient to enable these chemicals to be detected at the boundary of the operation.</p>	
L8 Other limit conditions			
<p>L8.1 All storm water and other surface water holding ponds identified in the Site Water Management Plan must be designed, constructed and maintained to accommodate the stormwater runoff generated in a 100 year (24 hour) Average Recurrence Interval rain event.</p>	Compliant Observation	<p>During this February 2019 audit, BHOP was unable to provide relevant information and records to demonstrate that stormwater and other surface water holding ponds identified in the Site Water Management Plan must be designed, constructed and maintained to accommodate the stormwater runoff generated in a 100 year (24 hour) Average Recurrence Interval rain event.</p> <p>Design rainfall data for 10 yr, 20 yr, 50 yr and 100 yr design rainfall events is presented in Section 7.3 – Table 2 of the April 2012 BHOP Water Management Plan prepared by Golder Associates.</p> <p>Observation No. 68 – BHOP could request that Golder Associates</p>	Ob 68 – To be actioned by BHOP.

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		<p>confirms the capacity of all dams listed in Table 5 of the Site Water Management Plan to verify they meet the required 1 in 100 year ARI. This additional information would be expected to be included in the scheduled update of the 2019 Water Management Plan.</p>  <p>Photos 31 and 32 – Ryan Street Dam (S49 Dam) (February 2019)</p> <p>Auditor's Note – An ARI of 1:100 year should not apply to the S49 Dam as it has only been designed and constructed to 1:20 year rainfall event over 24 hours.</p>	
<p>L8.2 The water storage ponds listed below must have the base and wall artificially lined with an impermeable high density polyethylene liner:</p> <ol style="list-style-type: none"> 1) "Mine Settlement Ponds" and "Backfill Plant Sediment Pond" identified in Figure 3 of the Rasp Mine Site Water Management Plan. 2) "Plant Event Pond" and the "Overflow Event Pond" identified in Figure 4 of the Rasp Mine Site Water Management Plan. 	Compliant	<p>BHOP's Mine Settlement Pond, Plant Event Pond and the Overflow Event Pond have the base and wall artificially lined with an impermeable high-density polyethylene liner.</p> <p>The Backfill Plant Sediment pond referenced in the EPL does not yet exist (this pond has not yet been constructed).</p> <p>In addition to the above, BHOP commissioned Golder Associates to conduct a site process water ponds review in May 2018 inclusive of:</p> <ol style="list-style-type: none"> a) Lochness Pond (i.e. the S22 Dam); b) S22A Pond; c) Patto's Pond; d) Main Process Pond and e) Events Pond. <p>All of these five water storage facilities have the base and wall artificially lined with an impermeable high-density polyethylene liner.</p>	
<p>L8.3 The licensee must ensure waste rock used for the construction of the amenity bund around the Concrete Batching Plant and other surface area works is tested in accordance with Appendix D of the Construction Environment Management Plan (BHO-PLN-ENV-011) dated December 2017 and</p>	Compliant	<p>In March 2017, Pacific Environment Ltd submitted a report titled "Rasp Mine – Waste Rock Classification Report".</p> <p>BHOP maintain a Waste Rock to Surface Testing Procedure (BHO-PRO-ENV-036) last issued on 20 December 2017 to outline the requirements for taking waste rock readings as part of the</p>	

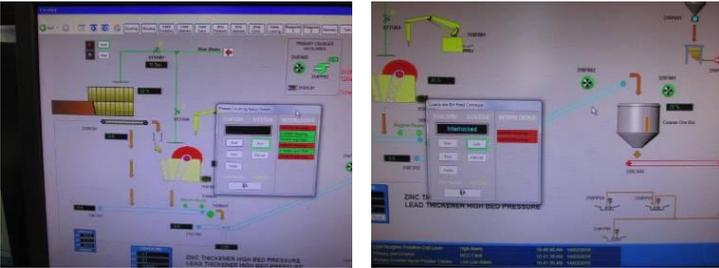
Environment Protection Licence Number 12559 as at 21 December 2017			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
ensure that waste rock used does not average a lead (Pb) fraction of more than 0.5%.		<p>construction of the Concrete Batching Plant to ensure that the installed waste rock contains <0.5% lead (Pb).</p> <p>This procedure defines the sampling and monitoring requirements (i.e. to determine average %Pb by XRF Method) for the individual dumped truck loads from the Waste Tipple in Kintore Pit and its hauling to the Concrete Batch Plant Area.</p> <p>All XRF data from the above sampling is retained in a spreadsheet.</p> <p>Relevant requirements to control the risks of waste rock used for the construction of the amenity bund around the Concrete Batching Plant and other surface area works are included in the Construction Environment Management Plan for the Concrete Batching Plant (revision no. 1 dated 6 December 2017, Doc ID: BHO-PLN-ENV-011).</p>	
<p>L8.4 During construction works the licensee must:</p> <ol style="list-style-type: none"> 1. Have a traffic light system for wind speeds; and 2. introduce additional dust mitigation measures when wind speeds are averaging greater than 40 kilometres per hour; and 3. when wind speeds exceed 50 kilometres per hour, any dust generating construction activities must cease. 	<p>Compliant Observation</p>	<p>This condition applies to all construction works on the site.</p> <p>In the audit period BHOP issued two Construction Environment Management Plans as detailed below, which both address the requirements of this condition.</p> <p>Table 8-2, row 3.3, in BHOP's Construction Environment Management Plan for the Concrete Batching Plant (revision no. 1 dated 6 December 2017, Doc ID: BHO-PLN-ENV-011) refers to paragraph 1 of this condition:</p> <p>“Daily morning pre-starts to include traffic light system for wind speeds, provided by BHOP, and required additional actions to minimise dust generation.”</p> <p>Table 8-2, row 3.4 in the Construction Environment Management Plan for the Concrete Batching Plant refers to paragraphs 2 and 3 of this condition:</p> <p>“Additional dust mitigation measures must be introduced when winds are >40 kph, and that dust generating work ceases when winds exceed 50 kph.”</p> <p>Table 6-2, row 4.3 in BHOP's Construction Environment Management Plan – TSF2 Embankment (revision no. 1, issue date: 17 January 2019, Doc ID: BHO-PLN-ENV-012) refers to paragraph 1 of this condition:</p> <p>“Daily morning pre-starts to include traffic light system for wind</p>	<p>Ob 69 – To be actioned by BHOP.</p>

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		<p>speeds, provided by BHOP, and required additional actions to minimise dust generation.”</p> <p>Table 6-2, row 4.4 in the Construction Environment Management Plan – TSF2 Embankment refers to paragraphs 2 and 3 of this condition: “Additional dust mitigation measures must be introduced when winds are >40 kph, and dust generating work ceases when winds exceed 50 kph (unless dust can be prevented/controlled).”</p> <p>It was stated that BHOP’s construction dust mitigation practices include:</p> <ul style="list-style-type: none"> • actual or potentially adverse weather conditions are communicated to employees during pre-start meetings; • the BHOP water truck is deployed if wind speed exceeds 40 kmh; and • construction works would cease if wind speed exceeds 50kmh. <p>It was stated that during the audit period construction activities did not have to cease due to wind speed exceeding 50 kmh.</p> <p>BHOP’s new on-site meteorological station which was installed in January 2019 is not compatible with the logger-monitor used on the previous meteorological station. It was stated that BHOP intends to obtain its own account for the EagleIO or an alternative interface.</p> <p>Observation No. 69 – Table 6-4, row 4.4 in the Construction Environment Management Plan – TSF2 Embankment should be revised to match the wording in paragraph 3 of this condition.</p>	
4 Operating Conditions			
O1 Activities must be carried out in a competent manner			
O1.1 Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to	Compliant Observation	Refer to supporting evidence/comments for Project Approval Schedule 2, condition 10. Generally, during this February 2019 audit, licensed activities were observed to be carried out in a competent manner, inclusive of relevant operating, maintenance and monitoring related activities defined in the EPL.	Ob 70 – To be actioned by BHOP.

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<p>carry out the activity; and</p> <p>b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.</p>		<p>The non-compliances identified in this February 2019 audit report were not raised on account of BHOP employees not being competent to conduct work in their area of responsibility.</p> <p>BHOP's training programs are centralised (i.e. not department specific) and are the responsibility of BHOP's Training Coordinator. BHOP maintains a training matrix for each employee defining the required and completed inductions, training modules, training certificates etc. The frequency of reinduction is once every two years.</p> <p>Observation No. 70 – For the purpose of environment risk assessment, BHOP could investigate and determine the exact location and point in time when BHOP ceases to have responsibility for concentrate which is transported off-site (i.e. potentially referenced in the conditions of carriage or customer contracts).</p>	
O2 Maintenance of plant and equipment			
<p>O2.1 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>Non-compliant (low risk)</p> <p>Observation</p>	<p>Non-compliant (low risk) – On 28 September 2018 BHOP was fined \$15,000 by the EPA for a breach of this condition. TEOM data for PM₁₀ was not collected from TEOM2 in April and May 2018 due to a storage card malfunction in TEOM2 and the data was not being downloaded or being reviewed on a daily basis.</p> <p>BHOP's investigation into the above incident found that following the TEOM2 service conducted on 19 April 2018, the flash card to which the data is written appeared to have malfunctioned and the process for writing data to the memory card became corrupted. As of 31 May 2018 a replacement memory card was installed in TEOM2, which is operational and data is being downloaded automatically on a daily basis.</p> <p>Observation No. 71 – Training sessions in key environmental obligations under the EPL (and Project Approval and CML7) may be beneficial for key BHOP operational personnel (e.g. Control Room operators) to ensure that these personnel understand the environmental obligations applicable to the operation (i.e. to facilitate correct decision making).</p>	<p>NC – Measures implemented to reduce risk of recurrence. Refer to show cause response of 27 July 2018.</p> <p>Ob 71 – To be actioned by BHOP.</p>

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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.	Compliant	Refer to supporting evidence/comments for Project Approval Schedule 3, condition 5.
O3.2	Ore trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.	Compliant	Ore trucks are not authorised to enter or leave the Rasp Mine site except in the limited circumstances permitted under Project Approval Schedule 2, condition 7 (i.e. an emergency situation and with the prior written approval of the Secretary of the DPE). During the audit period no load-carrying ore trucks entered or left the site.
O3.3	Visible dust emissions from any tailings storage facility must be immediately suppressed by water or chemical application.	Non-compliant (low risk)	<p><u>Tailings Dust Emissions</u></p> <p>Non-compliant (low risk) – BHOP is unable to ‘immediately’ suppress dust from TSF2, as a spray system or alternative dust control measure(s) have not yet been installed.</p> <p>The planned water spray system will be linked to the on-site weather station. Activation of the water spray system will be by anemometer on any of the three existing PM₁₀ monitors or the on-site weather station (i.e. if required).</p> <p>It was stated that external service provider, WetEarth, will modify and upgrade the mill PLC (programmable logic controller) system that is required for this improvement.</p> <p>In addition, one camera/video monitor system is also planned to be installed and the image displayed on a screen in the mill Control Room (i.e. with recording function and display on CITECT). It was stated that the EPA will not be given real time access, but will have access to the recorded video on request.</p> <p><u>Tailings Management (Kintore Pit and Blackwood Pit (TSF2))</u></p> <p>In recent years, BHOP has improved recovery of the underground resource and grade to enable the projected mine life to be extended.</p> <p>It was stated that BHOP plans to commence tailings discharge into Kintore Pit in late 2021. This will occur after the TSF2 Embankment</p>

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		<p>Lift. The new portal is expected to be located near the ROM pad in the future.</p> <p>It was stated that paste tailings (i.e. low water tailings) are being considered for disposal into Kintore Pit. As of February 2019, the discharge of tailings occurred at 63% solids, which is not expected to be altered over the next few years.</p> <p>The construction of the TSF2 Embankment Lift is scheduled to commence in April 2019. In February 2019, an engineer from Golder Associates was responsible for reviewing the tenders. Three individual wall lifts are planned for TSF2, inclusive of stage 2 in 2019 and stages 1 and 3 in 2020. TSF2 will have an estimated 3.5 years of tailings storage after its completion.</p> <p>Currently, TSF2 is not a prescribed dam under criteria set by the NSW Dam Safety Committee. It was stated that TSF2 will be a prescribed dam after the 2019 TSF2 Embankment Lift.</p> <p>It was stated that the surface of the tailings deposited in TSF2 is not a source of fugitive dust, mainly due to the presence of sulfates in the water after evaporation, forming a surface crust.</p> <p>Ground Support Engineers completed a geotechnical inspection of TSF2 in 2018.</p> <p>Visual checks of TSF2 are conducted by plant operators a few times per shift. The occurrence of these checks is documented on a checklist.</p> <p>It was stated that the TSF2 Tailings Operating Manual is currently being revised and will be reissued in the near future to reflect updated and current operating practices and the completed tailings rush inundation risk assessment.</p>	
O3.4	Crushing of extracted material must only occur inside the crusher enclosure.	<p>Non-compliant (low risk)</p> <p>Observation</p> <p>It was stated that periods of mobile crushing and screening occurred at the bottom of Kintore Pit (i.e. near the decline) to generate road base for the underground mine (i.e. the raw material sourced for crushing originated from waste rock from the underground). No formal approvals were secured at the time for this former activity.</p> <p>Non-compliant (low risk) – The use of a mobile crusher (as occurred once in the audit period) is not authorised under the EPL. Crushing of</p>	<p>NC – crushing of road base on the surface is no longer conducted.</p> <p>Ob 72 – Noted.</p>

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		<p>extracted material must only occur inside the existing crusher enclosure.</p> <p>Observation No. 72 – In the event that a mobile crusher is required to be used for the TSF2 Embankment Lift, BHOP could consider either: a) applying to vary this EPL condition; or b) securing formal written approval from the EPA to use a mobile crusher for a limited period.</p>	
O3.5 The crusher enclosure must be designed to operate under negative pressure at all times	Compliant	<p>It was stated (and verified in the mill Control Room) that the crusher is unable to be operated in the absence of the ventilation system and baghouse being operational (i.e. as a result of the presence of multiple interlocks).</p>  <p>Photos 33 and 34 – Mill control PLC system defining interlocks on: a) Coarse Ore Bin Feed Conveyor; and b) Primary Crushing Apron Feeder</p>	
O3.6 The crusher enclosure and associated emission controls must be constructed and operated in such a manner, as to ensure visible fugitive emissions from the enclosure are minimised.	Compliant Observation	<p>Emission limits from the crusher enclosure baghouse exists at the crusher. Air Concentration Limits defined in the EPL required Point 2 to meet a Total Solids Particulate limit of 20 ug/m³.</p> <p>No real time monitoring is conducted at this emission point. Since late February 2013, stack testing has been completed at quarterly intervals at two locations, being the mill process enclosure/baghouse stack (i.e. Point 2) and the main ventilation shaft.</p> <p>In January 2017, external service provider, AMG/Assured Environmental, commenced air emissions testing at quarterly intervals at three defined locations (i.e. RP1 Main Ventilation Shaft, Process enclosure/baghouse stack and Vent Shaft 6). A total of eight quarterly emissions test reports have been received from this service</p>	Ob 73 – To be actioned by BHOP.

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		<p>provider in 2017 and 2018.</p> <p>Observation No. 73 – It is unclear what the 'visible' trigger limit at Point 2 is. BHOP could discuss determination of the 'visible' trigger limit with AMG/Assured Environmental.</p>	
<p>O3.7 The Air Quality Management Plan must include dust management practices that effectively minimise dust emissions at all times, including all mitigation measures discussed in the Environmental Assessment titled "RASP Mine Zinc-Lead-Silver Project Environmental Assessment Report, July 2010" and additional measures proposed in the document titled "RASP Mine Zinc-Lead-Silver Project Preferred Project Report September 2010". [Auditor's Note: error in spelling of "management".]</p>	Compliant	<p>Refer to supporting evidence comments for Project Approval Schedule 3, condition 11.</p> <p>Other documents which contain dust management practices in addition to those described in BHOP's AQMP include:</p> <ul style="list-style-type: none"> rows 3.1 to 3.8 of Table 8-2 in BHOP's Construction Environment Management Plan (revision no. 1 dated 6 December 2017, Doc ID: BHO-PLN-ENV-011) ; and section 7 of BHOP's Application of Dust Suppression Procedure (revision no. 1 dated 10 March 2015, Doc ID: BHO-PRO-ENV-013). <p>Auditor's Note – This condition refers to documents which may have been superseded by more recent documents.</p>	
O4 Processes and management			
<p>O4.1 All surface water storage ponds must be maintained to ensure that sedimentation does not reduce their capacity by more than 10% of the design capacity.</p>	<p>Non-compliant (low risk)</p> <p>Observation</p> <p>Observation</p>	<p>It was stated that approximately 30 stormwater retention storages exist on site as part of the site water management system. These structures are primarily utilised to retain stormwater runoff from disturbed and undisturbed areas across the site.</p> <p>It was stated that water storages for processing is managed by BHOP's Processing Department. The remainder of the water storages, primarily stormwater retention structures, are the responsibility of BHOP's Senior Environmental Advisor.</p> <p>Periodic inspections of stormwater retention facilities are conducted. Based on the completed February 2018 inspection checklist, the auditors experienced difficulty in interpreting the inspection results from the February 2018 inspection (i.e. the individual that conducted this inspection resigned in 2018).</p> <p>In 2019, it was stated that BHOP plans to commence utilising drones to inspect and survey existing stormwater retention storages. This will</p>	<p>NC – surveying and inspections were conducted in 2018 and sediment-removal works to be progressed in 2019 during winter.</p> <p>Ob 74 – To be actioned by BHOP.</p> <p>Ob 75 – To be actioned by BHOP.</p>

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		<p>require the installation of sediment markers at these facilities to define the zero level (i.e. when these ponds are empty of sediment) of these storages.</p> <p>As of February 2019, no formal process or procedure existed to currently exists to ensure that sedimentation does not reduce the capacity of these facilities by more than 10% of the design capacity.</p> <p>It was stated that this is scheduled to be rectified in 2019, by formalising BHOP's on-site inspection processes.</p> <p>It was stated that as of February 2019, some existing sediment storage facilities were full of sediment. It was stated that only the on-site S22 Dam has had sediment removed in the last 12 months to February 2019.</p> <p>Non-compliant (low risk) – Some surface water storage ponds are not being maintained to ensure that sedimentation does not reduce their capacity by more than 10% of the design capacity.</p> <p>Sediment removed from on-site sediment retention facilities is deposited into TSF2 (i.e. a designed dumping point exists).</p> <p>Observation No. 74 – BHOP could consider developing and implementing an annual pre-summer inspection checklist and clean-up to ensure that all drainage, sediment control facilities etc are fully functional prior to higher risk summer rainfall events occurring (i.e. given that winter rains were stated to be easily managed by BHOP). The demonstrated completion of a formal inspection with the use of a checklist could be invaluable in the event of a major rain event resulting in the overtopping and release from any on-site water storages.</p> <p>Observation No. 75 – BHOP is encouraged to survey all on-site stormwater retention storages to determine the actual storage volumes of each facility (i.e. information determined by Golder Associates within the 2012 Water Management Plan is limited to the area of each facility (i.e. in m²) and the runoff volumes within each catchment, not the actual available storage volume within each facility).</p>	

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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.	Compliant	<p>Refer to supporting evidence/comments for EPL conditions M1.2 and M1.3.</p> <p>During the audit period, the majority of environmental monitoring records retained by BHOP are held in MS Excel spreadsheets.</p> <p>Time series data (TM and weather data) are supplied monthly from external service providers as MS Excel spreadsheets.</p> <p>External laboratory reports are provided to BHOP from external service provider ALS in PDF format.</p> <p>Field sheets utilised by BHOP environmental personnel are held in hard copy and these are scanned and held in electronic format.</p> <p>No cloud-based storage of environmental monitoring data currently occurs.</p>	
<p>M1.2 All records required to be kept by this licence must be:</p> <p>a) in a legible form, or in a form that can readily be reduced to a legible form;</p> <p>b) kept for at least 4 years after the monitoring or event to which they relate took place; and</p> <p>c) produced in a legible form to any authorised officer of the EPA who asks to see them.</p>	<p>Compliant</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>No documented internal standard exists from CBH for the storage of environmental records and data.</p> <p>Environmental monitoring data is being stored, maintained and interpreted in MS Excel spreadsheets. This remains a high environmental risk (i.e. from a compliance/reporting perspective) and is unlikely to be sustainable in the future.</p> <p>It was stated that some historical meteorological data was not retained prior for the period 2012 to 2017 (i.e. this data is not readily retrievable).</p> <p>ALS data is being manually transcribed from hard copy PDFs into relevant Excel spreadsheets. The auditors consider this practice to be an inefficient and time-consuming use of BHOP environmental resources on site (i.e. when the majority of resource operations receive this data as electronic CSV files for electronic uploading into an on-site database).</p> <p>Observation No. 76 – No compliance database (or equivalent) is</p>	<p>Ob 76 – To be actioned by BHOP.</p> <p>Ob 77 – To be actioned by BHOP.</p> <p>Ob 78 – To be actioned by BHOP.</p>

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		<p>being utilised to enable BHOP to be proactively and consistently notified of required statutory renewals, reporting obligations, fee payments and other relevant compliance obligations.</p> <p>Observation No. 77 – Some critical records from ALS (i.e. Chain of Custody Forms) are potentially being retained with emails and ideally should be held separately in a designated storage medium.</p> <p>Observation No. 78 – BHOP is encouraged to purchase a formal environmental database and discontinue the use of multiple spreadsheets for the retention of environmental monitoring data and records. Once purchased, BHOP could request ALS to submit this data as electronic CSV files for uploading into the on-site database.</p>	
<p>M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:</p> <p>a) the date(s) on which the sample was taken;</p> <p>b) the time(s) at which the sample was collected;</p> <p>c) the point at which the sample was taken; and</p> <p>d) the name of the person who collected the sample.</p>	Compliant	<p>Most field sheets are utilised in hard copy. Once completed, these are scanned as required and stamped as being electronically scanned by BHOP's Environmental Technical Officer.</p> <p>Monitoring procedures exist for environmental monitoring conducted at the operation.</p> <p>It was stated that BHOP has labelled its environmental monitoring sites with EPL ID numbers. Selected monitoring sites inspected during this February 2019 audit were identified to have the EPL ID numbers.</p>	
M2 Requirement to monitor concentration of pollutants discharged			
<p>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:</p>	<p>Non-compliant (low risk)</p> <p>Observation</p> <p>Observation</p>	<p>As of February 2016 all monitoring points are appropriately identified with the relevant EPL point number.</p> <p>Non-compliant (low risk) – TEOM data for PM₁₀ was not collected from TEOM2 in April and May 2018 due to a storage card malfunction in TEOM2 and the data was not being downloaded or being reviewed on a daily basis.</p> <p>The EPA's letter (with penalty notice number 3173526300 attached) of 28 September 2018 to BHOP stated (in part):</p> <p>“The findings of our inquiries into this incident included that BHOP failed to meet Condition M2.1 of the licence which requires TEOM2 to sample air discharge quality daily and Condition O2.1</p>	<p>NC – Measures implemented to reduce risk of reoccurrence. Refer to show cause response of 27 July 2018.</p> <p>Ob 79 – To be actioned by BHOP.</p> <p>Ob 80 – To be actioned by BHOP.</p>

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		<p>of the licence that requires all plant and equipment to be maintained in a proper and efficient condition.”</p> <p>In relation to groundwater sampling, during this February 2019 audit it was observed that BHOP uses manual disposable hand bailers to partially purge groundwater bores (i.e. prior to sampling) and for the collection of groundwater samples for laboratory analysis.</p> <p>Observation No. 79 – BHOP could review its current use of manual disposable hand bailers for groundwater sampling and consider whether other instruments (e.g. low-flow groundwater pumps) could reduce the risk of unrepresentative samples being obtained.</p> <p>Observation No. 80 – BHOP’s Site Water Monitoring Procedure (BHO-ENV-PRO-011) should be reviewed and updated with suitable document control applied.</p> <p>BHOP’s Environment Department retains copies of relevant Australian Standards for required environmental monitoring that is conducted by BHOP’s environmental personnel.</p> <p>An extensive number of Australian Standards are available on BHOP’s W: Drive.</p>	
M2.2 Water and/ or Land Monitoring Requirements	<p>Non-compliant (low risk)</p> <p>Observation</p>	<p><u>Surface Water Monitoring – Monitoring Points 29, 31, 32, 33, 34, 35, 36</u></p> <p>BHOP was able to demonstrate, with some minor exceptions, that water samples are collected for the a) pollutants b) at the required units of measurement, c) at the defined frequencies and d) sampling methods defined in the tables in this condition.</p> <p>Under adverse climatic conditions, some of the seven surface samples at the relevant monitoring points defined in the EPL are unable to be collected as the designated sampling site was dry during the scheduled month of sampling.</p> <p>BHOP’s November 2018 Annual Return identifies that:</p> <ul style="list-style-type: none"> only one surface water sample was collected in October 2018 at Monitoring Points 29, 31, 32, 34, 35, and 36 (instead of two six monthly samples in both April and October 2018); and no surface water sample was collected at Monitoring Point 33 	<p>NC – Only due to lack of rainfall and sampling conditions did not comply with those required by the SWMP.</p> <p>Ob 81 – To be actioned by BHOP.</p>

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		<p>November 2018 Annual Return, inclusive of the reason.</p> <p>BHOP’s November 2017 Annual Return identifies that:</p> <ul style="list-style-type: none"> • as required, four quarterly groundwater samples were collected at Monitoring Points 37, 39, 40, 45, 46; • only three groundwater samples were collected at Monitoring Points 42, 44 and 47 (instead of the required four quarterly samples); • only two groundwater samples were collected at Monitoring Point 41 (instead of the required four quarterly samples); • only one groundwater samples were collected at Monitoring Points 38, 43, 48 and 52 (instead of the required four quarterly samples); and • no groundwater samples were collected at Monitoring Points 49, 50 and 51 (instead of the required four quarterly samples). <p>Failure to collect the required number of groundwater samples in 2017 was reported as a non-compliance on page 41 of the November 2017 Annual Return, inclusive of the reason.</p> <p>BHOP’s November 2016 Annual Return identifies that:</p> <ul style="list-style-type: none"> • as required, four quarterly groundwater samples were collected at Monitoring Points 39, 40, 41, 42, 43, 44, 45, 46, 47 and 48; • only two groundwater samples were collected at Monitoring Point 37 (instead of the required four quarterly samples); • only one groundwater samples were collected at Monitoring Point 52 (instead of the required four quarterly samples); and • no groundwater samples were collected at Monitoring Points 38, 49, 50 and 51 (instead of the required four quarterly samples). <p>Failure to collect the required number of quarterly groundwater samples in 2016 was reported as a non-compliance on page 27 of the November 2016 Annual Return, inclusive of the reason.</p> <p>Non-compliant (low risk) – During the audit period, BHOP did not collect the required number of surface and groundwater samples at all the monitoring points (i.e. as a result of dry climatic conditions) defined in the tables in this condition.</p>	

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		<p>Observation No. 81 – BHOP is expected to provide more explanatory commentary in its Annual Returns when environmental samples are not collected in accordance with the sampling frequencies defined in this condition. This was not consistently defined in the November 2016 and November 2018 Annual Returns.</p> <p><u>Mine Settlement Ponds – Monitoring Points 53, 54</u></p> <p>BHOP’s November 2016 and November 2018 Annual Returns identify that as required, 12 monthly samples were collected at Monitoring Points 53 and 54.</p> <p>BHOP’s November 2017 Annual Return identifies that only 9 monthly samples were collected at Monitoring Point 53 and only 7 monthly samples were collected at Monitoring Point 54.</p>																																																	
<p>M2.3 Air Monitoring Requirements</p> <p>POINT 1,2,56</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Dry gas density</td> <td>kilograms per cubic metre</td> <td>Quarterly</td> <td>TM-23</td> </tr> <tr> <td>Moisture</td> <td>percent</td> <td>Quarterly</td> <td>TM-22</td> </tr> <tr> <td>Molecular weight of stack gases</td> <td>grams per cubic metre</td> <td>Quarterly</td> <td>TM-23</td> </tr> <tr> <td>Temperature</td> <td>degrees Celsius</td> <td>Quarterly</td> <td>TM-2</td> </tr> <tr> <td>Total Solid Particles</td> <td>milligrams per cubic metre</td> <td>Quarterly</td> <td>TM-15</td> </tr> <tr> <td>Type 1 and Type 2 substances in aggregate</td> <td>milligrams per cubic metre</td> <td>Quarterly</td> <td>TM-12, TM-13 & TM-14</td> </tr> <tr> <td>Velocity</td> <td>metres per second</td> <td>Quarterly</td> <td>TM-2</td> </tr> <tr> <td>Volumetric flowrate</td> <td>cubic metres per second</td> <td>Quarterly</td> <td>TM-2</td> </tr> </tbody> </table> <p>POINT 1,56</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units of measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Nitrogen Oxides</td> <td>milligrams per cubic metre</td> <td>Quarterly</td> <td>TM-11</td> </tr> <tr> <td>volatile organic compounds as n-propane equivalent</td> <td>milligrams per cubic metre</td> <td>Quarterly</td> <td>TM-34</td> </tr> </tbody> </table>	Pollutant	Units of measure	Frequency	Sampling Method	Dry gas density	kilograms per cubic metre	Quarterly	TM-23	Moisture	percent	Quarterly	TM-22	Molecular weight of stack gases	grams per cubic metre	Quarterly	TM-23	Temperature	degrees Celsius	Quarterly	TM-2	Total Solid Particles	milligrams per cubic metre	Quarterly	TM-15	Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Quarterly	TM-12, TM-13 & TM-14	Velocity	metres per second	Quarterly	TM-2	Volumetric flowrate	cubic metres per second	Quarterly	TM-2	Pollutant	Units of measure	Frequency	Sampling Method	Nitrogen Oxides	milligrams per cubic metre	Quarterly	TM-11	volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Quarterly	TM-34	<p>Non-compliant (low risk)</p>	<p><u>Air Quality Monitoring (Point Source) – Monitoring Points 1, 2</u></p> <p>During the audit period, air quality monitoring was completed at quarterly intervals as required at Monitoring Points 1 and 2. Since late February 2013, quarterly stack testing has been completed at the mill process enclosure/baghouse stack (Monitoring Point 1) and the main ventilation shaft (Monitoring Point 2) and analysed for the parameters listed in the table in this condition.</p> <p><u>Air Quality Monitoring (Dust Deposition) – Monitoring Points 3, 4, 5, 6, 7, 8, 9</u></p> <p>BHOP’s November 2016, November 2017 and November 2018 Annual Returns identify that as required, 12 monthly dust deposition samples were collected at Monitoring Points 3, 4, 5, 6, 7, 8 and 9 and analysed for the parameters listed in the table in this EPL condition.</p> <p><u>Air Quality Monitoring (HVAS TSP and Lead) – Monitoring Point 10</u></p> <p>BHOP’s November 2018 Annual Return identified that only 47 of the required 60 samples were collected at Monitoring Point 10 and analysed for the parameters listed in the table in this condition.</p> <p>BHOP’s November 2017 Annual Return identified that only 57 of the required 60 samples were collected at Monitoring Point 10 and analysed for the parameters listed in the table in this condition.</p> <p>BHOP’s November 2016 Annual Return identified that only 52 of the</p>	<p>NC – High Volume Air Samplers are not capable of measuring TSP and PM₁₀ at the same time. Licence has been varied to create a new monitoring point 57 – TSP HVAS.</p> <p>HVAS failure resulting in samples not being collected and one event where samples were lost in transit to laboratory.</p>
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		<p>required 365 daily samples were collected at Monitoring Point 13 and analysed for PM₁₀; and b) only 314 of the required 365 daily samples were collected at Monitoring Point 14 and analysed for PM₁₀.</p> <p>BHOP's November 2017 Annual Return identified that all 365 of the required 365 samples were collected at Monitoring Points 13 and 14 and analysed for PM₁₀.</p> <p>BHOP's November 2016 Annual Return identified that all 365 of the required 365 samples were collected at Monitoring Points 13 and 14 and analysed for PM₁₀.</p> <p>Refer to non-compliance below.</p> <p>Non-compliant (low risk) – During the audit period, BHOP did not satisfy the requirements of this condition as follows:</p> <ul style="list-style-type: none"> • For Monitoring Point 10, the required number of samples for Air Quality Monitoring (i.e. HVAS for TSP and Lead) did not occur at Monitoring Point 10. • For Monitoring Points 11 and 12, the required number of samples for Air Quality Monitoring for PM₁₀ did not occur at: a) Monitoring Points 11 and 12 in 2018; and b) for Monitoring Point 11 in 2016. • For Monitoring Point 14, the required number of daily samples for Air Quality Monitoring for PM₁₀ did not occur at Monitoring Point 14 in 2018. • Data for the BHOP high volume air samplers (HVAS) was not available for May 2018, as filters were mislaid during transport to the external laboratory. <p>It was stated that changes to air sampling equipment have been identified and included in a licence variation application to the EPA.</p>	
M2.4	For the purposes of the table(s) above Special Frequency 2 means the collection of two samples a year six months apart.	Note	Relevant BHOP were aware of and understood the meaning of Special Frequency 2.
M3 Testing methods – concentration limits			
M3.1	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this	Compliant	<u>Point Source Air Emissions Testing</u> Ob 82 – To be actioned

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<p>licence must be done in accordance with:</p> <p>a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or</p> <p>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</p> <p>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.</p> <p>Note: The Protection of the <i>Environment Operations (Clean Air) Regulation 2010</i> 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".</p>	<p>Observation</p>	<p>External air quality monitoring service provider AMG/Assured Environmental (NATA Accreditation No. 19703) conducts on-site monitoring of pollutants listed in relevant EPL conditions.</p> <p>AMG/Assured Environmental utilises Envirolab Services (NATA Accreditation No. 2901) for the off-site testing of relevant pollutants (i.e. TVOCs and Type 1 and 2 Hazardous Substances) listed in relevant EPL conditions.</p> <p><u>Ambient Dust Monitoring</u></p> <p>BHOP utilises external commercial laboratory, Australian Laboratory Services (ALS) in Newcastle (NATA Accreditation No. 15784) for relevant dust analysis for samples collected for:</p> <ul style="list-style-type: none"> total suspended particulates (TSP); particulate matter less than 10 microns (PM₁₀); and lead dust. <p>Observation No. 82 – BHOP could confirm with the ALS/ACTest Newcastle Coal Testing Laboratory that: a) TSP; b) PM₁₀; and c) lead dust, is included within this laboratory's current scope of NATA Accreditation.</p>	<p>by BHOP.</p>
<p>M3.2 Analysis of heavy metals in air samples required by this licence must be done in accordance with:</p> <p>(a) APHA 3030 for the preparation of the sample; and</p> <p>(b) APHA 3111B for the measurement of lead.</p>	<p>Not verified</p> <p>Observation</p> <p>Observation</p>	<p>Submitted quarterly Source Emission Monitoring Reports from AMG/Assured Environmental state that Type 1 and 2 hazardous substances (heavy metals) are analysed using NSW Method IDs M-12, 13 & 14.</p> <p>External commercial laboratory, Envirolab Services (NATA Accreditation No. 2901 for these tests) is utilised for the analysis of heavy metals in air samples. Submitted laboratory reports define that metals in emissions are analysed utilising USEPA Method m29, with the exception of Sn and V which are not covered under USEPA m29 accreditation but are under in-house methodology.</p> <p>Not verified – Neither the quarterly AMG/Assured Environmental test reports or associated Envirolab Services laboratory reports make reference to APHA 3030 for the preparation of the sample or APHA 3111B for the measurement of lead.</p> <p>Observation No. 83 – BHOP could request a variation of this</p>	<p>Ob 83 – To be actioned by BHOP.</p> <p>Ob 84 – To be actioned by BHOP.</p>

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		<p>condition, as APHA methods are not being used by service provider, Envirolab Services (i.e. Envirolab Services defines in its laboratory reports that USEPA methods are being utilised for the analysis of heavy metals in air samples).</p> <p>Observation No. 84 – BHOP should request that the original Envirolab Services analytical reports be included as an appendix forming part of the quarterly reports provided by stack testing consultant, AMG/Assured Environmental.</p>	
M3.3 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.	Compliant	<p>During the audit period no requests were made by BHOP to the EPA for alternate monitoring methods to be used.</p> <p>It was noted that this condition's reference to 'monitoring' includes both 'sampling and obtaining results by analysis' as referred to in EPL condition M2.1.</p> <p>BHOP engages ALS in Sydney (a NATA accredited laboratory) to conduct analyses and reporting of submitted water samples.</p> <p>ALS currently uses both USEPA and APHA Standard Methods for the laboratory analysis of submitted water samples, which are in accordance with and exceed the analysis requirements specified in the NSW EPA's 'Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales' (March 2004).</p>	
M4 Weather monitoring			
M4.1 At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.	Non-compliant (low risk)	<p>In January 2019, BHOP replaced its on-site meteorological station with a new on-site meteorological station to enable the reliable and effective monitoring of all measurement parameters identified in this condition.</p> <p>The new meteorological station now enables BHOP to calculate Sigma Theta at 15-minute averaging periods.</p> <p>Non-compliant (low risk) – From 2016 to 2018, BHOP's meteorological station did not calculate Sigma Theta as required by this condition.</p>	NC – New weather station installed 15 Jan 2019 which measures Sigma Theta.

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M5 Recording of pollution complaints																																	
<p>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.</p>	Compliant	<p>External complaints are either received directly from a complainant or indirectly through the EPA. It was stated that all external complaints received are managed through BHOP's INX InControl corrective action database.</p> <p>BHOP maintains a formal Environmental Issue Complaints Procedure (issued on 10 March 2015) which references the required use of INX InControl for the formal entry, tracking and close-out of external complaints. Records of received complaints and the corrective actions completed to address these complaints are retained in INX InControl.</p> <p>In addition, BHOP's Register of Complaints lists the external complaints received by BHOP, and is uploaded to the CBH website.</p> <p>The BHOP Environmental Issue Complaints Form remains available and in use within the ESO's office.</p>																															
<p>M5.2 The record must include details of the following:</p> <ul style="list-style-type: none"> 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 	<p>Compliant</p> <p>Observation</p> <p>Observation</p> <p>Observation</p> <p>Observation</p>	<p>During this February 2019 audit there was evidence that BHOP was recording complaints in accordance with the requirements in paragraphs a) to e) of this condition.</p> <p>The INX InControl record of a blasting complaint dated 31 December 2018 (Ref No. 4425) was sighted.</p> <p>It was noted that personal details of the complainant are currently recorded in the INX InControl 'description' field.</p> <p>Observation No. 85 – There was evidence that prior to 2018, not all complaints received were being recorded in INX InControl. In 2015, 8 complaints were recorded in the Register of Complaints and one</p>	<p>Ob 85 – To be actioned by BHOP.</p> <p>Ob 86 – To be actioned by BHOP.</p> <p>Ob 87 – To be actioned by BHOP.</p> <p>Ob 88 – Currently implemented.</p>																														

Environment Protection Licence Number 12559 as at 21 December 2017			
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<p>the complaint, including any follow-up contact with the complainant; and</p> <p>f) if no action was taken by the licensee, the reasons why no action was taken.</p>		<p>complaint was recorded in INX InControl. In 2016, 15 complaints were recorded in the Register and one complaint was recorded in INX InControl. In 2017, 4 complaints were recorded in the Register and two complaints were recorded in INX InControl.</p> <p>Observation No. 86 – BHOP could consider modifying INX InControl to create separate fields for recording:</p> <ul style="list-style-type: none"> any personal details of the complainant or a note that no personal details were provided (paragraph c)); and information stating that if no action was taken by the licensee, the reasons why no action was taken (paragraph f)). <p>Observation No. 87 – BHOP could consider updating the Environmental Issue Complaints Form to: a) portrait layout; and b) to allow only one complaint to be documented per form. Ideally, BHOP could consider the availability of a hard copy form that can be completed with the same fields and required content as the electronic INX InControl Communication – Community / Reputation Form.</p> <p>Observation No. 88 – BHOP could consider whether the INX InControl reference number could be recorded in the Register of Complaints for each entry in the Register prior to 2019. It is acknowledged that the practice of recording INX InControl reference numbers in the Register of Complaints commenced in 2019.</p>	
M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant	<p>There was evidence that BHOP has retained some records of external complaints since August 2012 (i.e. the auditors sighted a complaint in INX InControl dated 21 August 2012 (Ref No. 250)).</p> <p>There was evidence that BHOP has consistently entered external complaints into INX InControl as needed from 2015 onwards.</p> <p>The location of records of complaints prior to 2015 was unable to be determined.</p> <p>There was a gap in INX records from 9 August 2012 to July 2015 and throughout 2016 and 2017. At the time of this February 2019 audit, source records for complaints from February 2015 to April 2015 could not be located.</p>	
M5.4 The record must be produced to any authorised	Compliant	Complaints received since 2015 are available in BHOP's INX	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
officer of the EPA who asks to see them.		InControl database to any authorised officer of the EPA who requests to view them.	
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.	Compliant Observation	BHOP Rasp Mine displays its main phone number and the dedicated complaints number at the front gate of the BHOP Offices in Eyre Street. Observation No. 89 – BHOP should reconsider the current practice (adopted in 2018) of locating the dedicated phone for the receipt of community complaints on the Senior Environmental Advisor's desk, which is unmanned at night and over the weekend (i.e. the phone is answered by an answering machine). This practice could potentially increase caller frustration and result in an increased number of complaints made directly to the EPA or media.	Ob 89 – To be actioned by BHOP.
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.	Compliant Observation Observation	Refer to supporting evidence/comments for EPL condition M6.1. Observation No. 90 – BHOP is encouraged to define in INX InControl if an external complaint was received directly by BHOP or indirectly via the EPA. Observation No. 91 – A prompt or formal trigger for the internal communication of environmental incidents/exceedances and community complaints could be established as the second agenda item at morning BHOP management meetings (i.e. second to safety incidents).	Ob 90 – To be actioned by BHOP. Ob 91 – Noted.
M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Note	This condition relates to the original EPL, which according to the EPA website was issued on 2 November 2006.	
M7 Blasting			
M7.1 To determine compliance with conditions L5.1, L5.2, L5.3, L5.4 and L5.4: (a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for all blasts carried out in or on the	Non-compliant (low risk) Observation	BHOP maintains a total of 6 blast monitors within and around the Rasp Mine. Blast monitors are connected via 3G (i.e. via geophone) to enable the data to be uploaded to the Saros InstanTel server (i.e. after the blast event or alternatively up to four times a day).	NC – A spare monitor is available for installation if a blast monitor is not communicating and cannot be accessed

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>premise at the following locations;</p> <p>The blast monitor labelled "V1" in Figure 1 titled "Blast Monitoring Locations" of Broken Hill Operations Pty Ltd - Rasp Mine - "Blasting Monitoring Program Management Plan" received by the EPA 29 June 2015 DOC15/238188.</p> <p>The blast monitor labelled "V2" in Figure 1 titled "Blast Monitoring Locations" of Broken Hill Operations Pty Ltd - Rasp Mine - "Blasting Monitoring Program Management Plan" received by the EPA 29 June 2015 DOC15/238188.</p> <p>The blast monitor labelled "V3" in Figure 1 titled "Blast Monitoring Locations" of Broken Hill Operations Pty Ltd - Rasp Mine - "Blasting Monitoring Program Management Plan" received by the EPA 29 June 2015 DOC15/238188.</p> <p>The blast monitor labelled "V4" in Figure 1 titled "Blast Monitoring Locations" of Broken Hill Operations Pty Ltd - Rasp Mine - "Blasting Monitoring Program Management Plan" received by the EPA 29 June 2015 DOC15/238188.</p> <p>The blast monitor labelled "V5" in Figure 1 titled "Blast Monitoring Locations" of Broken Hill Operations Pty Ltd - Rasp Mine - "Blasting Monitoring Program Management Plan" received by the EPA 29 June 2015 DOC15/238188.</p> <p>The specific monitoring locations are subject to the actual blasting locations as described in Table 4 - "Airblast Overpressure and Ground Vibration Monitoring Locations" of Broken Hill Operations Pty Ltd - Rasp Mine - "Blasting</p>		<p>Blast reports can be generated as needed and are also accessible on-line approximately 45 minutes after a blast has occurred.</p> <p>It was stated that there have been some cases where the blast monitor has failed to collect data prior to and during a blast. It was stated that there is no alert capability for the existing blast monitors to communicate that a monitor is not operational.</p> <p>It was stated that BHOP Technical Services personnel have responsibility for checking the functionality of the blast monitors prior to conducting a blast.</p> <p>Non-compliant (low risk) – A blast monitor at V3 ceased operating in August 2018 and BHOP was unable to obtain permission to enter the property for a week to restart the monitor.</p> <p>BHOP acknowledged that blast monitor V3 failed to operate from the 8th to 17th August 2018. BHOP received a formal warning letter from the EPA for failing to maintain this blast monitor in an operational state.</p> <p>It was stated that BHOP's Minimate blast monitors were purchased at the commencement of mining in 2012. A total of 7 Minimates and 3 newer Micromates were stated to be available on site for blast vibration monitoring.</p> <p>Observation No. 92 – At least annually, and if sufficient monitors exist, BHOP could operate one new blast monitor (i.e. Micromate model) against an older blast monitor (i.e. Minimate model) as a QA/QC measure to confirm the accuracy and functionality of the older Minimate blast monitors.</p> <p>Calibration records existed for a sample of BHOP blast monitors that were requested (e.g. a calibration certificate issued on 13 August 2018 by Saros for Minimate serial number BE22003).</p>	<p>prior to a blast.</p> <p>Ob 92 – Noted.</p>

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Monitoring Program Management Plan" received by the EPA 29 June 2015 DOC15/238188; and</p> <p>(b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standards AS 2187.2-2006.</p>			
6 Reporting Conditions			
R1 Annual return documents			
<p>R1.1 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; and 7. a Statement of Compliance – Environmental Management Systems and Practices. <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>	<p>Compliant Observation</p>	<p>During the audit period BHOP submitted the following Annual Returns to the EPA:</p> <ul style="list-style-type: none"> • Annual Return for the reporting period 2 November 2015 to 1 November 2016 (November 2016 Annual Return); • Annual Return for the reporting period 2 November 2016 to 1 November 2017 (November 2017 Annual Return); • Annual Return for the reporting period 2 November 2017 to 1 November 2018 (November 2018 Annual Return). <p>The November 2016, November 2017 and November 2018 Annual Returns use the EPA’s form and include:</p> <ol style="list-style-type: none"> 1. a Statement of Compliance (Section A); 2. a Monitoring and Complaints Summary (Section B); 3. a Statement of Compliance – Licence Conditions (Section C); 4. a Statement of Compliance – Load based Fee (Section D); 5. a Statement of Compliance – Requirement to Prepare Pollution Incident Response Management Plan (Section E); 6. a Statement of Compliance – Requirement to Publish Pollution Monitoring Data (Section F); and 7. a Statement of Compliance – Environmental Management Systems and Practices (Section G). <p>The November 2018 Annual Return was submitted by email from BHOP’s Senior Environmental Advisor to the EPA on 21 December</p>	

Environment Protection Licence Number 12559 as at 21 December 2017			
Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
		2018. An EPA email of 21 December 2018 confirmed receipt. The November 2017 Annual Return is recorded on the EPA website as having been received on 18 December 2017. The November 2016 Annual Return was submitted via eConnect EPA (eConnect EPA email receipt dated 16 January 2017).	
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	Compliant	During the audit period there was no deviation in the reporting period (i.e. 2 November to 1 November in the next year).
R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period 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.	Not triggered (as at February 2019)	This condition is not triggered under a transfer of the EPL occurs.
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.	Not triggered (as at February 2019)	This condition is not triggered until a surrender or revocation of the EPL occurs.

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect <i>EPA</i> 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').	Administrative non-compliance	<p>The November 2018 Annual Return was submitted by email from BHOP's Senior Environmental Advisor to the EPA on 21 December 2018.</p> <p>The November 2017 Annual Return is recorded on the EPA website as having been received on 18 December 2017. The method of submission of the November 2017 Annual Return could not be verified during this February 2019 audit.</p> <p>The November 2016 Annual Return was submitted via eConnect <i>EPA</i> (eConnect <i>EPA</i> email receipt dated 16 January 2017).</p> <p>Administrative non-compliance – BHOP submitted the November 2018 Annual Return by email on 21 December 2018 (i.e. not via eConnect <i>EPA</i> or by registered post).</p>	<p>NC – To be actioned by BHOP.</p> <p>A procedure for reporting is to be developed.</p>
R1.6 Monitoring report The licensee must supply with the Annual Return a report, which provides: a) an analysis and interpretation of monitoring results; and b) actions to correct identified adverse trends.	Non-compliant (low risk) Observation	<p>Annual Returns are prepared and submitted by BHOP's Senior Environmental Advisor.</p> <p>Non-compliant (low risk) – No additional report, which provides information required by paragraphs a) and b) of this condition, was submitted with the November 2016 or November 2017 Annual Returns. An Annual Blast Compliance Report was included as an appendix within the November 2018 Annual Return.</p> <p>Observation No. 93 – BHOP should consider cross-referencing the existing monthly reports and/or attach these to future BHOP Annual Returns, to address the condition requirement to provide an a) analysis and interpretation of monitoring results; and b) actions to correct identified adverse trends.</p>	<p>NC – Monthly reports posted to the website will be appended or referenced in future Annual Returns. The AEMR/Annual Review is also provided to EPA and available on the company website.</p> <p>Ob 93 – To be actioned by BHOP.</p>
R1.7 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.	Compliant	BHOP was able to provide copies of the Annual Returns referred to in condition R1.1 and also Annual Returns for the reporting periods 2 November 2013 to 1 November 2014, and 2 November 2014 to 1 November 2015.	
R1.8 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	Administrative non-compliance	<p>Section H ('Signature and Certification') of the November 2018 Annual Return is signed and dated by a BHOP Director and BHOP's Secretary.</p> <p>In signing Section H, the Director and Secretary (as printed on the</p>	NC – To be investigated by BHOP.

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<p>b) by a person approved in writing by the EPA to sign on behalf of the licence holder.</p> <p>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.</p> <p>Note: An application to transfer a licence must be made in the approved form for this purpose.</p>		<p>EPA Annual Return form):</p> <ul style="list-style-type: none"> declare that the information in the Monitoring and Complaints Summary in section B of this Annual Return is correct and not false or misleading in a material respect, and certify that the information in the Statement of Compliance in sections A, C, D, E, F and G and any pages attached to Section C is correct and not false or misleading in a material respect. <p>Administrative non-compliance – In relation to the November 2016 and November 2017 Annual Returns:</p> <ul style="list-style-type: none"> Section H of the November 2017 Annual Return was not signed and dated by BHOP’s Secretary; and Section H of the November 2016 Annual Return was not signed and dated by either a BHOP Director or BHOP’s Secretary. 	
R2 Notification of environmental harm			
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Compliant	<p>During this February 2019 audit there was evidence that BHOP uses the EPA Environment Line to notify the EPA of incidents that require notification.</p> <p>For example, in relation to a blockage of HVAS monitoring equipment on 28 March 2018, the relevant INX InControl record (reference no. 3276) showed that BHOP telephoned the EPA Environment Line number 131 555 on the same day (reference no. C04305-2018).</p>
R2.2	<p>The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.</p> <p>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.</p>	Compliant	<p>During this February 2019 audit there was evidence that upon becoming aware of an incident that requires notification, BHOP has promptly (i.e. within 7 days of the date on which an incident occurred) notified incidents to the EPA.</p> <p>For example, when BHOP became aware of missing HVAS filter papers (for the monitoring event of 30 May 2018) on 19 June 2018, it notified the EPA Environment Line (reference no. C08390-2018) by telephone on 19 June 2018, and provided written details of the notification by an email to the EPA with an attached letter dated 26 June 2018.</p>

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
R3 Written report			
<p>R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:</p> <p>a) where this licence applies to premises, an event has occurred at the premises; or</p> <p>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,</p> <p>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.</p>	Compliant	It was stated that during the audit period there has not been an 'event' under paragraphs a) or b) of this condition for which the EPA has requested a written report.	
<p>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.</p>	Compliant	Refer to supporting evidence/comments for EPL condition R3.1.	
<p>R3.3 The request may require a report which includes any or all of the following information:</p> <p>a) the cause, time and duration of the event;</p> <p>b) the type, volume and concentration of every pollutant discharged as a result of the event;</p> <p>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;</p> <p>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</p>	Compliant Observation	<p>Refer to supporting evidence/comments for EPL condition R3.1.</p> <p>Observation No. 94 – BHOP could consider updating INX InControl to receive and capture the information defined in Condition R3.3 a) – g) (for example, any witnesses to an incident, in paragraph c)).</p>	Ob 94 – To be actioned by BHOP.

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>to obtain that information after making reasonable effort;</p> <p>e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</p> <p>f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and</p> <p>g) any other relevant matters.</p>			
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.	Compliant	Refer to supporting evidence/comments for EPL condition R3.1.	
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.	Compliant Observation	<p>A copy of the EPL is available for reference by employees via BHOP's intranet and a link to the EPL is on the CBH website.</p> <p>In addition, a hard copy of the current EPL is kept on the Senior Environmental Advisor's desk.</p> <p>Observation No. 95 – BHOP could consider keeping a hard copy of the current version of the EPL:</p> <ul style="list-style-type: none"> in the General Manager's office for ease of access by senior management; and in the mill Control Room for ease of access by personnel. 	Ob 95 – To be actioned by BHOP.
G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.	Compliant	The EPL is available for inspection and reference to regulators and employees via BHOP's intranet.	

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response	
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Compliant	The EPL is available for inspection and reference to regulators and employees via BHOP's intranet.	
8 Pollution Studies and Reduction Programs				
U1 Blast compliance management program				
U1.1	<p>The licensee must implement a production blast management program directed at achieving compliance with licence condition L5.1 - where the limit allows a 5% exceedence of the 5 millimeter per second (mm/s) ground vibration impact at any sensitive receptor outside the premises.</p> <p>The program must;</p> <ul style="list-style-type: none"> Record the ground vibration impact of each development and production blast separately consistent with condition M7.1. Develop and record corrective actions where a production blast is recorded exceeding a ground vibration impact > 5 mm/s. Complete an annual production blast management report which summarises the production blast impact levels (and which excludes Block 7 production blasts). The report must include but is not limited to information about blast record data detailing the percentage of production blasts < 5 mm/s, the percentage of blasts > 5 mm/s, corrective actions undertaken in that 12 month period and where necessary the proposed future corrective actions that will be implemented to meet ongoing compliance with production blast limits at condition L5.1. The annual production blast management report is to be completed and attached to each 	Non-compliant (low risk)	<p>Blast monitoring at the Rasp Mine is scheduled and conducted by personnel from BHOP's Environment Department. Personnel from BHOP's Technical Services Department are responsible for reviewing blast vibration data.</p> <p>During this February 2019 audit evidence was sighted that BHOP has implemented a production blast management program, including:</p> <ul style="list-style-type: none"> a completed Charge Signoff Sheet (approved by BHOP's Technical Services Superintendent on 18 January 2019 for Rings S9 to S11, Stope 17_165, Shot 4) and accompanying Charge Plans Checklist (revision no. 2 issued on 12 February 2018, Doc ID: BHO-CKL-MIN-004) and Rasp Mine Charge Plan; selected daily vibration monitoring reports from Envirohub (Saros), dated 2 December 2018, 9 December 2018, 19 December 2018 and 30 December 2018; and a Memorandum (Re: 2017/2018 Blast Annual Compliance Report) dated 21 November 2018 from BHOP's Technical Services Superintendent to the Senior Environmental Advisor, which includes information about: a) blast record data; b) implemented corrective actions for the seven 'events' in the reporting period (2 November 2017 to 1 November 2018) where a production blast was recorded exceeding a ground vibration impact > 5 mm/s; c) corrective actions undertaken in the 12 month period; and d) proposed future corrective actions. <p>Non-compliant (low risk) – BHOP failed to prepare and submit the required Production Blast Management Report with its November 2017 Annual Return (reporting period 2 November 2016 to 1 November 2017).</p> <p>The EPA issued a 'show cause' letter dated 5 December 2018 in</p>	NC – Report submitted prior to response to the Show Cause notice.

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Condition Number and Requirement	Audit Finding	Supporting Evidence/Comments	BHOP Response
<p>Annual Return for the 2015/16 and 2016/17 reporting periods.</p> <p>The licensee must comply with all requirements of condition L5.1 during the 2017/18 reporting period.</p>		<p>relation to this non-compliance (i.e. there was a failure to actually prepare the report, rather than simply a failure to submit the completed report as required). BHOP responded by letter dated 20 December 2018 (having submitted the report in the meantime), and at the time of this February 2019 audit had not received the EPA's decision regarding any regulatory action.</p> <p>It was noted that next version of the EPL will potentially remove this condition as the requirements in this condition are historical.</p>	
9 Special Conditions			
E1 Concrete Batching Plant construction			
<p>E1.1 The licensee must construct the Concrete Batching Plant (CBP) consistent with the Construction Environment Management Plan (BHO-PLN-ENV-011) dated December 2017 and kept on EPA file DOC17/609105-02.</p>	<p>Not verified Observation</p>	<p>BHOP's Construction Environment Management Plan – Concrete Batching Plant (CEMP-CBP) is revision no. 1 dated 6 December 2017, Doc ID: BHO-PLN-ENV-011.</p> <p>A letter was submitted by BHOP on 24 August 2018 to the Department of Planning informing them that BHOP's Concrete Batching Plant and associated noise bund had been completed.</p> <p>It was stated that relevant BHOP personnel commenced a detailed internal audit against the CEMP-CBP in November 2018 (after completion of construction of the Concrete Batching Plant and associated noise bund). As of February 2019, this audit was stated to be ongoing and will be completed in the near future.</p> <p>Not verified – At the time of this February 2019 audit, consistency of construction with the CEMP-CBP could not be verified because the internal audit had not been completed.</p> <p>Observation No. 96 – The internal audit against the CEMP-CBP commenced after completion of construction of the CBP. BHOP could consider commencing internal audits against CEMPs for future works (e.g. the CEMP for TSF2) during construction.</p>	<p>NV – audit to be completed.</p> <p>Ob 96 – To be actioned by BHOP.</p>

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
1. Notice to Landholders			
<p>1. Within a period of 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>	Administrative non-compliance	Administrative non-compliance – At the time of this February 2019 audit, BHOP was unable to provide evidence of written notification to landholders of the leased land or of a published notice in a newspaper circulating in the lease area.	NC – notification not provided.
Mining, Rehabilitation, Environmental Management Process (MREMP)			
2. Mining Operations Plan			
<p>(a) Mining operations must not be carried out otherwise than in accordance with a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries – Mineral Resources.</p> <p>(b) The MOP must:</p> <ul style="list-style-type: none"> identify areas that will be disturbed by mining operations; detail the staging of specific mining operations; identify how the mine will be managed to allow mine closure; identify how mining operations will be carried out on site in order to prevent and or minimise harm to the environment; 	<p>Administrative non-compliance</p> <p>Observation</p> <p>Observation</p>	<p>BHOP's current Rasp Mine Mining Operations Plan (MOP) is dated 16 October 2017 (version V1) and covers the period from 1 October 2017 to 30 September 2019.</p> <p>In relation to the paragraphs of this condition:</p> <p>(a) Refer to non-compliance below.</p> <p>(b) In relation to each dot point in this paragraph, the MOP:</p> <ul style="list-style-type: none"> identifies “nearly the entire surface of CML7 is disturbed or has previously been disturbed during the course of mining over 130 years” (Table 7-3); details the staging of specific mining operations (section 2.3.3); refer to administrative non-compliance below; identifies how mining operations will be carried out on site in 	<p>NC – Notice of Assessment of 30 January 2018 acknowledges receipt of the RCE.</p> <p>Ob 97 – To be actioned by BHOP.</p> <p>Ob 98 – Noted.</p>

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
<ul style="list-style-type: none"> • reflect the conditions of approval under: <ul style="list-style-type: none"> - the Environmental Planning and Assessment Act 1979 - the Protection of the Environment Operations Act 1997 - and 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. <p>(c) The titleholder may apply to the Director-General to amend an approved MOP at any time.</p> <p>(d) It is a defence to a breach of this condition if:</p> <p>i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992, the Environmental Planning and Assessment Act 1979, Protection of the Environment Operations Act 1997 or the Occupational Health and Safety Act 2000; and</p> <p>ii) the Director-General had been notified of the terms of the order or direction prior to the operations constituting the breach being carried out.</p> <p><i>Note: The Director-General is deemed to be notified of the terms of an order or direction if the order or Direction was issued by the Department or a copy of the order or direction has been faxed to 02 4931 6790.</i></p> <p>(e) A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General. An approved amendment to the MOP under condition (c) does not constitute an approval for the purpose of this paragraph unless otherwise identified by the Director-General.</p>		<p>order to prevent and/or minimise harm to the environment (e.g. section 3.2.1.2 regarding air quality, section 3.2.1.3 regarding surface water);</p> <ul style="list-style-type: none"> • generally reflects the conditions of approval of the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997 and other approvals relevant to the development including the conditions of CML007 (e.g. Table 6-1); • has regard to relevant Guidelines (e.g. section 12 refers to the MOP Guidelines (DRE, September 2013)). <p>(c) In the audit period BHOP has applied to the Resources Regulator to amend the MOP. The previous MOP covered the period from 1 November 2015 to 30 September 2017.</p> <p>(d) There have been no orders or directions received from the Resources Regulator in the audit period which would have caused a breach of this condition.</p> <p>(e) The current MOP will cease to have effect less than 7 years after the date of approval by the Resources Regulator.</p> <p>Administrative non-compliance – In relation to paragraphs (a) and (b) of this condition:</p> <p>(a) BHOP was unable to provide evidence of the Resources Regulator's approval of the current MOP; and</p> <p>(b) the current MOP does not identify how the mine will be managed to allow mine closure due to an apparent lack of agreement for end land use, which has continued to the time of this February 2019 audit.</p> <p>Section 4 of the MOP states (in part):</p> <p>"It is BHOP's understanding that DRG are currently involved in discussions with a number of government agencies to identify a process for determining the final end land use across the length of the Line of Lode, including those areas that come within the mining leases of Perilya. This process will be finalised towards the end of 2017."</p> <p>The Resources Regulator stated (in consultation prior to this February 2019 audit) that it is interested to see progression of the rehabilitation options analysis which BHOP was required to undertake as a</p>	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
		<p>condition of the current MOP approval. BHOP is required to include the outcomes of this rehabilitation options analysis in the next MOP. The current MOP expires on 30 September 2019.</p> <p>Observation No. 97 – BHOP could consider indicating on the cover page of the MOP the approval status of the MOP (i.e. pending or approved).</p> <p>Observation No. 98 – In relation to the sixth dot point in paragraph (b) of this condition, when preparing a new or amended MOP, BHOP could have regard to relevant updated environmental guidelines adopted by the Resources Regulator (e.g. in relation to rehabilitation).</p>	
Annual Environmental Management Report (AEMR)			
3. Reporting			
<p>(a) The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.</p> <p>(b) The EMR must:</p> <ul style="list-style-type: none"> - report against compliance with the MOP; - report on progress in respect of rehabilitation completion criteria; - report on the extent of compliance with regulatory requirements; and - have regard to any relevant guidelines adopted by the Director-General; <p>Additional environmental reports may be required on specific surface disturbing operations or environmental incidents from time to time as directed in writing by the Director-General and must be lodged as instructed.</p>	Compliant	<p>It was stated that in the audit period BHOP has lodged Annual Environmental Management Reports (AEMRs) for the years 2015 (reporting period 16 December 2014 to 31 December 2015), 2016 (reporting period 1 January 2016 to 31 December 2016) and 2017 (reporting period 1 January 2017 to 31 December 2017).</p> <p>At the time of this February 2019 audit the AEMR for 2018 (reporting period 1 January 2018 to 31 December 2018) had not yet been lodged.</p> <p>A letter dated 15 June 2018 from the Resources Regulator indicated that the 2017 AEMR (which was submitted on 6 April 2018) was accepted subject to the items in Attachment 1 to the letter; namely: (a) an improved waste rock characterization methodology is required; and (b) a review or gap analysis of rehabilitation options and potential for establishment of vegetation in conjunction with rock armouring or other cove system options is required.</p> <p>The 2016 and 2017 AEMRs address the requirements in paragraph (b) as follows:</p> <ul style="list-style-type: none"> - report against compliance with the MOP (refer to section 3.2 in the 2016 and 2017 AEMRs); - report on progress in respect of rehabilitation completion criteria 	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
		<p>(section 7 in 2016 AEMR, section 8 in 2017 AEMR);</p> <ul style="list-style-type: none"> - report on the extent of compliance with regulatory requirements (section 1 in the 2016 AEMR, sections 1 and 11 in the 2017 AEMR); and - have regard to any relevant guidelines adopted by the Director-General (section 2.1 of the 2016 and 2017 AEMRs states: "It [the AEMR] has been prepared in accordance with the NSW Government <i>Post-approval requirements for State significant mining developments - Annual Review Guideline</i>, October 2015"). <p>The 2015 AEMR has a different document structure which does not include specific sections that address each requirement in paragraph (b). The auditors consider the 2015 AEMR generally addresses the requirements in paragraph (b). A letter dated 27 July 2016 (reference: OUT16/23860) from the Department of Industry (Division of Resources and Energy) stated that the 2015 AMER as submitted on 16 March 2016 was to the satisfaction of the Secretary.</p> <p>In the audit period the Resources Regulator has not directed BHOP to lodge additional environmental reports.</p>	
Auditor's Note: There is no condition number 4 in CML7			
5. Working Requirement			
<p>5. The lease holder must: expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$100,000 per annum whilst the lease is in force.</p> <p>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.</p>	Compliant	<p>BHOP can demonstrate that operational expenditure on the lease area has exceeded \$100,000 per annum since BHOP's commencement of mining operations at the Rasp Mine in 2012.</p> <p>Auditor's Note – The Resources Regulator has written to BHOP (by letter dated 16 July 2018, reference: 18/493165) regarding its intention to omit this condition from CML7.</p>	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
6. Control of Operations			
<p>6. (a) 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:-</p> <p>(i) cease working the lease; or</p> <p>(ii) cease that part of the operation not complying with the Act or conditions;</p> <p>until in the opinion of the Environmental Officer the situation is rectified.</p> <p>(b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction.</p> <p>(c) A direction referred to in this condition may be served on the Mine Manager.</p>	Compliant	<p>The site General Manager is the statutory Mine Manager. The General Manager stated that in the audit period no directives have been received from the Resources Regulator in relation to a non-compliance with any provision of the <i>Mining Act 1992</i> or any condition of CML7.</p>	
7. Reports			
<p>7. 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, of each year. The report must be to the satisfaction of the Director-General and contain the following:</p> <p>(a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period;</p> <p>(b) Details of expenditure incurred in conducting that exploration;</p> <p>(c) A summary of all geological findings acquired through mining or development evaluation activities;</p> <p>(d) A statement of the ore and mineral reserves</p> <p>(e) Particulars of exploration proposed to be conducted</p>	Non-compliant (low risk)	<p>As noted in the 2016 AEMR (section 4.1) and 2017 AEMR (section 4.1), some surface exploratory drilling and underground exploratory drilling has occurred on CML7 in the audit period.</p> <p>Non-compliant (low risk) – At the time of this February 2019 audit, BHOP was unable to provide evidence of exploration reports being prepared and provided to the DPE (Division of Resources & Geoscience) within the required 28 day period.</p>	<p>NC – Reports provided to Resources and Geosciences.</p>

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
in the next twelve months period; (f) All plans, maps, sections and other data necessary to satisfactorily interpret the report.			
8. Licence to use Reports			
8. (a) 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. (b) The non-exclusive licence will operate as a consent for the purposes of section 365 of the Mining Act 1992.	Compliant	This condition relates to the grant of a non-exclusive licence by BHOP to the Minister to publish, print, adapt and reproduce all exploration reports lodged.	
9. Confidentiality			
9. (a) 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 made non-confidential. (ii) reports deal with exploration conducted exclusively on areas that have ceased to be part of the lease. (b) Confidentiality will be continued beyond the termination of a lease 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. (c) The Director-General may extend the period of confidentiality.	Compliant	This condition relates to the DPE (Division of Resources & Geoscience) keeping all exploration reports confidential subject to the described exceptions.	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
10. Terms of the non-exclusive licence			
<p>10. The terms of the non-exclusive copyright licence granted under condition 8 (a) are:</p> <p>(a) the Minister may sub-licence others to publish, print, adapt and reproduce but not on-licence reports.</p> <p>(b) the Minister and any sub-licensee will acknowledge the lease holder's and any identifiable consultant's ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database.</p> <p>(c) 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.</p> <p>(d) there is no royalty payable by the Minister for the licence.</p> <p>(e) if 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.</p>	Compliant	Refer to supporting evidence/comments for CML7 condition 8.	
Auditor's Note: There is no condition number 11 in CML7			
12. Safety			
<p>12. Operations must be carried out in a 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 excavations opened up or used by the lease holder must</p>	Compliant Observation	<p>As noted in the 2016 audit report, it was stated that to render historical abandoned shafts and excavations across the operation as safe, these have either: a) concrete slabs installed/placed over the entrance; or b) are suitably fenced to deter access to the shaft.</p> <p>A number of these historical abandoned shafts and excavations are</p>	Ob 99 – To be actioned by BHOP.

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
be filled in or otherwise rendered safe to a standard acceptable to the Director-General.		<p>located in the areas of the BHP Pit and Kintore Pit.</p> <p>BHOP maintains a plan of all known historical/abandoned surface shafts on the mining lease.</p> <p>The whole mine site is suitably fenced and attempts are made to repair the fence if it is vandalised or has deteriorated. Security perimeter fence and shaft fence inspections are conducted weekly. Completed weekly inspections (using the BHO-CKL-SAF-004 form, 7 pages) were viewed for 2 November 2018 and 16 November 2018. The inspections included boundary fences and access gates, and the four abandoned shafts which are used for ventilation, i.e. Thomson Shaft, Brown Shaft, No. 7 Shaft, and No. 4 Shaft.</p> <p>Observation No. 99 – Two abandoned shafts (one each at the BHP Pit and Kintore Pit) are surrounded by poles and chains instead of fences. For additional safety BHOP could consider erecting fences around these abandoned shafts.</p>	
13. Rehabilitation			
13. Disturbed land must be rehabilitated to a sustainable/agreed end land use to the satisfaction of the Director-General.	<p>Not triggered (as at February 2019)</p> <p>Observation</p>	<p>In the 2016 audit report it was noted that:</p> <p>“The MREMP Review minutes from 18th October 1995 stated that the Department of Mineral Resources would take on the responsibility for maintaining the long term stability of the sumps and undertaking any future rehabilitation required at the site when the former Normandy Mining CML7 lease expires. These meeting minutes were signed by the DMR Acting Senior Inspector of Mines (Western Region).</p> <p>It was stated by BHOP personnel that as a consequence of the Department being responsible for rehabilitation of disturbed land prior to BHOP’s commencement of occupation of CML7, BHOP is only responsible for the rehabilitation of land disturbed on CML7 since it commenced occupation of CML7.”</p> <p>Observation No. 100 – BHOP could consider the legal effect of this condition regarding whether the words, “disturbed land” mean:</p> <ul style="list-style-type: none"> land which only BHOP has disturbed, or land which BHOP and previous lessees have disturbed. 	Ob 100 – To be actioned by BHOP.

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
Auditor's Note: There is no condition number 14 in CML7			
15. Exploratory Drilling			
<p>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.</p> <p>(2) If the lease holder drills exploratory drill holes he must satisfy the Director-General that:-</p> <p>(a) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established;</p> <p>b) all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface;</p> <p>(c) all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters;</p> <p>(d) if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape;</p> <p>(e) if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers.</p> <p>(f) once any drill hole 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.</p> <p>(g) once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.</p>	<p>Non-compliant (low risk)</p>	<p>As noted in the 2016 AEMR (section 4.1) and 2017 AEMR (section 4.1), some surface exploratory drilling and underground exploratory drilling has occurred on CML7 in the audit period.</p> <p>Non-compliant (low risk) – At the time of this February 2019 audit, BHOP was unable to provide evidence of having given the minimum 28 days' notification of exploratory drilling to the DPE (Division of Resources & Geoscience).</p>	<p>NC – To be actioned by BHOP.</p>
Auditor's Note: There is no condition number 16 in CML7			

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
17. Transmission lines, Communication lines and Pipelines			
17. 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 he may stipulate.	Compliant	It was stated that in the audit period no mining or related activities have impacted or affected the ongoing use of the main HV transmission line, communication lines, pipelines or any other utility located on CML7. During this audit there was no visual evidence that mining operations are adversely impacting on the existing utilities service corridor.	
18. Fences, Gates			
18. (a) 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. (b) Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.	Compliant	In relation to the paragraphs of this condition: (a) Fences are inspected weekly by an Emergency Services Officer and a hard copy inspection form is completed (BHO-CKL-SAF-004). Hard copies are kept in a folder and an INX incident number is assigned if any property damage is detected. Completed weekly inspections were viewed as noted in the supporting evidence/comments for CML7 condition 12. (b) During the audit period no correspondence was received from the State of NSW in relation to any requirements under this paragraph. Seven gates are located on CML7. All gates except the front gate to the site on Eyre Street are generally kept locked.	
19. Roads and Tracks			
19. (a) 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 he may stipulate. (b) 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 any damage to roads caused by operations carried out under the lease, less any amount paid or payable from the Mine Subsidence	Compliant	In relation to the paragraphs of this condition: (a) The current MOP (1 October 2017 to 30 September 2019) identifies the roads that will be affected by mining operations (e.g. section 3.2.1.8 identifies South Road as being potentially affected by subsidence). (b) It was stated that during the audit period BHOP has not received any claims from Council or RMS regarding a contribution to the cost of road repairs.	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
Compensation Fund.			
20. Access tracks must be kept to a minimum and be positioned so that they do not cause any unnecessary damage to the land. Temporary access tracks must be ripped, topsoiled 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.	Compliant	It was stated that during the audit period no new site access tracks (vehicle or pedestrian) have been constructed, and no site access tracks have been closed.	
Auditor's Note: There is no condition number 21 in CML7			
22. Use of Mercury or Cyanide			
22. The lease holder must not use mercury or cyanide or any solution containing cyanide for the recovery of minerals on the lease area without the prior written approval of the Minister and subject to any conditions he may stipulate.	Compliant	It was stated that during the audit period the site did not use mercury or cyanide or any solution containing cyanide for the recovery of minerals on the lease area.	
23. Resource Recovery			
23. (a) Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals 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 recovered, he may give notice in writing to the lease holder requiring the holder to recover such minerals. (b) The notice shall specify the minerals to be	Compliant	It was stated that during the audit period the site has not received any notice under this condition from the DPE (Division of Resources & Geoscience).	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
<p>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.</p> <p>(c) 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.</p> <p>(d) 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.</p> <p>(e) 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.</p> <p>(f) 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.</p>			
24. Indemnity			
<p>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 of 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</p>	Compliant	<p>Relevant BHOP personnel were aware of and understood this condition.</p> <p>As noted in the 2016 audit report, a Deed of Responsibility for the Line of Lode Precinct was issued to CBH Resources Limited from the NSW Department of Trade and Investment, Crown Lands on 23rd December 2014.</p>	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
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.			
25. Single Security			
<p>25. (a) A security in the sum of \$250,000.00 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 Consolidated Mining Lease No 7 (Act 1973), Mining Purposes Lease Nos 183, 184, 185 and 186 (Act 1973)). 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 have failed to fulfil the obligations of this lease if the lease holder fails to comply with any condition or provision hereof, any provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision hereof or of any provision of the Act or regulations made thereunder.</p> <p>(b) The lease holder must provide the security required by sub-clause (a) in one of the following forms:</p> <ul style="list-style-type: none"> (i) cash, (ii) a security certificate in a form approved by the Minister and issued by an authorised deposit-taking institution. 	Compliant	<p>As noted in the 2016 audit report:</p> <p>“BHOP was able to provide a scanned copy of the security certificate from the Bank of Tokyo-Mitsubishi UFJ. Ltd Sydney Branch (reference 746LG702161) dated 29 June 2011 for \$250,000.00 (Australian Dollars) that was stated to have been provided to the Minister.</p> <p>BHOP was able to provide written confirmation from the DRE that it holds the above security certificate.”</p>	
Special Conditions – General			
26. In respect of the area shown on Catalogued Plan No M8388 the registered holder shall not conduct any mining operations other than diamond drilling between the depths of 15.24 metres and 76 metres below the surface unless with the consent of the Minister first and	Compliant	<p>It was stated that during the audit period no mining operations contrary to this condition have been conducted in respect of plan M18388.</p> <p>Observation No. 101 – The reference in this Condition to Catalogued Plan Number M8388 seems to be incorrect. Schedule 2 of CML7</p>	Ob 101 – To be actioned by BHOP.

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
subject to such conditions as may be stipulated.		refers to plan M18388. BHOP could clarify the correct reference with the appropriate government agency.	
27. In respect of the area shown on Catalogued Plan No M2193 the registered holder shall ensure that mining operations are conducted in such a manner as not to interfere with the stability of any railway line traversing the area and the registered holder shall adhere to any direction to this affect which may be given from time to time by the Minister.	Compliant	Figure 3-1 in the current MOP identifies the Surface Exclusion Zone for Railway Infrastructure – Cross Section (looking north). Section 3.2.2.4 of the current MOP states (in part): “An exclusion area and buffer zone of 150m was established around the rail infrastructure.” It was stated that during the audit period there has been no disruption to railway lines traversing the area.	
28. The registered holder shall not deposit any refuse or waste rock on the dumps located on the areas indicated by Catalogue Plan Nos D3564, D3565, D3566 and D2322 unless authorised by the Minister and subject to such conditions as may be stipulated.	Compliant	It was stated that during the audit period no refuse or waste rock has been deposited on the dumps located on these areas.	
29. (a) Notwithstanding that the registered holder shall have complied with conditions numbered 30 to 32 (inclusive) the registered holder shall pay to the public authority the cost incurred by such public authority of making good any damage caused by operations carried on by or under the authority of the registered holder or any person claiming through or under the registered holder. (b) AND THE REGISTERED HOLDER HEREBY COVENANTS with the said public authority that the registered holder will pay to the said public authority the cost incurred by the public authority of making good any such damage caused as aforesaid. AND IT IS HEREBY AGREED AND DECLARED that the amount to be paid by the registered holder under the provisions of this clause shall include in addition to the cost of all necessary labour and materials all costs and expenses reasonably incurred in and about the making of surveys the preparation of plans and specifications and estimates the supervision and inspection of the works and all administrative and overhead costs and	Compliant	In the audit period BHOP has not received any correspondence from a public authority either to request or demand the cost of the public authority making good any damage caused by BHOP’s operations. As noted in the 2016 audit report: “It was stated that an external request was made to BHOP in August 2015 from Crown Lands relating to the sharing the cost of upgrading a length of boundary fence located at British Flats (to restrict access to the public in that area). It appears this external request has not (as yet) met the criteria in this condition.”	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
expenses of the public authority as the case may be related or attributable to the works undertaken to make good any damage caused. A certificate under the hand of the public authority as to the amount of the cost of making good any damage shall in all respects and for all purposes be conclusive evidence of the amount of such cost and of the due determination thereof.			
Special Conditions – Catchment Areas and Reserves			
<p>30. (a) If the registered holder is using or about to use any process which in the opinion of the Minister is likely to cause contamination of the waters of Stephen's Creek Catchment Area the registered holder shall refrain from using or cease using as the case may require such process within twenty four hours of the receipt by the registered holder of a notice in writing under the hand of the Minister or the Director General requiring the registered holder so to do.</p> <p>(b) The registered holder shall comply with any regulations now in force or hereafter to be in force for the protection from pollution of the said Catchment Area.</p> <p>(c) The registered holder shall not erect nor permit to be erected any dwellings unless with the consent of the Minister or Country Energy-Water and subject to such conditions as may be stipulated.</p> <p>(d) The registered holder shall make such provisions for sanitation as may be approved by Country Energy-Water and shall at all times observe and perform any requirements of the said Country Energy-Water respecting sanitation.</p>	Compliant	<p>In relation to the paragraphs of this condition:</p> <p>(a) It was stated that current mining, processing and related activities are unable to practically contaminate Stephens Creek due to: a) the operational controls in place; b) existing underground mining and waste rock storage practices; and c) the significant distance from the lease to the creek. The potential for contaminated water from the site discharging to Stephens Creek (a distance of 18 km) is considered to be remote.</p> <p>(b) It was stated that in the audit period there has been no evidence that the Stephens Creek catchment area has been impacted by the Rasp Mine.</p> <p>(c) No new dwellings have been erected on site during the audit period.</p> <p>(d) BHOP has not received any correspondence from Essential Energy or Essential Water in relation to sanitation on site during the audit period. All sewage from the project is collected and pumped for treatment at Broken Hill City Council's sewage treatment plant.</p>	
31. Operations shall be conducted in such a manner as not to interfere with or cause damage to the assets of Country Energy-Water situated on or around the subject area.	Compliant	In the audit period BHOP has not received any correspondence from Essential Energy and/or Essential Water regarding interference with or damage to their assets situated on or around CML7.	

Consolidated Mining Lease Number 7			
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response
32. The registered holder shall as far as may be practicable so conduct operations as not to interfere in any way with the public use and enjoyment of Reserve No 2421 for Temporary Common; Reserve No 69262 from Sale for future Public Requirements, Reserve No 3073 from Sale for Public Recreation and Reserve No 30905 for Quarry.	Compliant Observation	<p>As was the case in the previous (February 2016) audit, BHOP was unable to locate the Reserve areas named in this condition.</p> <p>It is considered that the current MOP (which addresses public access issues) is an indication of BHOP's position of not interfering with public use and enjoyment of non-operational areas. For example, refer to section 1.3.2.2 of the current MOP (regarding the Broken Hill Miners Memorial and Broken Earth Café not being affected by mining operations). Table 2-3 in the current MOP identifies "Other Users" as Domain 8.</p> <p>Observation No. 102 – BHOP could contact the appropriate government agency to confirm the locations of these named Reserve areas.</p>	Ob 102 – Noted.
Special Conditions – Prospecting/Mining Restriction			
33. The registered holder must not prospect or mine any mineral on the surface of the areas shown by:- <ul style="list-style-type: none"> a) Yellow tint on the plan annexed hereto of below the surface thereof to a depth of 10 meters; b) Blue tint on the plan annexed hereto of below the surface thereof to a depth of 15.24 meters; c) Red tint on the plan annexed hereto of below the surface thereof to a depth of 20 meters; d) Green tint on the plan annexed hereto of below the surface thereof to a depth of 76.20 meters. 	Compliant	It was stated that prospecting or mining operations do not take place on the surface of these colour tinted areas.	
34. Subject to the requirements of any order issued pursuant to section 75 of the Mining Act (1992): <ul style="list-style-type: none"> (a) the registered holder shall not, unless with the written approval of the Minister and subject to such conditions as he may impose, carry out a mining purpose on the lands described in column 1 of the Schedule numbered 2 annexed hereto other than a mining purpose specified opposite that description in column 2 of that schedule; (b) the registered holder shall not carry out a mining 	Compliant	<p>Relevant BHOP personnel were aware of and understood this condition including the depth restrictions.</p> <p>As noted in the 2016 audit report:</p> <p>"All of the "plans" referred to in Schedule 2 – Details of Lands, Purposes and Depths, were able to be located by relevant BHOP personnel (including survey personnel), to verify compliance with this condition.</p> <p>It was noted that Plan D3815 has no records on the Geological Survey of New South Wales.</p>	

Consolidated Mining Lease Number 7															
Condition Number and Requirement	Status	Supporting Evidence/Comments	BHOP Response												
<p>purpose specified in column 2 of Schedule 2 except in accordance with the conditions of this lease including any conditions that may be referred to in Column 3 of that schedule opposite that purpose.</p> <p style="text-align: center;">Schedule No 2</p> <p>This page and the succeeding pages is the schedule No. 2 and referred to in the annexed Consolidated Mining Lease No. 7 under the Mining Act, 1973, granted eighth day of October 1987.</p> <p style="text-align: center;">..... Witness to Minister's signature</p> <p style="text-align: center;">Details of Lands, Purposes and Depths</p> <table border="1"> <thead> <tr> <th>Lands</th> <th>Purposes</th> <th>Depth Restriction</th> </tr> </thead> <tbody> <tr> <td>Shown on plan M18388 previously being Mining Purpose Lease 597 (Act 1906)</td> <td> <ol style="list-style-type: none"> Constructing, maintaining or using in connection with mining or mining purposes a building, dam or any machinery. The dumping or depositing of any ore, mineral, mine residues or tailings. </td> <td>The surface and the soil below thereof to a depth of 15.24 metres.</td> </tr> <tr> <td>Shown on plan M18466 previously being Mining Purpose Lease 607 (Act 1906)</td> <td> <ol style="list-style-type: none"> Constructing, maintaining or using in connection with mining or mining purposes a building or any machinery. The treatment of tailings, water or a mineral bearing substance for the extraction or obtaining of any mineral therefrom. </td> <td>The surface and the soil below thereof to a depth of 15.24 metres.</td> </tr> <tr> <td>Shown on plan M22229 previously being Mining Purpose Lease 1238 (Act 1906)</td> <td> <ol style="list-style-type: none"> Constructing, maintaining or using in connection with mining or mining purposes a building, electricity transmission line, pipeline, railway, road or any machinery/ The treatment of tailings, water or a mineral bearing substance for the extraction or obtaining of any mineral therefrom. The generation of electricity for use in connection with mining or mining purposes. The dumping or depositing of any ore, mineral, mine residues or tailings. Erecting dwellings for the use of persons employed on or about the mine or on or about land subject to a lease for mining purposes. </td> <td>The surface and the soil below thereof to a depth of 76.20 metres.</td> </tr> </tbody> </table>	Lands	Purposes	Depth Restriction	Shown on plan M18388 previously being Mining Purpose Lease 597 (Act 1906)	<ol style="list-style-type: none"> Constructing, maintaining or using in connection with mining or mining purposes a building, dam or any machinery. The dumping or depositing of any ore, mineral, mine residues or tailings. 	The surface and the soil below thereof to a depth of 15.24 metres.	Shown on plan M18466 previously being Mining Purpose Lease 607 (Act 1906)	<ol style="list-style-type: none"> Constructing, maintaining or using in connection with mining or mining purposes a building or any machinery. The treatment of tailings, water or a mineral bearing substance for the extraction or obtaining of any mineral therefrom. 	The surface and the soil below thereof to a depth of 15.24 metres.	Shown on plan M22229 previously being Mining Purpose Lease 1238 (Act 1906)	<ol style="list-style-type: none"> Constructing, maintaining or using in connection with mining or mining purposes a building, electricity transmission line, pipeline, railway, road or any machinery/ The treatment of tailings, water or a mineral bearing substance for the extraction or obtaining of any mineral therefrom. The generation of electricity for use in connection with mining or mining purposes. The dumping or depositing of any ore, mineral, mine residues or tailings. Erecting dwellings for the use of persons employed on or about the mine or on or about land subject to a lease for mining purposes. 	The surface and the soil below thereof to a depth of 76.20 metres.		<p>Plan D3815 was previously Mining Lease 177 and is now annexed under CML7. Plan D3815 is shown on Plan D 6199 R inside ML12 (i.e. in the centre of the plan)."</p>	
Lands	Purposes	Depth Restriction													
Shown on plan M18388 previously being Mining Purpose Lease 597 (Act 1906)	<ol style="list-style-type: none"> Constructing, maintaining or using in connection with mining or mining purposes a building, dam or any machinery. The dumping or depositing of any ore, mineral, mine residues or tailings. 	The surface and the soil below thereof to a depth of 15.24 metres.													
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Shown on plan M22229 previously being Mining Purpose Lease 1238 (Act 1906)	<ol style="list-style-type: none"> Constructing, maintaining or using in connection with mining or mining purposes a building, electricity transmission line, pipeline, railway, road or any machinery/ The treatment of tailings, water or a mineral bearing substance for the extraction or obtaining of any mineral therefrom. The generation of electricity for use in connection with mining or mining purposes. The dumping or depositing of any ore, mineral, mine residues or tailings. Erecting dwellings for the use of persons employed on or about the mine or on or about land subject to a lease for mining purposes. 	The surface and the soil below thereof to a depth of 76.20 metres.													

Consolidated Mining Lease Number 7																														
Condition Number and Requirement			Status	Supporting Evidence/Comments	BHOP Response																									
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Appendix 1 – Endorsement of February 2019 Audit Team

In accordance with Condition 7(a) in Schedule 4 of Project Approval 07_0018 MOD 5, on 27 December 2018 the Secretary of the DPE endorsed the appointment of the Audit Team (specifically, the Lead Auditor, Kurt Hammerschmid) for this February 2019 audit. The DPE's letter of 27 November 2018 is reproduced below.



Contact: Katrina O'Reilly
Phone: 02 62297909
Email: Katrina.oreilly@planning.nsw.gov.au

Mr Devon Roberts
Senior Environmental Advisor
CBH Resources - Rasp Mine
Broken Hill Operations Pty Ltd
PO Box 5073
Broken Hill NSW 2880

Email: devonroberts@cbhresources.com.au

27 November 2018

Dear Devon,

RASP (Project Approval 07_0018) Independent Environmental Audit

I refer to the letter from Mr Giorgio Dall'Armi dated the 22 November 2018 seeking the Secretary's endorsement for Mr Kurt Hammerschmid to undertake the Independent Environmental Audit (audit) in accordance with Condition 7 of Schedule 4 of Project Approval 07_0018 (the approval) for the RASP Project.

Having considered the qualifications and experience of Mr Hammerschmid of Integrated Environmental Systems Pty Ltd (IES) the Secretary endorses the appointment of Mr Hammerschmid to undertake the audit in accordance with Condition 7 of Schedule 4 of the approval. This approval is conditional on Mr Kurt Hammerschmid being independent of the development.

The audit is to be conducted in accordance with AS/NZS ISO 19011 Australian/New Zealand Standard: Guidelines for quality and/or environmental management systems auditing and the *Post-approval requirements for State significant developments – Independent Audit Guideline* dated October 2015.

The audit report is to:

- include consultation with relevant government agencies and council;
- include a compliance table indicating the compliance status of each condition of the approval and the Environment Protection Licence;
- not use the term "partial compliance";
- recommend actions in response to non-compliances;
- review the adequacy of plans and programs required under this approval; and

Within six weeks of completing the audit, or otherwise as agreed by the Secretary, RASP is to submit a copy of the audit report to the Secretary together with its response to any

recommendations contained in the audit report and a timetable to implement the recommendations.

Prior to submitting the audit report to the Secretary, it is recommended that RASP review the report to ensure it complies with the relevant approval condition.

Should you wish to discuss this matter please contact myself on the details above.

Yours sincerely

Katrina O'Reilly
Team Leader Compliance
as nominee for the Secretary

Appendix 2 – Consultation letters and responses received

In accordance with Condition 7(b) in Schedule 4 of Project Approval 07_0018 MOD 5 and section 4.2 of the NSW Government's *Independent Audit Guideline (Post-approval requirements for State significant developments October 2015)*, consultation letters were sent to the relevant agencies and the Community Consultative Committee for the Project. These consultation letters and responses received are reproduced below and on the following pages.

Consultation letters (11 letters sent by email)

INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD
A.B.N. 44 070 213 988
1 / 3251 Point Nepean Road (PO Box 192) Sorrento Victoria 3943 Australia
Telephone: 0411 724 478 Email: hammer@ied.com.au

18th January 2019

Ms Katrina O'Reilly
Team Leader Compliance
NSW Department of Planning and Environment
Level 2, 84 Crown Street
Woolongong NSW 2500

By email: katrina.oreilly@planning.nsw.gov.au

Dear Ms O'Reilly

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

Integrated Environmental Systems Pty Ltd has been engaged by CBH Resources Limited to undertake an Independent Environmental Audit (audit) of the BHOP Rasp Mine as required by Project Approval 07_0018 (MOD 5).

The scope of this audit in February 2019 will:

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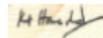
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Integrated Environmental Systems Pty Ltd will conduct the on-site component of the audit from 11th to 15th February 2019.

If you wish to respond to this request please email your written response to: hammer@ied.com.au, before 10th February 2019.

Your written response (if any) and this letter will be included as an appendix in the final audit report.

Yours sincerely
INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD



Kurt Hammerschmid M.Sc.
Director and Principal Environmental Auditor

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18th January 2019

Ms Christine Fawcett
Manager Environment Operations
NSW Department of Planning and Environment,
Division of Resources and Geoscience
516 High Street
Maitland NSW 2320

By email: christine.fawcett@planning.nsw.gov.au

Dear Ms Fawcett

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

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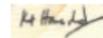
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18th January 2019

Mr Brad Tanswell
Unit Head Far West Operations
NSW Environment Protection Authority
48-52 Wingewarra Street
Dubbo NSW 2830

By email: rverina.farwest@epa.nsw.gov.au

Dear Mr Tanswell

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

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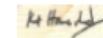
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 1 / 3251 Point Nepean Road (PO Box 192) Somers Victoria 3943 Australia
 Telephone: 0411 724 476 Email: hammer@cdi.com.au

16th January 2019

Mr Mark Grealy
 Inspector Environment – Compliance Operations
 NSW Department of Planning and Environment,
 Resources Regulator
 516 High Street
 Maitland NSW 2320

By email: mark.grealy@planning.nsw.gov.au

Dear Mr Grealy

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

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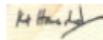
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Kurt Hammerschmid M.Sc.
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16th January 2019

Mr Shaun Barker
 Group Leader
 NSW Department of Industry – Lands & Water (Crown Land)
 45 Wingewarra Street
 Dubbo NSW 2830

By email: shaun.barker@crowland.nsw.gov.au

Dear Mr Barker

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

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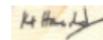
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Kurt Hammerschmid M.Sc.
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 1 / 3251 Point Nepean Road (PO Box 192) Somers Victoria 3943 Australia
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16th January 2019

Mr Tim Baker
 Senior Water Regulation Officer
 NSW Department of Primary Industries – Water
 Cnr Hampden and Cobra Streets
 Dubbo NSW 2830

By email: tim.baker@dpi.nsw.gov.au

Dear Mr Baker

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

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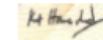
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Kurt Hammerschmid M.Sc.
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 A.B.N. 44 079 213 989
 1 / 3251 Point Nepean Road (PO Box 192) Sorrento Victoria 3943 Australia
 Telephone: 0411 724 476 Email: hammer@cdi.com.au

18th January 2019

Mr Darren Wallett
 Head – Griffith Unit
 NSW Office of Environment and Heritage
 Suite T-9 Level 1, 130-140 Banna Avenue
 Griffith NSW 2580

By email: darren.wallett@epa.nsw.gov.au

Dear Mr Wallett

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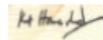
Schedule 4, Condition 7(b) of Project Approval 07_0018 (MOD 5) requires that the audit must include consultation with the key agencies (there is no Community Consultative Committee for the project) and may include consultation with other stakeholders, e.g. relevant statutory authorities or community groups. In compliance with this condition, we request your agency to provide any feedback regarding the environmental operations and/or environmental management of the BHOP Rasp Mine and any key issues which your agency would like us to consider within the scope of the audit.

Integrated Environmental Systems Pty Ltd will conduct the on-site component of the audit from 11th to 15th February 2019.

If you wish to respond to this request please email your written response to: hammer@cdi.com.au, before 10th February 2019.

Your written response (if any) and this letter will be included as an appendix in the final audit report.

Yours sincerely,
INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD



Kurt Hammerschmid M.Sc.
 Director and Principal Environmental Auditor

INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD
 A.B.N. 44 079 213 989
 1 / 3251 Point Nepean Road (PO Box 192) Sorrento Victoria 3943 Australia
 Telephone: 0411 724 476 Email: hammer@cdi.com.au

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 Telephone: 0411 724 476 Email: hammer@cdi.com.au

18th January 2019

Mr Francois van der Berg
 Manager Planning, Development and Compliance
 Broken Hill City Council
 240 Blendle Street
 Broken Hill NSW 2580

By email: francois.vandenberg@brokenhill.nsw.gov.au

Dear Mr van der Berg

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

Integrated Environmental Systems Pty Ltd has been engaged by CBH Resources Limited to undertake an Independent Environmental Audit (audit) of the BHOP Rasp Mine as required by Project Approval 07_0018 (MOD 5).

The scope of this audit in February 2019 will:

- Include all relevant conditions specified in:
 - Project Approval Number 07_0018 (MOD 5) approved on 2nd November 2018 by the delegate of the NSW Minister for Planning,
 - Environment Protection Licence Number 12559 as at 21st December 2017 issued by the NSW Environment Protection Authority, and
 - Consolidated Mining Lease Number 7 as renewed on 17th January 2007; and
- cover the period from February 2016 to February 2019.

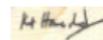
Schedule 4, Condition 7(b) of Project Approval 07_0018 (MOD 5) requires that the audit must include consultation with the key agencies (there is no Community Consultative Committee for the project) and may include consultation with other stakeholders, e.g. relevant statutory authorities or community groups. In compliance with this condition, we request Council to provide any feedback regarding the environmental operations and/or environmental management of the BHOP Rasp Mine and any key issues which Council would like us to consider within the scope of the audit.

Integrated Environmental Systems Pty Ltd will conduct the on-site component of the audit from 11th to 15th February 2019.

If you wish to respond to this request please email your written response to: hammer@cdi.com.au, before 10th February 2019.

Your written response (if any) and this letter will be included as an appendix in the final audit report.

Yours sincerely,
INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD



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 Director and Principal Environmental Auditor

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 Telephone: 0411 724 476 Email: hammer@cdi.com.au

18th January 2019

Ms Marlon Browne
 Chairperson, Steering Committee
 Broken Hill Environmental Lead Program

By email: marlon.browne@brokenhill.nsw.gov.au

Dear Ms Browne

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

Integrated Environmental Systems Pty Ltd has been engaged by CBH Resources Limited to undertake an Independent Environmental Audit (audit) of the BHOP Rasp Mine as required by Project Approval 07_0018 (MOD 5).

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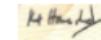
Schedule 4, Condition 7(b) of Project Approval 07_0018 (MOD 5) requires that the audit must include consultation with the key agencies (there is no Community Consultative Committee for the project) and may include consultation with other stakeholders, e.g. relevant statutory authorities or community groups. In compliance with this condition, we request the Steering Committee to provide any feedback regarding the environmental operations and/or environmental management of the BHOP Rasp Mine and any key issues which the Steering Committee would like us to consider within the scope of the audit.

Integrated Environmental Systems Pty Ltd will conduct the on-site component of the audit from 11th to 15th February 2019.

If you wish to respond to this request please email your written response to: hammer@cdi.com.au, before 10th February 2019.

Your written response (if any) and this letter will be included as an appendix in the final audit report.

Yours sincerely,
INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD



Kurt Hammerschmid M.Sc.
 Director and Principal Environmental Auditor

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 A.B.N. 44 070 213 989
 1 / 3251 Point Nepean Road (PO Box 192) Sorrento Victoria 3943 Australia
 Telephone: 0411 724 476 Email: hammer@ecd.com.au

18th January 2019

Ms Leanne Hastwell
 Manager Community Health
 Far West Local Health District (NSW Health)
 Broken Hill Community Health Centre
 1st Floor, 2-4 Sulphide Street
 Broken Hill NSW 2880

By email: leanne.hastwell@health.nsw.gov.au

Dear Ms Hastwell

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

Integrated Environmental Systems Pty Ltd has been engaged by CBH Resources Limited to undertake an Independent Environmental Audit (audit) of the BHOP Rasp Mine as required by Project Approval 07_0018 (MOD 5).

The scope of this audit in February 2019 will:

- Include all relevant conditions specified in:
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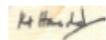
Schedule 4, Condition 7(b) of Project Approval 07_0018 (MOD 5) requires that the audit must include consultation with the key agencies (there is no Community Consultative Committee for the project) and may include consultation with other stakeholders, e.g. relevant statutory authorities or community groups. In compliance with this condition, we request the Far West Local Health District to provide any feedback regarding the environmental operations and/or environmental management of the BHOP Rasp Mine and any key issues which the Far West Local Health District would like us to consider within the scope of the audit.

Integrated Environmental Systems Pty Ltd will conduct the on-site component of the audit from 11th to 15th February 2019.

If you wish to respond to this request please email your written response to: hammer@ecd.com.au, before 10th February 2019.

Your written response (if any) and this letter will be included as an appendix in the final audit report.

Yours sincerely,
INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD



Kurt Hammerschmid M.Sc.
 Director and Principal Environmental Auditor

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 1 / 3251 Point Nepean Road (PO Box 192) Sorrento Victoria 3943 Australia
 Telephone: 0411 724 476 Email: hammer@ecd.com.au

18th January 2019

Ms Kaylene Kemp
 Executive Manager, Primary Health Care Service
 Maarri Ma Health
 439-443 Argent Street
 Broken Hill NSW 2880

By email: info@maarima.com.au

Dear Ms Kemp

CBH Resources – Broken Hill Operations (BHOP) Rasp Mine – Independent Environmental Audit

Integrated Environmental Systems Pty Ltd has been engaged by CBH Resources Limited to undertake an Independent Environmental Audit (audit) of the BHOP Rasp Mine as required by Project Approval 07_0018 (MOD 5).

The scope of this audit in February 2019 will:

- Include all relevant conditions specified in:
 - Project Approval Number 07_0018 (MOD 5) approved on 2nd November 2018 by the delegate of the NSW Minister for Planning,
 - Environment Protection Licence Number 12559 as at 21st December 2017 Issued by the NSW Environment Protection Authority, and
 - Consolidated Mining Lease Number 7 as renewed on 17th January 2007; and
- cover the period from February 2016 to February 2019.

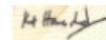
Schedule 4, Condition 7(b) of Project Approval 07_0018 (MOD 5) requires that the audit must include consultation with the key agencies (there is no Community Consultative Committee for the project) and may include consultation with other stakeholders, e.g. relevant statutory authorities or community groups. In compliance with this condition, we request Maarri Ma Health to provide any feedback regarding the environmental operations and/or environmental management of the BHOP Rasp Mine and any key issues which Maarri Ma Health would like us to consider within the scope of the audit.

Integrated Environmental Systems Pty Ltd will conduct the on-site component of the audit from 11th to 15th February 2019.

If you wish to respond to this request please email your written response to: hammer@ecd.com.au, before 10th February 2019.

Your written response (if any) and this letter will be included as an appendix in the final audit report.

Yours sincerely,
INTEGRATED ENVIRONMENTAL SYSTEMS PTY LTD



Kurt Hammerschmid M.Sc.
 Director and Principal Environmental Auditor

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 1 / 3251 Point Nepean Road (PO Box 192) Sorrento Victoria 3943 Australia
 Telephone: 0411 724 476 Email: hammer@ecd.com.au

Agency and other stakeholder responses to audit consultation letters

From: Katrina O'Reilly <Katrina.OReilly@planning.nsw.gov.au>
Sent: Monday, 4 February 2019 12:46 PM
To: 'hammer@cdi.com.au' <hammer@cdi.com.au>
Subject: RE: CBH Resources - Broken Hill Operations (BHOP) Rasp Mine - Independent Environmental Audit (February 2019)

Thankyou Kurt,

The aspects the Department would like attention to include air, noise, rehab, lead mgt, community engagement and the heritage.

Regards

Katrina

From: Darren Wallett <Darren.Wallett@epa.nsw.gov.au>
Sent: Thursday, 31 January 2019 2:31 PM
To: hammer@cdi.com.au
Cc: EPA RSD Riverina Far West Region Mailbox <riverina.farwest@epa.nsw.gov.au>
Subject: RE: CBH Resources - Broken Hill Operations (BHOP) Rasp Mine - Independent Environmental Audit (February 2019)

Hi Kurt,

Thank you for your enquiry about the CBH Rasp mine. In short we have a significant involvement with CBH since the recommencement of the rasp mine. There have been a number of compliance issues we have dealt with relating to EPL conditions. The main areas where we have had issues at the mine include site water management, blasting (vibration and overpressure) , air quality (dust) and failure to maintain environmental monitoring systems. There has been a number of regulatory responses to these issues from the EPA.

If you wish to have a chat about it please give me a call.

Cheers Darren

Darren Wallett**Head Regional Operations Unit**

Riverina Far West Region

South and West Branch, NSW Environment Protection Authority

+61 2 6969 0700 +61 427 255 214

darren.wallett@epa.nsw.gov.au www.epa.nsw.gov.au @EPA NSW

Report pollution and environmental incidents 131 555 (NSW only) or +61 2 9995 5555

From: Christine Fawcett <christine.fawcett@planning.nsw.gov.au>
Sent: Friday, 25 January 2019 3:13 PM
To: hammer@cdi.com.au
Cc: Mark Grealley <mark.grealley@planning.nsw.gov.au>
Subject: RE: CBH Resources - Broken Hill Operations (BHOP) Rasp Mine - Independent Environmental Audit (February 2019)

Hi Kurt

I am assuming that the audit will cover the MOP and its commitments as a condition of the title?

I would be interested to see their progression of the rehabilitation options analysis which they were required to undertake as a condition of the MOP approval. They are required to include the outcomes of this in their next MOP due in September.

Happy to discuss

Regards,

Christine Fawcett

Manager Environmental Operations – Central/West
Resources Regulator
161 Kite Street (Locked Bag 21) Orange NSW 2800
T 02 6360 9522 M 0429 462 841

From: Christine Fawcett <christine.fawcett@planning.nsw.gov.au>
Sent: Thursday, 7 February 2019 3:06 PM
To: hammer@cdi.com.au
Cc: John Stacpoole <John.Stacpoole@planning.nsw.gov.au>
Subject: FW: CBH Resources - Broken Hill Operations (BHOP) Rasp Mine - Independent Environmental Audit (February 2019)

Hi Kurt

Some input from Mine Safety regarding audit

Regards,

Christine Fawcett

Manager Environmental Operations – Central/West
Resources Regulator
161 Kite Street (Locked Bag 21) Orange NSW 2800
T 02 6360 9522 M 0429 462 841

Subscribe to our [information alerts](#)

From: John Stacpoole
Sent: Thursday, 7 February 2019 2:04 PM
To: Christine Fawcett <christine.fawcett@planning.nsw.gov.au>
Subject: RE: CBH Resources - Broken Hill Operations (BHOP) Rasp Mine - Independent Environmental Audit (February 2019)

Hello Christine

Sorry for the late answer

Some things worth following up

1. Is there capacity to pump and store an 1:100 year event
2. Has the inundation and inrush study included the risk to underground workers
3. There are two different potential fatality figures for the dam break study, which is the latest

Thanks

john

From: Christine Fawcett
Sent: Friday, 25 January 2019 11:10 AM
To: John Stacpoole <John.Stacpoole@planning.nsw.gov.au>
Subject: FW: CBH Resources - Broken Hill Operations (BHOP) Rasp Mine - Independent Environmental Audit (February 2019)

Hi John

Do you have any concerns that would benefit from an independent audit?

Regards,

Christine Fawcett

Manager Environmental Operations – Central/West
Resources Regulator
161 Kite Street (Locked Bag 21) Orange NSW 2800
T 02 6360 9522 M 0429 462 841

From: David Ferrall (Western NSW LHD) <David.Ferrall@health.nsw.gov.au>

Sent: Friday, 15 February 2019 4:36 PM

To: hammer@cdi.com.au

Subject: FW: CBH Resources - Broken Hill Operations (BHOP) Rasp Mine - Independent Environmental Audit (February 2019)

Hi Kurt

Apologies for the delay in get back to you

I am the contact for any enquiries regarding the Rasp Mine. Contact details below

We would only request that the audit considers whether the air monitoring and dust mitigation measures are adequate and meet the requirements of Project Approval 07_0018 (MOD 5).

Thanks

David

David Ferrall

Senior Environmental Health Officer | **Health Protection**

2-4 Sulphide St, PO Box 457, Broken Hill NSW 2880

Tel (08) 8080 1504 | Fax (08) 8080 1196 | Mob 0409 462 137 | david.ferrall@health.nsw.gov.au

www.health.nsw.gov.au

From: Cathy Dyer <Cathy.Dyer@maarima.com.au>
Sent: Tuesday, 5 February 2019 4:18 PM
To: hammer@cdi.com.au
Cc: Kaylene Kemp <Kaylene.Kemp@maarima.com.au>
Subject: RE: CBH Resources - Broken Hill Operations (BHOP) Rasp Mine - Independent Environmental Audit (February 2019)

Dear Mr Hammerschmid

Thank you for writing to Maari Ma regarding the proposed independent audit of CBH operations for the last 3 years. As you may be aware, Maari Ma staff are represented on the Broken Hill Environmental Lead Program's (BHELP) Steering Committee, as both community representatives and Aboriginal Advisory Group representatives. We also attend the Broken Hill City Council's Lead Reference Group meetings.

We are not aware of any particular positives or negatives to the CBH operations over recent years however we are aware of the results thus far of air monitoring being done as part of the BHELP research program.

There is nothing that Maari Ma would specifically like to highlight for your audit. We note the cooperation of all of Broken Hill's mining interests in the BHELP and BH LRG activities to date and hope to see that continue for the sake of Broken Hill as a community and for the health of the children.

Thank you for contacting us.

Good luck with the audit.

Cathy Dyer

Executive Manager Corporate Services

Maari Ma Health

Aboriginal Corporation

08 80829832

Tel:

(If unanswered, call 0419 973 834)

Fax:

08 80829889

Email:

cathy.dyer@maarima.com.au

Web:

<http://maarima.com.au>

I acknowledge and celebrate the First Australians on whose traditional lands we meet and work, and whose cultures are among the oldest continuing cultures in human history.

Appendix 3 – Actions taken by BHOP in response to the previous independent environmental audit in February 2016

The key overall findings from the previous (February 2016) independent environmental audit of the BHOP Rasp Mine were (reproduced in italics below):

- *In carrying out lead and zinc mining and related activities, BHOP Rasp Mine has demonstrated that the operation has prevented and/or minimised the likelihood of material harm to the environment as a result of its current mining and processing activities. This environmental compliance audit did not identify evidence of any “material harm” to the environment occurring or being demonstrated as a result of the operation (Note: “material harm” being defined in the Project Approval as “Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial”).*
- *The environmental performance and operational control demonstrated by BHOP Rasp Mine in the field was observed to be maintained to high standards. No extensive systematic (i.e. widespread) issues of concern were observed during field inspections conducted during this audit.*
- *A total of 172 conditions across the Project Approval, EPL and CML7 were audited. Of these 172 conditions, this audit identified 138 compliances, 11 non-compliances, 8 potential non-compliances and 15 not applicable findings.*
- *BHOP’s high level of compliance at the time of this audit can be attributed to: a) the significant work completed across the operation in the three years preceding this audit to improve the level of statutory compliance; and b) the efforts of the relevant BHOP personnel.*
- *A total of 79 observations were identified during this audit. Observations are provided for BHOP’s consideration to maintain higher levels of compliance and enable continuous improvement to be demonstrated in statutory compliance, site environmental management and environmental practices across the operation.*

The 2016 audit report (dated 9 March 2016) is on the CBH website. BHOP noted its responses (including actions) to the various identified non-compliances and observations in the final column of Table 2 in the 2016 audit report.

An indication that BHOP has responded to the identified non-compliances and observations in the 2016 audit report is the limited repetition of the same non-compliances and observations in this February 2019 audit. However during this February 2019 audit there was no evidence of formal tracking and close-out (i.e. within INX InControl) of the 19 actual and potential non-compliances and 79 observations identified in the 2016 audit report. It could not be verified whether BHOP had implemented all of the actions by their due dates as noted in the final column of Table 2 in the 2016 audit report.

Appendix 4 – Incidents and complaints and BHOP’s performance in relation to response and management of incidents and complaints

During the audit period (6 February 2016 to 15 February 2019) the majority of incidents and complaints which BHOP was required to notify to the DPE under Project Approval 07_0018 (MOD 5) and/or the EPA under Environment Protection Licence Number 12559 related to one of the following reasons:

- incidents relating to failure of monitoring equipment (HVAS, TEOM and blast monitors); or
- complaints arising from blasting operations.

Publicly available information regarding environment-related incidents and complaints is included in BHOP’s Annual Environmental Management Reports (AEMRs), Annual Returns and Register of Complaints.

AEMRs

At the time of this February 2019 audit, the 2018 AEMR (to be submitted to the DPE and the Resources Regulator) had not been issued.

The 2017 AEMR (reporting period 1 January 2017 to 31 December 2017) indicated four internally reported environment-related incidents (including complaints) and no externally reported incidents. The four **internally** reported incidents were:

- 16 December 2017: Incident number 2324 – Tailings line blocked resulting in slurry running outside of bunded area.
- 6 December 2017: Incident number 2290 – SAG Mill trammel blocked with scale resulting in slurry (ore) outside of bunded area.
- 26 October 2017: Incident number 2219 – Noise exceedance at A6 (Bonanza & Gypsum Streets) and A14 monitoring site (Piper Street North).
- 15 October 2017: Incident number 2185 – Lead concentrate spillage outside of bund walls.

The 2016 AEMR (reporting period 1 January 2016 to 31 December 2016) indicated 33 internally reported environment-related incidents (including complaints) and three externally reported incidents. The 2016 AEMR stated that a majority of the internally reported incidents related to the management of hydrocarbons, or leaks and spills on site. The three **externally** reported incidents were (noting that incident numbers were not printed in the 2016 AEMR):

- 5 October 2016: Seepage from the toe of Ryan Street Dam (S49) following heavy rainfall contaminated soil at toe of dam.
- 26 July 2016: The transformer supplying power to TSP-HVAS and HVAS1 failed, causing the air samplers to shut down. The generator installed to replace the transformer also failed, and contaminated the filters with diesel emissions. The units were then moved to a nearby location until the transformer was replaced.
- 21 March 2016: Resident was not notified prior to blast. This was caused by a late notification to the Environment Department of blasting that night.

Annual Returns

The November 2018 Annual Return (reporting period 2 November 2017 to 1 November 2018) indicated 11 non-compliances for EPL conditions L5.2, M2.1, M2.2 (twice), M2.3 (four times), M4.1, M7.1, and O2.1. During the audit period the EPA issued one penalty notice to BHOP, on 28 September 2018. The penalty notice (number 3173526300) was issued for non-compliances with EPL conditions M2.1 and O.2.1. Refer to supporting evidence/comments for EPL condition M2.1.

The November 2017 Annual Return (reporting period 2 November 2016 to 1 November 2017) indicated three non-compliances for EPL conditions L1.1, M2.2 and M2.3.

The November 2016 Annual Return (reporting period 2 November 2015 to 1 November 2016) indicated three non-compliances for EPL conditions M2.2 (twice) and M2.3.

It is considered that not all of the non-compliances described in the Annual Returns are ‘incidents’. For example, a failure to collect a groundwater sample due to a dry monitoring bore, which is regarded as a non-compliance with EPL condition M2.2, is not an ‘incident’.

Register of Complaints

In 2019 (to the end of the audit period on 15 February 2019) BHOP received seven complaints. All of these complaints related to vibration from blasting operations. Four of these complaints related to blasting on 6 January 2019 and the other three complaints related to blasting on 8 January 2019.

In 2018 BHOP received 17 complaints.

In 2017 BHOP received four complaints. It is noted that the 2017 AEMR does not account for these four complaints within the four incidents described above.

In 2016 (from the beginning of the audit period on 6 February 2016) BHOP received 13 complaints. These complaints are within the 33 incidents, including complaints, as noted in the 2016 AEMR.

Response and management of environment-related incidents and complaints

BHOP's Pollution Incident Response Management Plan (Doc ID: BHO-ENV-PLN-002) was scheduled to be tested in May 2016, June 2017 and June 2018. The 2016 and 2017 AEMRs stated that the PIRMP was tested on May 2016 and June 2017, respectively.

During this February 2019 audit there was evidence that BHOP has implemented corrective actions in response to incidents and complaints. For example, the Memorandum (Re: 2017/2018 Blast Annual Compliance Report) dated 21 November 2018 from BHOP's Technical Services Superintendent to the Senior Environmental Advisor included:

- details of implemented corrective actions for the seven 'events' in the reporting period (2 November 2017 to 1 November 2018) where a production blast was recorded exceeding a ground vibration impact > 5 mm/s;
- corrective actions undertaken in the 12 month period (2 November 2017 to 1 November 2018); and
- proposed future corrective actions.

BHOP's response and management of the seven complaints received in January 2019 (as noted in the Register of Complaints) was 'in progress' during this February 2019 audit. An email of 6 February 2019 from the EPA to BHOP (the most recent correspondence observed by the auditors) excluding the complainant's identity is reproduced below:

From: Tansley Hill <Tansley.Hill@epa.nsw.gov.au>

To: Devon Roberts <devonroberts@cbhresources.com.au>

Cc: Joel Sulicich <joelsulicich@cbhresources.com.au>

Bcc:

Date: Wed, 6 Feb 2019 02:23:51 +0000

Subject: RE: Incident Allocated I00366-2019 300 NOISE/VIBRATION - 301 MINE - Noise/vibration BROKEN HILL

Hi all, I'm just enquiring as to what the status is of the report regarding these blast issues and what actions have occurred to address same.

I noted a recent email from Devon indicating that [complainant's name] did not want a blast monitor nor alleges any damages to [complainant's] premises however BHP still need to ensure that [complainant's name] amenity is not being impacted by your activities or [complainant] will continue to report matters to the EPA.

Hence, factoring [complainant's] premises into blast design may be necessary yet this is a matter for BHOP to determine.

Regards,

Tansley Hill

Operations Officer

Riverina Far West Region

South & West Branch, NSW Environment Protection Authority

☎ 03 5021 8919 Mobile ☎ 0427 437 905

tansley.hill@epa.nsw.gov.au www.epa.nsw.gov.au @EPA_NSW

Report pollution and environmental incidents 131 555 (NSW only) or +61 2 9995 5555