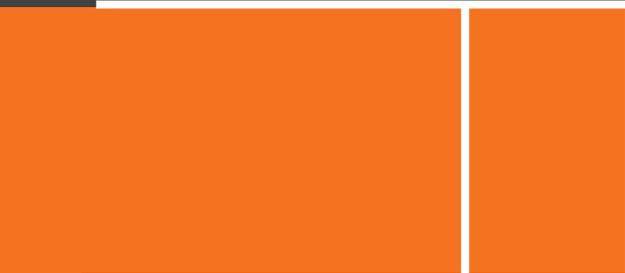


Mandatory Independent Environmental Compliance Audit

For Broken Hill Operations Pty Ltd

Mandatory Independent Environmental Compliance Audit
Of the Rasp Mine in accordance with
Condition 7 of Schedule 4 of Project Approval
Dated 31 January 2011

November 2012





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Broken Hill Operations Pty Ltd

Mandatory Independent Environmental Compliance Audit – Rasp Mine, Broken Hill, NSW

November 2012



Submitted To

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Broken Hill Operations Pty Ltd

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1. Authorisation

This Report is authorised by:

Graham A Brown M.Sc. FAusIMM, FEIANZ, CPEA

NAME

SIGNATURE

1st February 2013

DATE



2. Limitations

Mandatory Independent Environmental Compliance Audit – Rasp Mine, Broken Hill, NSW

This is to certify:-

1. Graham A Brown & Associates (the Auditor) has prepared the accompanying Mandatory Independent Environmental Compliance Audit Report of the Rasp Mine, Broken Hill, NSW as at 1st February 2013 (the Report) from certain information provided to it by Rasp Mine (the Auditee) at the request of and exclusively for the use and benefit of Broken Hill Operations Pty Ltd (the Client) on behalf of the Director-General, Department of Planning and Infrastructure.
2. Under the terms of the Auditor's engagement the Auditor has conducted the audit in accordance with the Scope of Works contained in the Request for Proposal – Rasp Mine Environmental Compliance Audit dated 9th August 2012. The Auditor has relied on information provided by the Auditee. The Auditor expresses no opinion as to the accuracy, truth, sufficiency or legality of the information provided by the Client or the Auditee in respect of the Auditee's compliance with the conditions or other requirements set out in Condition 7 of Schedule 4 of the Project Approval for the Rasp Mine dated 31st January 2012.
3. This Report has been prepared in accordance with generally accepted practices (including the standards set out in *ISO 19011: 2011 Guidelines for auditing management systems*) using standards of care and diligence normally practiced by recognised consulting firms performing services of a similar nature.
4. The Lead Auditor, Graham Brown, whose qualifications and experience satisfy the criteria set out in ISO 19011, is a Registered Lead Environmental Auditor (RABQSA Australia); a Principal Environmental Auditor (IEMA UK); and a Certified Professional Environmental Auditor (CPEA – BEAC USA). The Auditor is not responsible for the accuracy of information provided by other individuals or entities which is used in this Report. This Report presents the Auditor's professional judgement based upon data and findings identified in this Report and interpretation of such data based upon the Auditor's experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.
5. It is a condition of the provision of this Report that any liability of the Auditor to the Client for anything contained or stated herein shall be limited to the amount of the fee actually paid or payable by the Client to the Auditor for this Report. It is a further condition of the provision of this Report that any liability of the Auditor to the Client for anything contained or stated in the Report to the fullest extent permitted by law is hereby excluded unless the claim giving rise to such liability is made in writing to the Auditor within twelve (12) months of the date of this Report.
6. This Report is issued with the understanding that it is the responsibility of the Client, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law.
7. Neither the Auditor nor any member associate or employee of the Auditor undertakes any responsibility for any injury, loss or damage claimed by the Client or the Director-General of the Department of Planning and Infrastructure arising out of a claim by any third party against the Client in connection with this Report.



3. Abbreviations

Abbreviation	Definition
AEMR	Annual Environment Management Report
ANZECC Guidelines	Australian and New Zealand Environment Conservation Council
APHA	American Public Health Association (standard methods for analysis of samples)
AQMP	Air Quality Management Plan
ARI	Average Recurrence Interval
AS	Australian Standard
AWS	Automatic Weather Station
BHCC	Broken Hill City Council
BHOP	Broken Hill Operations Pty Ltd
BS	Blasting Schedule
BVO	Blasting Vibration and Overpressure
CLMP	Community Lead Management Plan
CML7	Consolidated Mining Lease 7
CMP	Conservation Management Plan
DECCW	NSW Department of Environment, Climate Change and Water
DoPI	NSW Department of Planning and Infrastructure
DRE	Division of Resources & Energy
EA	Environmental Assessment Report
ENVIRON	ENVIRON Australia Pty Ltd
EPA	Environment Protection Authority
EP&A Act	<i>Environment Planning and Assessment Act 1979 (NSW)</i>
EPBC Act	<i>Environment Protection Biodiversity Conservation Act 1999 (Commonwealth)</i>
EPL	Environment Protection Licence issued under the POEO Act
GABA	Graham A Brown & Associates
HHRA	Human Health Risk Assessment
IA	Internal Audit
IBC	Intermediate Bulk Container
LMP	Lead Management Plan
MOP	Mining Operations Plan
MP	Management Plan



Abbreviation	Definition
MSDS	Material Safety Data Sheets
NATA	National Association of Testing Authorities
NBMP	Noise and Blasting Management Plan
Pb	Lead
Pers comm	Personal communication
PIRMP	Pollution Incident Response Management Plan
PM	Particulate Matter
POEO Act	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
PPR	Preferred Project Report September 2010
Pronto	Software program
ROM	Run of Mine
RSC	Revised Statement of Commitments
RSR	Response to Submission Report July 2010
RTA	Roads and Traffic Authority
SWMP	Site Water Management Plan
TEOM	Tapered Element Oscillating Microbalance
TMP	Traffic Management Plan
tpa	Tonnes per annum
TSF	Tailings Storage Facility
TSP	Total Suspended Particulates
WMP	Waste Management Plan



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4. Audit Summary

Audit Title	Rasp Mine Independent Environmental Compliance Audit
Site:	Rasp Mine, 130 Eyre Street, Broken Hill, NSW 2880
Client Contact:	Ben Jones
Position:	Senior Environment and Community Officer
Client:	Broken Hill Operations Pty Ltd
Client Address:	130 Eyre Street, Broken Hill, NSW 2880 PO Box 5073, Broken Hill, NSW 2880
Client Telephone	(08) 8088 9116
Client Fax	(08) 8088 3392
Client Email	benjones@cbhresources.com.au
Lead Auditor:	Graham A Brown M.Sc., FAusIMM, FEIANZ, CPEA Registered Lead Environmental Auditor (RABQSA International) Principal Environmental Auditor (IEMA – UK) Certified Professional Environmental Auditor (CPEA) (BEAC – USA)
Audit Team Member:	Jade Molloy, B.EnvSc&Mgt. Auditor in training Ken Page B.A. (Hons)(Economics) Compliance Specialist
Auditor's Telephone:	(02) 4927 8500
Auditor's Fax:	(02) 4927 8400
Date of Site Visit	13 th , 14 th , 15 th and 16 th November 2012
Audit Objective:	Report on compliance by Rasp Mine with the Project Approval dated 31 st January 2011: <ul style="list-style-type: none"> 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); Review the adequacy of any approved strategies, plans or programs required under these approvals; and, if appropriate Recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.
Time period audited:	31 st January 2011 to 15 th November 2012
Date terms of engagement signed:	Purchase Order issued 19 th October 2012
Date Audit report signed (the Completion Date):	1 st February 2013



5. Engagement Overview and Summary

5.1 Introduction

Graham A Brown & Associates (GABA) was engaged by Broken Hill Operations Pty Ltd (BHOP) who is also referred to as 'the Proponent' in the Approval, to undertake a Mandatory Independent Environmental Compliance Audit on compliance by Rasp Mine with the Project Approval dated 31st January 2011 (the Approval). A mandatory audit is carried out to comply with Condition 7 of Schedule 4 of the Approval and is required to:

- (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
- (b) include consultation with the relevant agencies;
- (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);
- (d) review the adequacy of any approved strategies, plans or programs required under these approvals; and, if appropriate
- (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

Condition 7 of Schedule 4 of the Approval required that the audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General. The delegate of the Director-General specified that an air quality expert must review the air quality management of the Rasp Mine. Mr Aleks Todoroski was approved by the delegate of the Director-General and appointed to the audit team. The delegate of the Director-General also specified that an erosion and sedimentation specialist must be part of the audit team, and this role is covered by Graham Brown, the Lead Auditor, who was approved by the delegate of the Director-General for this purpose.

Condition 7 of Schedule 4 of the Approval required that by the end of December 2011, and every three years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit fulfils this requirement; however it does not comply with the timing specified, as this audit was not commissioned until 19th October 2012.

5.2 Audit Completion

It is a further requirement of Condition 7 of Schedule 4 of the Approval that within six weeks of the completion of this audit, or as otherwise agreed by the Director-General, BHOP shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

For the purpose of this condition, it is considered that the completion of the audit is the date on which the Final Report is signed by the Lead Auditor, on which date an electronic copy will be provided to BHOP. It is then the responsibility of BHOP to prepare its response to any recommendations made in this report and to submit the report together with its response to the Director-General within the six week time period specified.

5.3 Auditor's Responsibility

Our responsibility is to conduct a mandatory Independent Environmental Compliance Audit in accordance with Condition 7 of Schedule 4 of the Approval and to express an opinion on BHOP's compliance with the Approval, within the agreed scope, in all material respects. The procedures selected depend on our judgment, including



an assessment of the risks of material non-compliance of the matter being audited. We conducted our engagement in accordance with the international standard ISO 19011:2011 *Guidelines for auditing management systems*.

We read other information provided by the client and considered whether it was consistent with the knowledge obtained through our procedures. We considered the implications for our report if we became aware of any apparent material inconsistencies with the matter being audited. Our responsibilities did not extend to any other information.

An Independent Environmental Compliance Audit involves performing procedures to obtain evidence about the matter being audited. The procedures selected depend on the audit team leader's judgement, including the assessment of material non-compliance of the matter being audited. In making those assessments, we considered internal controls relevant to BHOP's compliance with the Approval in order to design assurance procedures that are appropriate in the circumstances, including for the purpose of expressing an opinion on the effectiveness of BHOP's internal controls.

We believe that the compliance evidence we have obtained is sufficient and appropriate to provide a basis for our independent opinion in this report, for the defined scope as described above.

5.4 Use of our Independent Environmental Compliance Audit Report

This Independent Environmental Compliance Audit report has been prepared on behalf of the management of BHOP for the Director-General of DoPI for the sole purpose of reporting on the matter being audited in accordance with Condition 7 of Schedule 4 of the Approval.

GABA disclaim any assumption of responsibility for any reliance on this report to any persons or users other than the management of BHOP and the Director-General of DoPI, or for any purpose other than that for which this report was prepared.

5.5 Inherent Limitations

There are inherent limitations in performing an Independent Environmental Compliance Audit; for example, compliance audits are based on selective testing of the information being examined. It is possible that non-compliance may occur and not be detected. An environmental compliance audit is not designed to detect all instances of non-compliance with the Approval, as it is not performed continuously throughout the year and the procedures performed in respect of compliance with the Approval are undertaken on a test basis. The conclusion expressed in this report has been formed based on the above limitations.



6. Statement of the Audit Methodology and Processes

This Independent Environmental Compliance Audit has been carried out based on a site visit to the Rasp Mine at Broken Hill, NSW.

Key matters which were audited included a critical review of the mine's environmental performance, reported sequentially relevant to the following matters (as required by Department of Planning and Infrastructure):

- Conditions of the Approval (referenced by condition number)
- Management Plans
- Environment Protection Licence
- Environmental conditions of mining lease(s)
- EA or EIS predictions and commitments
- Statements of Commitments
- Monitoring results and trends (including against regulatory limits and EA predictions)
- Community complaints
- Any regulatory action (Letters, Penalty Notices, Prosecutions etc) and outcomes
- Annual Reviews
- Any other specific matters raised by DoPI or other agencies
- The adequacy of strategies, plans or programs; whether they are consistent with current best practice (not just standard industry practice); and whether management systems, proposed actions and measures are adequate.
- Specific expert opinion on air quality management and erosion and sedimentation.

These requirements were achieved by the audit team through the following activities:

- Reviewing substantiating documentation.
- Testing delineation of facility boundaries.
- Interviewing responsible administrative, environmental and operational staff regarding operational control of activities that may have an adverse impact on the environment.
- Testing management methodologies, systems and processes for data capture from activities.
- Testing methodology and accuracy of air emissions data measured from instrumentation and sampling procedures.
- Testing internal audit methodology and process.
- Testing management methodologies, systems and processes for data and document management and audit trails.
- Assessing the environmental performance of the project and whether it is complying with the relevant requirements in the Approval
- Assessing whether the project is complying with any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals).
- Reviewing the adequacy of any approved strategies, plans or programs required under these approvals.
- Conducting an expert review of the air quality management of the Rasp Mine.
- Conducting an expert review of the erosion and sedimentation controls of the Rasp Mine.
- Testing other matters which came to the attention of the audit team leader during the planning and execution of the audit.

A summary of the Procedures undertaken as part of the Independent Environmental Compliance Audit is provided below.



Phase	Key Activity	Date(s)
Plan and Prepare	<p>Plan and Prepare:</p> <ul style="list-style-type: none"> GABA prepared a comprehensive, customised set of audit protocols (collectively called the Audit Protocol) and provided them to Rasp prior to commencement of the audit. The protocols included specific compliance assessment requirements of the Approval and other consent(s), lease(s), licence(s) and other applicable regulatory documents BHOP submitted the Audit Protocol to DoPI for approval (approval received by BHOP) Initial analysis of documentation provided by BHOP and population of the Audit Protocol BHOP provided additional data and documents upon request. Discussion with Kane Winwood of DoPI <p>Output: Audit Protocol with limited responses</p>	19 October – 9 November 2012
Site Visit	Opening Meeting on site at Rasp Mine.	13 November 2012
Site Visit	<p>Perform audit tasks – 3.5 days on site at Rasp Mine.</p> <ul style="list-style-type: none"> Interviews with key staff Site inspections, including underground. Documentation requested and received electronically Photography 	13-16 November 2012
Site Visit	Closing Meeting on site with preliminary audit findings	16 November 2012
Data Requests	Issue data requests and follow up on key items from site visit	19 July – 4 December 2012
Perform	<p>Review and Reporting</p> <ul style="list-style-type: none"> Review of audit evidence against conditions of the Approval and other related documents Specialist review of erosion and sedimentation management (Graham Brown) Expert opinion on air quality management (Aleks Todorosky) Audit findings and recommendations ranked 	19 November – 7 December 2012
Draft Report	Delivery of Draft Independent Environmental Compliance Audit Report.	20 December 2012
Review	Review of Draft Independent Environmental Compliance Audit Report by BHOP	January 2013
Final Report	Finalisation of Independent Environmental Compliance Audit Report, including assessment of comments on the Draft Report received from BHOP and peer review.	1 February 2013



a. Basis for Conclusion

The Auditor has made efforts to undertake a full and complete audit for and on behalf of BHOP in accordance with Condition 7 of Schedule 4 of the Approval. A majority of the information and documentation requested initially was provided by BHOP prior to and during the site visit in November 2012, with supplementary documentation subsequently provided on request. It is noted that not all documentation requested was provided.

We have presented our findings under the following categories.

- The Approval dated 31 January 2011;
- EPL 12559 dated 9 August 2012;
- Revised Statement of Commitments - Preferred Project Report, January 2011;
- Mining Lease (CML 7).

Our findings include our reviews of any assessments, plans or programs required under these approvals.

b. Findings

For each compliance requirement, the Auditor has assessed the extent to which the requirement has or has not been met. Compliance is assessed in accordance with the following table:

Finding	Reported as	Explanation
Complies	C	The auditee is fully in compliance with the condition or requirement. A recommendation for improvement may be made where appropriate.
Does not comply	NC	The auditee does not comply with the condition or requirement, wholly or in part. Recommendations for improvement are made.
Observation	O	An observation that does not constitute a non-compliance e.g. it may relate to an action that has been taken in the past in compliance with a condition or requirement, but the action may not have been initiated or completed within the time specified by the condition or requirement. Recommendations may be made for improvement if appropriate.
Not Applicable	NA	The condition or requirement does not apply at the time of the audit because the action is no longer required (e.g. construction has ceased) or it relates to something that is required in the future. No recommendations are made.

c. Recommendations

Where appropriate a recommendation has been provided against each finding to achieve compliance or improve performance. These recommendations have been ranked, based on the auditor's opinion. This practical approach highlights those recommendations that are considered by the Audit Team to be the most important (Emergency or Urgent) and which must be addressed within an agreed time frame, and to distinguish them from those that can be managed through normal operational practices that do not require a target time for completion (Improvement or Normal), based on the following Environmental Recommendations Ranking (ERR) scheme:



Environmental Recommendations Ranking	
Ranking	Proposed Action
"E" (Emergency)	<p>The defect is severe and poses immediate risk to the plant or the environment, to regulatory compliance or to the reputation of the organisation. This may include organisational (including management) defects that will lead to rapid deterioration of the plant or operations or the inability to securely and safely deal with an incident (i.e. lack of competent staff, failure of a management process, no emergency plan, inadequate equipment to deal with an emergency, lack of environmental security, etc).</p> <p><i>Action: Management should ensure that action is committed to minimise or eliminate the identified risk immediately, or otherwise within a time frame agreed with the auditor, or as required by regulatory requirements or agreement with the appropriate government officials or agencies. In extreme cases, the deficiency must be corrected prior to the auditor departing the site.</i></p>
"U" (Urgent)	<p>The defect presents a serious situation, but may not necessarily impact immediately on human health or safety, assets, the environment, property, security or the community. There may be a risk which is not immediate, of regulatory non-compliance or adverse publicity affecting the organisation's public image or business reputation.</p> <p><i>Action: A firm deadline should be set by management to correct the deficiency by an agreed date.</i></p>
"I" (Improvement)	<p>Improvement is required, and can be achieved through regular channels of management, maintenance, capital improvements, or assigned to environmental management staff.</p> <p><i>Action: Documented action plans to achieve the recommended outcome should be established, e.g. through setting and reviewing Objectives and Targets or initiating a Work Order. Management may decide not to undertake the recommended improvement, and should document the reasons for not doing so.</i></p>
"N" (Normal)	<p>No specific action is considered necessary, the recommendation is considered to be covered by the organisation's normal environmental management procedures; however it should be documented through Objectives and Targets or other process, such as a Work Order.</p>
"N/A"	<p>Not Applicable to this situation or at this time; there is no perceived risk to the environment or the community, no recommendation is made.</p>



d. Format of Audit Report

The detailed analysis contained in this Audit Report is set out in Section 8 – **Table of Findings, Audit Evidence and Recommendations**. This table is structured as follows:

- **Compliance Requirement** – a requirement of the Project Approval. Where appropriate, compliance requirements arising from other sources including legislation, EPL 3390, environmental assessments and Management Plans required as part of the Project Approval, may be addressed in conjunction with related requirements of the Project Approval.
- **Compliance** – the auditor’s view of the auditee’s compliance with the requirement.
- **Audit Finding** – results of the evaluation of the collected audit evidence against the Compliance Requirement.
- **Objective Evidence** – verifiable evidence in support of the audit finding (records, statements of fact, results of inspections or other evidence) that is provided by the auditee or identified by the auditor.
- **Recommendations** – the professional opinion of the auditor in relation to action to achieve compliance or to improve the auditee’s environmental management of the site.

The table of Findings, Audit Evidence and Recommendations is supplemented by an **Audit Recommendations and Response Table** (Appendix 6). This table provides a ranking of the recommendations resulting from this audit based on the Environmental Recommendations Ranking (ERR) scheme as shown in the table in (c) above.

The ERR is designed to indicate priorities for the audit recommendations. It highlights those recommendations that are considered by the auditor to be the most important (Emergency or Urgent) and which must be addressed within an agreed time frame, and to distinguish them from those that can be managed through normal operational practices that may not require a target time for completion (Improvement or Normal).



7. Executive Summary

7.1 Audit Requirement

The Mandatory Independent Environmental Compliance Audit of the Rasp Mine at Broken Hill measured compliance against the following criteria:

- Conditions of the Approval (referenced by condition number)
- Management Plans
- Environment Protection Licence 12559
- Environmental conditions of mining lease CML7
- Predictions and commitments in the EA, July 2010
- Revised Statement of Commitments, September 2010
- Monitoring results and trends (including against regulatory limits and EA predictions)
- Community complaints
- Any regulatory action (Letters, Penalty Notices, Prosecutions etc) and outcomes
- AEMR 2011-2012
- Any other specific matters raised by DoPI or other agencies
- The adequacy of strategies, plans or programs; whether they are consistent with current best practice (not just standard industry practice); and whether management systems, proposed actions and measures are adequate.

Operations reviewed at the Rasp Mine included:

- Underground mining operations;
- ROM pad;
- Ore Processing Plant;
- Tailings Storage Facilities (TSF1 and TSF2);
- Chemicals store;
- Workshops;
- Haul roads;
- Water treatment, storage and recovery;
- Erosion and sedimentation management;
- Air monitoring;
- Noise and vibration monitoring;
- Rail siding and concentrate handling;
- Administration of the environmental management programs;
- Heritage buildings and items.

A list of documents reviewed is provided in Appendix 1.



Figure 1. Aerial photo: Rasp Mine layout and surrounding residential areas.

7.2 Background

The following description is adapted from the 2011-2012 Annual Environmental Management Report.

Broken Hill Operations Pty Ltd (BHOP) (a wholly owned subsidiary of CBH Resources Ltd (CBH)), purchased the Rasp Mine from Normandy Mining Investments in 2001 (NMI). The Rasp Mine consists of the Consolidated Mining Lease 7 (CML7) and Mining Purpose Leases 183, 184, 185 and 186. These leases occupy a central region of the historic Broken Hill Line of Lode ore body and incorporate the original mine areas that commenced operations in the 1880s including a substantial amount of mining infrastructure from various mining phases.

The Rasp Mine is located centrally within the City of Broken Hill and is surrounded by transport infrastructure, areas of commercial and industrial development and some residential housing. The Rasp Mine is bounded by Eyre Street and Holten Drive to the south and east, Menindee Road (MR 66) to the northeast, Crystal Street to the northwest and Bonanza Street and South Road (Silver City Highway SH 22) to the southwest. These roads form part of the existing road train and B-double route through Broken Hill. Broken Hill railway station located directly to the north of the mine lies on the main Sydney – Perth railway line. Residential and commercial areas are located to the west, south and north of CML7, Perilya mine developments to the north-east (North Mine) and south-west (Southern Operations) and the Blue Metal Quarry to the east. An aerial view of the Rasp Mine is provided in Figure 1.

A Mine Operations Plan (MOP) was approved by Industry and Investment NSW (I&I NSW) in November 2006 for the development of an exploration decline. An extension to this decline was approved by a MOP amendment in May 2008. The current MOP, which also included underground mining and stockpiling of ore



(120,000 tpa) was approved by I&I NSW in December 2009 for a period of twelve months. In December 2010 the MOP was extended to 28th February 2011.

In January 2011 BHOP received approval from the Department of Planning and Infrastructure (DoP) under the *Environment Planning and Assessment Act 1979* (EP&A Act) for the expansion of mining production to 750,000 tpa and the construction and operation of a processing plant and rail load out facility for despatch of concentrates. This application was supported by an Environmental Assessment Report (EAR) (July 2010) and a Preferred Project Report (PPR) (September 2010).

A modification to the Project Approval was sought in November 2011 from the Department of Planning and Infrastructure (DoPI) to accommodate the relocation of the ventilation shaft from Kintore Shaft in Little Kintore Pit to a central area north west of the Lease. This relocation was required as heavy rains in early 2011 damaged the Kintore Shaft and rehabilitation of the Shaft to enable the construction of the ventilation shaft was no longer possible. The modification was granted by DoPI on the 16th March 2012. An amendment to the MOP for the relocation of the ventilation shaft was approved on the 30th March 2012 by DRE.

7.3 Compliance Summary

Broken Hill Operations Pty Ltd compliance with the documents reviewed as found by this audit is summarised in the table below.

Compliance Result	Number of Results	Per Cent
Complies	241	78.5%
Non-Compliance	37	12.1%
Observation	29	9.4%
Total Applicable	307	100%
Not Applicable	60	16.3%
TOTAL	367	

Out of the total 367 compliance requirements audited, BHOP achieved an overall compliance rate of 87.9% of the applicable compliance requirements, including all "Compliance" and "Observation" results recorded.

There were 37 Non-Compliances observed at the time of the audit, amounting to 12.1% of the overall number of applicable compliance requirements. There were 29 observations identified (9.4%), and 60 of the 367 requirements were not applicable at the time of the audit (16.3%). A total of 84 recommendations have been made, which are summarised in Appendix 6 'Audit Recommendations and Response Table', and detailed in Section 8 of this report.

The main non-compliances identified are set out below reported sequentially as required by the instructions from DoPI.

7.3.1 General

This finding is presented as an observation for management consideration. **It is recommended that** consideration be given to the implementation of a formal environmental management system (EMS) compatible with, and preferably certified to, ISO 14001:2004 *Environmental management systems – Requirements with guidance for use*. This is also included in Recommendation C44.2.



7.3.2 Project Approval dated 31 January 2011

- Copies of construction and occupation certificates for mine buildings were not available in BHOP's records.
- Copies of correspondence with DoPI in relation to the surrender of existing development consents were not available in BHOP's records.
- The Air Quality Management Plan (AQMP) does not include a protocol for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions.
- There is no incident investigation procedure and no reference to a contingency plan within the AQMP.
- Neither the Lead Management Plan nor the Community Lead Management Plan are finalised and were not submitted to the Director-General for approval by 30 June 2011.
- Appropriate links reporting the relevant dust and blood level monitoring data has not been established on CBH Resources website.
- The requirement for noise monitoring at 14 receiver locations specified in Table 7 of the Approval is not complied with, as there are only the 5 off-site locations currently monitored.
- The blasting schedules that are published weekly on the CBH Resources website are not referenced within the NBMP.
- The SWMP does not include adjusting the scale of mining operations to match the available water supply in case of drought.
- Condition No. 2 of the Bore Licence Certificate #85BL256109 has not been completed, requiring the NSW Office of Water to be provided with (a) details of the work completed by a licensed driller; (b) a location plan; (c) details of any pumping tests carried out; and (d) details of any water analysis.
- The Environmental Management Strategy does not include copies of any strategies, plans and programs approved under the conditions of the Approval.
- Relevant Management Plans such as the AQMP and NBMP do not include specific actions that will be taken in an environmental emergency, or a reference to the Emergency Response Plan.
- The identification of trends in the monitoring data over the life of the project are not included in AEMRs.
- The Strategies, Plans and Programs required under the Approval have not been reviewed and revised if necessary as required three months after the submission of the annual AEMR, the submission of an incident report under Condition 5, the submission of an audit report under Condition 7, or any modification of the conditions of the Approval.
- The complaints register on the CBH website has not been updated since June 2012, and the AEMR 2011-2012 is not available under the heading 'Annual Reports'.



7.3.3 Environment Protection Licence 12559

- A signed copy of annual returns submitted to the EPA are not retained in BHOP's records.

7.3.4 Revised Statement of Commitments - Preferred Project Report, September 2010

- A Community Consultation Group has not been established.
- Rasp Mine News Updates are not provided to local neighbours surrounding the mine to outline information on activities.
- A Rasp Mine information notice board has not been located at the Café and Miner's Memorial.
- A Rasp Mine magazine providing a summary of environmental monitoring, initiatives and activities is not distributed annually.
- Targeted consultation involving presentations and briefings on specific issues as they arise is not provided.
- The Complaints Procedure has not been updated to reflect current practice and the change from paper to electronic recording.
- The telephone Complaints Hotline system is not operational during operating hours, only during office hours.
- The Rasp Mine Complaints Hotline telephone number is not prominent on the CBH Resources website.
- The Rasp Mine Complaints Summary on the CBH Resources website is not kept up to date.
- Identification and remediation of areas where fines or silt has built up (typically after heavy rain storms) is not undertaken.
- A remediation action plan has not been prepared as part of the Mine Closure Plan.
- Undertaking sampling to quantify road surface silt loadings is not carried out on an ongoing basis.
- Regular maintenance of pollution control equipment to ensure that it is functioning at optimal performance levels is not carried out.
- A maintenance schedule is not documented and implemented for all pollution control equipment as part of an environmental management plan.
- Efficiency of all new mobile and fixed equipment is not considered during procurement for both diesel and electric powered equipment.
- The requirement for a new health risk assessment of the dust suppressant to be undertaken and forwarded to Greater Western AHS and NSW Health for approval prior to its use on-site has not been documented and implemented in the event that the dust suppressant chosen to be used at the site is not included in the Screening Assessment undertaken as part of the EAR.
- Verification has not been obtained that spill kits provided are suitable for recovering spills of substances located at the location of the spill kit.
- Training has not been planned or provided either by the supplier or site trainers, for personnel who are likely to use the spill kits.
- The quality and quantity of water captured by the toe drains on the TSF are not monitored in accordance with the requirements of the Monitoring of Tailings Trench Procedure.
- The Monitoring of Tailings Trench Procedure has not been reviewed for accuracy. It is filed under Procedure - Monitoring Trench Integrity, and is titled in the header Application of Dust Suppression Procedure BHO-ENV-PRO-010.



- The Conservation Management Plan does not include a photographic record of listed heritage buildings.
- The Conservation Management Plan does not include preservation requirements for buildings not to be reused.
- The Conservation Management Plan does not include an inventory of all mobile items remaining on site.
- The Conservation Management Plan does not include an agreement with a mining history organisation to preserve and care for relocated items.
- A procedure has not been prepared requiring that heavy vehicles associated with deliveries to the mine use approved B-Double routes, which are not clearly marked on a street map of the area.

7.3.5 Consolidated Mining Lease CML 7

There were no non-compliances relating to the CML 7. All environmental conditions in CML 7 also relate to items in either the Approval or the Revised Statement of Commitments and are therefore covered in those reviews.

7.3.6 Specialist Opinion on Erosion and Sedimentation

Erosion and sedimentation are covered in the Site Water Management Plan (SWMP) prepared by Golder Associates and dated 30th April 2012. This Specialist Opinion is prepared by Graham Brown, M.Sc. FAusIMM FEIANZ CPEA.

One of six objectives of the SWMP is to “Identify erosion and sediment control measures for the site and a monitoring plan for areas considered susceptible to erosion”. Section 10 of the SWMP is a “Catchment Runoff and Sediment Management Plan” which states that the susceptibility to soil erosion and the generation of sediment and flooding as a result of water erosion has been minimized by dividing the site into 68 smaller catchments that generally conform to the existing landform. Where storage areas are not provided within a catchment due to site restrictions, drainage channels discharge runoff into nearby catchment storage ponds. New sediment will accumulate in these storage ponds, and when new sediment levels reduce the 100 year storage capacity of the ponds by 10%, BHOP will desilt the ponds of new sediment, leaving the original sediment in place where practicable, to restore the design storage requirement. The sediment is to be disposed of into one of the existing large mine pits on site. **It is recommended that** this statement be modified to require the sediment to be disposed of into Blackwood Pit with the tailings.

It is intended by the SWMP that storage capacity will be assessed by viewing sediment depth markers at each storage area. No sediment depth markers were observed during the site inspections carried out by the auditors.

The SWMP identifies the difficulty in modifying existing batters that were constructed during previous mining operations, and now consist mainly of weathered rock, any fines having been removed over the years, which has resulted in the slopes being covered in an armour of coarse particles with limited erosion potential. The SWMP further proposes that in order to limit further erosion of the batters, surface water will be diverted from the batter slopes by shaping the top area of the landform to allow surface water to drain away from the crest of the slopes. This can be seen to be done in Photo 13 along the top of Blackwood Pit. The auditors observed that these structures were generally in place throughout the site, as can be observed in Photos 18 to 21 in Attachment 3 (Photographic Record) to the Summary of Project Approval and EP Licence Conditions Internal Audit, August 2012. The auditors did not verify that the top area of the landform has been shaped to



allow surface water to drain away from the crest of the slopes in all cases. Most slopes have a stormwater collection drain along the toe that directs flow to the sediment settlement ponds.

Some of this work may still be in progress; however it is asserted in the Internal Audit that BHOP have agreed with the EPA to complete these works by end of December 2012.

It is the opinion of the erosion and sedimentation specialist that any erosion products are confined to the site, that there are processes in place to maintain the capacity of water storages, and that the limited erosion prevention measures available on site are being implemented.

7.3.7 Expert Opinion on Air Quality Management

The review found that overall the mine management system and documentation includes the majority of ameliorative controls that would need to be taken to manage the dust and lead particulate emissions from each of the mine activities, individually to a high level. However several areas were found to be lacking. This includes issues with incomplete and inconsistent documentation and document control, and a lack of evidence that the mine's air quality management system is delivering overall best practice management of dust and lead particulate. For example despite the comprehensive list of actions, we did not find documented evidence that dust levels were checked and analysed daily for elevated emissions due to the mine or that daily actions to minimise dust on the days of the recorded elevated emissions had occurred.

In other words, the mine has comprehensively documented what could be done, but appears to lack a coherent system to ensure that it is done to the maximum extent feasible at the required time.

Nevertheless, it is considered that the issues identified can be readily corrected in a short time with advice from a suitably experienced air quality specialist to assist the mine to develop a coordinated overall management system and documentation. **It is therefore recommended** that specialist advice be sought from a suitably experienced air quality expert to assist the mine to develop a coordinated overall air quality management system and documentation.

This finding supports the recommendation made in Section 7.3.1 regarding the implementation of a formal environmental management system, including appropriate documentation.

The specialist review of air quality matters provided in Appendix 4 outlines the findings in detail.



8. Findings, Audit Evidence and Recommendations

Broken Hill Operations Pty Ltd - Rasp Project
Independent Audit for Department of Planning & Infrastructure
Detailed Findings and Recommendations
Project Approval

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
SCHEDULE 2 - ADMINISTRATIVE CONDITONS					
Obligation to Minimise Harm to the Environment					
S2.1	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 projects.	C	Section 2 'Commitment and Responsibilities' of the Environment Management Strategy states that "BHOP is committed to the protection of the natural environment and achieving a high level of performance at its Rasp Mine and will manage its operations to limit the potential for adverse impacts to the environment". Rehabilitation commitments are documented in Sections 17.3 and 17.4 of the Environmental Assessment Report (EA).	EA Environment Management Strategy V2 June 2012 Site Inspection	There are no recommendations.
Terms of Approval					
S2.2	The Proponent shall carry out the project generally in accordance with the: (a) EA; (b) Response to Submissions and PPR; (c) Statement of Commitments; and (d) conditions of this approval. If there is any inconsistency between the documents listed in this condition, 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.	C	This Environmental Compliance Audit addresses the documents set out in this condition. The draft Statement of Commitments set out in the EA is superseded by a revised Statement of Commitments in the PPR. The revised Statement of Commitments is reviewed in this audit. Project approval was granted on 31st January 2011. A number of non-compliances are identified in the following assessments. This audit achieved a 78.5% compliance with the criteria set out in this protocol.	EA PPR RSC Project Approval This audit	S2.2.1 The recommendations in the body of this audit should be addressed as appropriate to cover the non-compliance with this condition. Ranking: N
S2.4	The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of: (a) any reports, strategies, plans, programs, reviews, audits, or correspondence that are submitted in accordance with the conditions of this approval; and (b) the implementation of any actions or measures contained in these documents.	NA	No requirements have been received from the Director-General.	Management Assertion	
Limits on Approval					
S2.6	Production 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.	C	Section 4 'Consents, Leases and Licences' and section 5.2 'Project Approval Conditions' of the Environmental Management Strategy provide extraction consent limits. The Mining Manager indicated that the processing plant allows for a maximum of 750,000 tonnes to be processed annually. The Operations Manager also indicated that 350,000 - 375,000 tonnes will be processed in 2012 and it is estimated that 675,000 tonnes will be extracted and processed in 2013.	Environment Management Strategy V2 June 2012 Management Assertion	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S2.7a	Transport 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 Director-General, for processing.	NA	No ore is transported offsite. See also condition C90.	Site inspection Management Assertion	
S2.7b	Transport 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 Director-General.	C	Chapter 14.4.5 'Rail network' of the EA states that "a rail siding will be reinstated at the site to enable rail dispatch of all product concentrate". The rail siding was observed during the site inspection and all concentrates are transported from the site by rail (Photo 15).	EA Management Assertion Site Inspection	There are no recommendations.
Structural Adequacy					
S2.8a	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.	C	Chapter 6 'Environmental Goals and Objections' of the Environmental Management Strategy, outlines objectives to retain the maximum possible value of cultural mining heritage located on CML7. The workshop and offices have been fitted out. See also condition C79b.	Environment Management Strategy V2 June 2012 Management Assertion Site Inspection	There are no recommendations.
S2.8b	Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.	NC	This requirement could not be verified by the auditors as copies of construction and occupation certificates for mine buildings were not provided during the audit.		S2.8b.1 Copies of construction and occupation certificates for mine buildings should be made available in BHOP's records. Ranking: N
Demolition					
S2.9	The Proponent shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.	NA	Appendix A 'Environmental Risk Register' of the Response to Submissions Report (RSR) 2010 states that "no demolition of buildings required". It was indicated during the site inspection that no demolition of buildings has been carried out. See also condition C79b.	RSR Management Assertion	
Operation of Plant and Equipment					
S2.10	The Proponent shall ensure that all the plant and equipment used on site, or to transport materials to and from the site, is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	C	See condition C45.	Management Assertion (Mining Manager, Mill Manager, Mining Superintendent, Workshop Superintendent)	There are no recommendations.
Staged Submission of Any Strategy, Plan or Program					
S2.11	With the approval of the Director-General, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.	NA	No strategy, plan or program required by this approval has been submitted on a progressive basis.	Management Assertion	
Surrender of Development Consents					
S2.11	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.	NC	This requirement could not be verified by the auditors as copies of correspondence with DoPI in relation to the surrender of existing development consents were not provided during the audit.		S2.11.1 Copies of correspondence with DoPI in relation to the surrender of existing development consents should be available in BHOP's records. Ranking: N

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
SCHEDULE 3 - ENVIRONMENTAL PERFORMANCE CONDITIONS					
Air Quality and Greenhouse Gas					
S3.1	Odours The Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.	C	Section 2.2.10 'Odour' of the RSR provides for odour reducing measures used on site. Complaints regarding a strong odour were received due to the use of a reagent at the mill. This issue was addressed and the reagent was changed. The site inspection revealed that odour is minimal on site.	RSR Site Inspection Management Assertion	There are no recommendations.
S3.2	Greenhouse Gas Emissions 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 Director-General.	C	Section 10.17 'Greenhouse Gas Management' of the AQMP details management measures to minimise energy consumption and greenhouse gas emissions. BHOP has committed to undertaking an energy audit 12 months following the commencement of operations. This is scheduled to be undertaken in the second quarter of 2013. See also condition C52.	AQMP Management Assertion (Workshop Superintendent) BHOP IA	There are no recommendations.
S3.3	Air Quality Criteria 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. Tables 1, 2, and 3 set out long terms and short term criteria for particulate matter, and long term criteria for deposited dust.	C	Section 10 'Management Strategies' of the AQMP identifies air quality management strategies to control dust emissions. Real-time dust monitoring, water trucks, water sprays/sprinklers, chemical dust suppression, sealed roads, wash bay facilities and covered conveyers were all observed during the site inspection. See condition C35 and C46.	AQMP Procedure - Management of Exposed Areas ROM Pad Management Procedure Procedure – Roadway Dust Management Site Inspection	There are no recommendations.
S3.4	Air Quality Criteria The Proponent shall ensure that the project is operated in a manner that does not exceed the criteria listed in Tables 4 and 5. Tables 4 and 5 set out Discharge Criteria for Point 1 – Ventilation Shaft (Little Kintore Pit) and Point 2 – Process Enclosure/ Baghouse Stack.	NA	The Ventilation Shaft (Little Kintore Pit) has not yet been commissioned, however it is scheduled for completion last quarter of 2012 which will trigger monitoring. The Process Enclosure/Baghouse Stack is in operation (Photo 23) and it was indicated that BHOP are currently in the planning process to commence monitoring. The BHOP IA states that BHOP will arrange testing and identification of limits. The limit must be proposed by the Proponent and agreed by the Director-General in consultation with DECCW and be based on the results of post-commissioning test results. The limit must be proposed prior to the second sampling occurrence at Point 2. A proposal and costings has been provided by PA Holmes P/L to undertake this work.	BHOP IA Management Assertion Site Inspection Project Approval	
S3.5a	Operating Conditions The Proponent shall implement best practice dust management, including all reasonable and feasible measures to minimise dust emissions, including point source and fugitive emissions to the satisfaction of the Director-General.	C	See condition S3.3, C35, C46 and C47.	AQMP Procedure - Management of Exposed Areas ROM Pad Management Procedure Procedure – Roadway Dust Management Management Site Inspection	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.5b	Operating Conditions The Proponent shall minimise any visible off-site dust generated by the project or the site to the satisfaction of the Director- General.	C	Any visible off-site dust is minimised by the strategies referred to in condition S3.3 and C46.	AQMP Procedure - Management of Exposed Areas ROM Pad Management Procedure Procedure – Roadway Dust Management Site Inspection	There are no recommendations.
S3.5c	Operating Conditions The Proponent shall 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 Director-General.	C	The use of meteorological forecasting for dust management purposes is documented in the Procedure - Meteorological Forecasting to Guide Dust Management (BHO-ENV-PRO-004) which is also referred to in section 10.19 of the AQMP. See condition C35 and S3.11c (iii).	AQMP Management Assertion Procedure - Meteorological Forecasting to Guide Dust Management	There are no recommendations.
S3.6	The Proponent shall seal and maintain the roads listed in Table 6 to the satisfaction of the Director-General. The roads shall be sealed prior to the commencement of ore extraction, unless otherwise agreed by the Director-General.	C	See conditions C28 and C87. Some deterioration of the main haul road was evident during the site inspection.	AQMP BHOP IA Site inspection RSR Procedure - Management of Exposed Areas	See recommendation C87.1 and C87.2.
S3.7	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.	C	Section 10.10 'Crusher Circuit' of the AQMP details the engineering controls utilised. It was observed during the site inspection that the crusher circuit is fully enclosed and the ore is kept damp so that no visible fugitive emissions are released from the enclosure. (Photo 23) The internal air pressure is negative and vents to a baghouse.	AQMP Site Inspection Management Assertion BHOP IA	There are no recommendations.
S3.8	A chemical dust suppressant shall be applied as per the manufacturer's specification, or more often as required, to all 'free areas' identified in the figure in Appendix 4.	C	There is a Management of Exposed Areas Procedure BHO-ENV-PRO-003. See also conditions C29, C57 and C88.	AQMP Procedure - Management of Exposed Areas Site Inspection	There are no recommendations.
S3.9	All aboveground conveyors and transfer points prior to the grinding circuit (SAG and ball mills) shall be enclosed.	C	See condition C30 and Photos 6 and 7.	AQMP Site Inspection	There are no recommendations.
S3.10	Video recording equipment shall be installed to assist in the active management of emissions from the tailings storage facility.	NA	See condition C41.	AQMP Site Inspection	
S3.11a	Air Quality Management Plan The Proponent shall prepare and implement a detailed Air Quality Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with DECCW and submitted to the Director-General for approval prior to the commencement of construction on the site.	C	An Air Quality Management Plan was prepared by Environ in consultation with the EPA and submitted on 1/3/2011. According to the BHOP IA, a response by the EPA regarding sufficiency of consultation was provided to DoPI. These documents have since been revised and submitted to the EPA for review and comment (3 April 2012) who responded that a review was not possible for some time.	AQMP BHOP IA Management Assertion	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.11b	Air Quality Management Plan The Plan must 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.	C	Table 3, 'Air Quality Aspects Register with Uncontrolled/Controlled Particulate Emission Rankings' in the AQMP lists uncontrolled emission estimates for different particle sizes, along with their ranking in terms of magnitude of emission. Table 4, 'Air Quality Aspects Register with Lead Emission Rankings' in the AQMP lists uncontrolled and controlled emission estimates for lead, and the ranking of sources based on the magnitude of their emissions.	AQMP	There are no recommendations.
S3.11c (i)	Air Quality Management Plan The Plan must include an air quality monitoring program that provides for periodic point source monitoring at Point 1 (Ventilation Shaft – Little Kintore Pit) and Point 2 (Process Enclosure/ Baghouse Stack).	O	The Air Quality Monitoring Program is referred to in the AQMP and was prepared by Environ in consultation with the EPA and submitted on 1/3/2011. Point 1 and Point 2 were not listed in the monitoring locations at Table 6 of the Air Quality Monitoring Program. See condition S3.4.	AQMP AQ Monitoring Program BHOP IA Management Assertion	S3.11c (i).1 The Air Quality Monitoring Program should be revised to include Point 1 and Point 2 as monitoring locations listed within Table 6. Ranking: I
S3.11c (ii)	Air Quality Management Plan The Plan must include an air quality monitoring program that provides for continuous ambient monitoring across an ambient air quality and dust monitoring network comprising no fewer than ten monitoring locations (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 DECCW.	C	Section 4.1 'Monitoring Equipment And Locations' of the Air Quality Monitoring Program states that, "the air quality monitoring network comprises seven dust deposition gauges, three high volume air samplers (of which one monitors for TSP and Lead (Pb) and two monitor for PM10 and Pb), and two TEOM monitors". This is a total of 12 monitors. Section 4.1 states that "monitoring locations have been selected to be representative of areas of higher predicted impacts, as evaluated within the Air Quality Assessment prepared for the Environment Assessment". See also condition S3.11a and C43.	AQ Monitoring Program Monitoring Location Overview Site Inspection	There are no recommendations.
S3.11c (iii)	Air Quality Management Plan The Plan must include an air quality monitoring program that provides for continuous meteorological monitoring using a meteorological monitoring station located on the site.	C	Section 4.3 'Meteorological Monitoring' of the AQ Monitoring Program states that meteorological monitoring is conducted using the Rasp Mine Automatic Weather Station (AWS) which records data at 15-minute intervals and is located North East of Little Kintore Pit. The BHOP IA states that the AWS was installed in 2007 (Photo 26) and has been continuously in use.	AQ Monitoring Program BHOP IA	There are no recommendations.
S3.11c (iv)	Air Quality Management Plan The Plan must include an air quality monitoring program that is consistent with the requirements of Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DECC, 2007), the Protection of the Environment Operations Act 1997 and the Protection of the Environment (Clean Air) Regulation 2010.	C	Section 3 'Monitoring Standards' of the Air Quality Monitoring Program lists the Australian Standards and DECCW approved methods applicable to the Air Quality Monitoring Program.	AQ Monitoring Program	There are no recommendations.
S3.11d	Air Quality Management Plan The Plan must include 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.	C	Section 10 'Management Strategies' of the AQMP identifies the air quality management strategies for the potential air emission sources associated with activities at the Rasp Mine. Table 6 illustrates uncontrolled risk rankings for different air quality aspects. The strategies developed in the AQMP, as well as the relevant control actions described in operational procedures to mitigate and manage air quality issues are subsequently provided.	AQMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.11e	Air Quality Management Plan The Plan must include procedures and processes for monitoring ambient dust and deposited dust impacts.	C	Included in section 10.18 'Real Time Monitoring for Operational Dust Management' of the AQMP. The use of real-time monitoring for operational dust management is documented within the Procedure - Real-Time Particulate Monitoring for Operational Dust Management BHO-ENV-PRO-006. (Photo 1 and 2).	AQMP Procedure - Real-Time Particulate Monitoring for Operational Dust Management Site Inspection	There are no recommendations.
S3.11f	Air Quality Management Plan The Plan must include provision for regular review of dust monitoring data, with comparison of monitoring data with that assumed and predicted in the documents referred to under S2.2.	O	Section 11.2 'Regular Reporting' of the AQMP states that an environmental performance review shall be conducted annually and provided to the DoPI. These review reports shall commence at the end of June 2012 then annually thereafter. This review will 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: <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. Senior Environment and Community Officer indicated that all data is collated monthly for BHOP's private records and is made available to the public via CBH Resources website which was verified. An environmental performance review for June 2012 was not available at the time of this audit. 	AQMP Management Assertion CBH Resources website	S3.11f.1 The annual environmental performance reviews referred to in the AQMP should be completed and provided to DoPI in a timely manner, i.e. not more than 3 months after the period to which they relate. Ranking: I
S3.11g	Air Quality Management Plan The Plan must include 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 S2.2.	C	Section 10.18 'Real Time Monitoring for Operational Dust Management' of the AQMP states that "real-time meteorological and PM10 monitoring will be used at suitable off-site locations. Monitoring will provide alarms (e.g. site specific investigation and action levels) to direct dust management in real-time. This may comprise notifications to relevant site personnel or the automatic implementation of dust controls (e.g. sprays at the TSF)". The investigation levels and action levels are detailed in section 4.5 of the AQ Monitoring Program. When a site alert is issued actions may include immediate dust mitigation measures or the cessation of dust generating activities. The Senior Environment and Community Officer advised that there is one real time monitor located off-site.	AQMP AQ Monitoring Program Management Assertion	There are no recommendations.
S3.11h	Air Quality Management Plan The Plan must include specific complaints management procedures in the event that dust monitoring indicates elevated off-site impacts.	C	This is set out in section 12 'Air Quality Complaints Management' of the AQMP. Issues in relation to the documentation and operation of BHOP's general complaints management procedures are addressed in C7.	AQMP Site Inspection Community Complaints Register	See Recommendations C7.1 - C7.4.
S3.11i	Air Quality Management Plan The Plan must include procedures for the minimisation of dust generation on the site.	C	This is set out in section 10 'Management Strategies' of the AQMP. Table B1 of the AQMP documents the air quality controls within Rasp Mine Procedures.	AQMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.11j	Air Quality Management Plan The Plan must include protocols for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions.	NC	Not included in AQMP or Air Quality Monitoring Program BHO-ENV-PRM-001. See also conditions C44 and C45.	AQMP AQ Monitoring Program	S3.11j.1 A protocol should be established in the AQMP for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions. Ranking: I
S3.11k	Air Quality Management Plan The Plan must include 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.	NC	Section 11.1 'Incident Reporting' of the AQMP states that air quality incidents are required to be reported in accordance with the Procedure – Incident Reporting and Investigation. The incident reporting and investigation procedure was not available for verification at the time of the audit. It was indicated that this procedure was being revised to take account of the new computer-based incident reporting system. There is no reference to a contingency plan within the AQMP.	AQMP Management Assertion	S3.11k.1 A revised incident reporting and investigation procedure reflecting current practice should be completed and issued as soon as possible. Ranking: U S3.11k.2 The AQMP should be revised to include a contingency plan for incidents leading to elevated dust impacts. Ranking: I
Lead Awareness and Public Health					
S3.12	Contribution to Public Blood Lead Monitoring & Public Education During the implementation of the project, the Proponent shall make a reasonable contribution towards the cost of: (a) public health monitoring, particularly in relation to child blood lead levels; and (b) public education campaigns about the health risks associated with lead, to the satisfaction of the Director-General.	C	Section 5 'BHOP Funding Contributions' of the CLMP outlines arrangements for financial contributions made to the Broken Hill Child & Family Health Centre annually up to \$50,000 in any calendar year. See condition C58.	CLMP	There are no recommendations.
S3.13a	Lead Management Plan The Proponent shall prepare and implement a Lead Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with the Lead Reference Group, including the NSW Department of Health (Western Area Health Service) and Council.	C	There are two Lead Management Plans. The Lead Management Plan BHO-SAF-PLN-004 proposes to minimise lead exposure to the BHO employees, contractors, visitors and the general public and to minimise the impact of lead within the environment through proper management of mining operations. The Community Lead Management Plan BHO-ENV-PLN-008 is currently in draft form, dated 22/11/2011. The BHOP IA states that the "Community Lead Management Plan was completed in consultation with the Broken Hill Lead Reference Group which included members of NSW Health, DRE, EPA, BHCC and local community".	CLMP LMP BHOP IA	
S3.13b	Lead Management Plan This plan must be submitted to the Director-General for approval by 30 June 2011.	NC	Neither the Lead Management Plan nor the Community Lead Management Plan have been submitted to the Director-General for approval.	Management Assertion	S3.13b.1 The Lead Management Plan (undated) and the Community Lead Management Plan (issued as a draft on 22/11/2011) should be finalised as a matter of urgency and submitted to the Director-General for approval. Ranking: U

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.13c	Lead Management Plan This plan must outline the proposed commitment towards the cost of: - 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.	C	This is included in the Community Lead Management Plan. See condition S3.12, C55a and C58.	CLMP LMP	There are no recommendations.
S3.13d	Lead Management Plan This plan must identify additional reasonable and feasible measures that could be implemented either on site or in the areas adjoining the site to minimise the potential lead impacts of the project and "free areas".	C	Section 4 'Rasp Mine Lead Dust Management' of the CLMP outlines an extensive range of measures to prevent and minimise the generation of lead bearing dust from the Rasp Mine. Section 4.19 'Contingency Measures' of the CLMP lists contingency measures applicable to both free areas and active mining areas that will be considered and implemented if dust monitoring results indicate that dust levels have increased.	CLMP	There are no recommendations.
S3.13e	Lead Management Plan This plan must 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.	C	Section 4.19 'Contingency Measures' of the CLMP lists contingency measures applicable to both free areas and active mining areas that will be considered and implemented if dust monitoring results indicate that dust levels have increased. Section 19 'Testing frequency and Levels' of the LMP provide level when action is required.	CLMP LMP	There are no recommendations.
S3.13f	Lead Management Plan This plan must 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.	O	Section 6.2 'Communication' of the CLMP refers to the publication of air quality monitoring on CBH Resources website, and commits to providing a link from its web site to the Far West Local Health District information website which will provide information on lead blood level monitoring data and will also contain relevant information on public education material. The BHOP IA states that "in discussions with NSW Health (Child and Family Health Centre) it was agreed to include a link to their web site for lead health information. This information is yet to be placed on their web site" and therefore no link is available on the CBH Resources website. Section 7 of the LMP provides for education and/or awareness programs regarding personal and workplace safety in relation to working in a lead risk environment to be delivered to employees annually.	CLMP CBH Resources website BHOP IA	S3.13f.1 Appropriate links reporting the relevant dust and blood level monitoring data should be established on CBH Resources website when available on the NSW Health website. Ranking: I
S3.14a	Updated Human Health Risk Assessment Within one year of the commencement of operation of the project, and every five years thereafter, unless otherwise agreed by the Director-General, the Proponent shall update the human health risk assessment prepared for the project and presented in the EA to the satisfaction of the Director-General. The updated risk assessment shall be prepared by a suitably-qualified expert whose appointment has been endorsed by the Director-General.	C	BHOP engaged Toxikos Pty Ltd to undertake a human health risk assessment (HHRA) of its proposed activities for the recommencement of mining at the Rasp Mine. This report was presented as Annexures I(A) and I(B) of the EA. An update of the human health risk assessment is in the budget for 2013 and is scheduled to be undertaken by June 2013.	EA BHOP IA	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.14b	Updated Human Health Risk Assessment The updated risk assessment shall take into account monitoring data collected under this approval, and such other information as may be relevant to the assessment.	NA	The update of the human health risk assessment is scheduled to be undertaken by June 2013.	BHOP IA	
S3.14c	Updated Human Health Risk Assessment The updated risk assessment shall be submitted to the Director- General, DECCW and the Western Area Health Service within one month of its completion.	NA	The update of the human health risk assessment is scheduled to be undertaken by June 2013.	BHOP IA	
Noise and Vibration					
S3.15	Construction Noise Restrictions Construction activities associated with the project shall only be undertaken between 7:00am and 7:00pm on any day. Construction activities include, but are not limited to, all construction work, front-end loader on the ROM pad, rock breaking and primary crushing in the process area, conveyors in the process area, flat-bed road truck haulage from the process area to the rail load-out area, locomotives at the rail load-out area and forklift at the rail load-out area.	NA	Construction activities have now been completed. The BHOP IA states that "contractual arrangements with GR Engineering Services provided for day shift work only. These requirements were met during the construction period".	BHOP IA Management Assertion	
S3.16	Operational Noise Restrictions Operational activities associated with the project are permitted to occur at any time, subject to compliance with the noise limits specified in this approval, and subject to the following restrictions: (a) crushing shall only occur between 7:00am and 7:00pm on any day; (b) shunting of concentrate wagons shall only occur between 7:00am and 6:00pm on any day; and (c) production rock blasting shall only occur between 6:45am and 7:15pm on any day.	C	See conditions C13, C14 and C15.	BS Oct NBMP Management Assertion	There are no recommendations.
S3.17	Noise Limits The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 7. Table specifies operational noise criteria at 14 receiver locations.	NC	Noise is monitored at only 5 community locations off-site plus one continuous monitoring location on site (Photo 1). Table 2 within section 6 of the Noise Monitoring Program provides details about the attended short term noise monitoring locations, parameters and frequency. Only 5 locations are referenced and the Senior Environment and Community Officer indicated that these 5 locations are monitored on a quarterly basis using a hand held monitor. Sec 6 of the Noise Monitoring Program states that "a permanent real-time noise monitor (Photo 1) is used on site as a reference point to aid in identifying potential exceedances to noise limits. The data collected at the permanent location on site will be correlated with the attended quarterly data and a relationship established, this reference monitor will be used to manage noise emissions in real-time". The BHOP IA states that "there have only been 3 noise complaints over the life of the project".	Noise Monitoring Program BHOP IA Site Inspection Management Assertion	S3.17.1 The requirement for noise monitoring at 14 receiver locations specified in Table 7 of the Project Approval should either be complied with, or approval should be sought from the Director-General to reduce the monitoring locations to the 5 off-site locations currently monitored. Ranking: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.18	Blasting Limits The Proponent shall ensure that air blast overpressure generated by blasting associated with the project does not exceed the criteria listed in Table 8, when measured at the nearest affected residential or other sensitive receiver.	C	The Environmental Monitoring Results (Attachment 2 to the BHOP IA and published on CBH Resources website) illustrate that blasting limits have not been exceeded. See also condition C24a.	Environmental Monitoring Results - Attachment 2 to the BHOP IA	There are no recommendations.
S3.19	Blasting Limits The Proponent shall ensure that ground vibration generated by blasting associated with the project does not exceed the criteria listed in Table 9, when measured at the nearest affected residential or other sensitive receiver.	C	THE BHOP IA states that "a lot of work has been done to design and control vibration levels of blasts. These include <ul style="list-style-type: none"> • Consultation with various community members • Blast design by blasting consultant Orica • Moving blast monitors around various residences in the community • Constant contact with EPA" The Environmental Monitoring Results (Attachment 2 to the BHOP IA and published on CBH Resources website) illustrate that vibration limits have not been exceeded. 	Environmental Monitoring Results - Attachment 2 to the BHOP IA	There are no recommendations.
S3.20a	Noise Management Plan The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with DECCW, and submitted to the Director-General for approval by the end of June 2011.	O	The Noise Blasting Management Plan, Noise Monitoring Program and Blasting Monitoring Program to meet the requirements listed were completed by EMGA in consultation with the EPA and submitted to DoPI in April 2012. These documents have since been modified and submitted to the EPA for review and comment. The EPA response (3 April) was that a review was not possible for some time.	NBMP BHOP IA	There are no recommendations.
S3.20b	Noise Management Plan This plan must describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time noise management system that employs both reactive and proactive mitigation measures.	O	Set out in section 7 'Management Strategies for Noise and Blasting' of the NBMP. This is incorrectly listed as Section 8.1 in Table 2 of the NBMP.	NBMP	S3.20b.1 The NMBP should be revised to correct the reference in Table 2 to 'Management Strategies for Noise and Blasting' to read section 7 instead of section 8.1. Ranking: I
S3.20c (i)	Noise Management Plan This plan must include a noise monitoring program that uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the project.	O	The Noise Monitoring Program is listed as Appendix A to the NBMP, however it is not included in the NBMP and is presented as a separate document BHO-ENV-PRM-002. Sec 6 specifies arrangements for one permanent real-time monitor and a program of attended short term readings at a series of 5 nominated locations.	NBMP Noise Monitoring Program	S3.20c (i).1 The reference to the Noise Monitoring Program in the NBMP should be changed from Appendix A to BHO-ENV-PRM-002. Ranking: I
S3.20c (ii)	Noise Management Plan This plan must include a noise monitoring program that includes a protocol for determining exceedances of the relevant conditions of this approval.	C	The Noise Monitoring Program section 6.1 sets out the parameters to be monitored. Sec 6.2 sets out trigger values for actions to be taken when noise levels approach or exceed limits during attended monitoring.	Noise Monitoring Program	There are no recommendations.
S3.20d	Noise Management Plan This plan must describe the blast mitigation measures that would be implemented to ensure compliance with the relevant condition of this approval.	O	The Blast Vibration and Overpressure Monitoring Program is listed as Appendix B to the NBMP, however it is not included in the NBMP and is presented as a separate document BHO-ENV-PRM-003. Blast mitigation measures are set out in section 6.4 of the BVO Monitoring Program.	BVO Monitoring Program NBMP	S3.20d.1 The reference to the BVO Monitoring Program in the NBMP should be changed from Appendix B to BHO-ENV-PRM-003. Ranking: I
S3.20e	Noise Management Plan This plan must describe the measures that would be implemented to ensure that the public can get up-to-date information on the proposed blasting schedule on-site.	NC	Blasting schedules are published weekly on the CBH Resources website. This is not referenced in the NBMP.	CBH Resources Website NBMP	S3.20e.1 The blasting schedules that are published weekly on the CBH Resources website should be referenced within the NBMP. Ranking: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.20f	Noise Management Plan This plan must include a blast monitoring program to evaluate the performance of the project.	C	The Blasting, Vibration and Overpressure Monitoring Program is attached B to the NBMP. Blast Monitoring is set out in Sec 6.1 of the BVO Monitoring Program.	BVO Monitoring Program	There are no recommendations.
Soil and Water					
S3.21	Except as may be expressly provided by an Environment Protection Licence issued under the Protection of the Environment Operations Act 1997, the Proponent shall comply with section 120 of that Act, which prohibits the pollution of waters.	NC	The Senior Environment and Community Officer indicated that there is no discharge from site unless unintended. An incident occurred at Rasp Mine where unintended discharge from stormwater storage pond (S49) at the Block 10 area of CML7 into Ryan Street on 9 March 2012 after 10 inches of rain over a 2 week period which resulted in a PIN from the EPA in the amount of \$1500. The Ryan Street Incident Report was sent to the EPA. Until a long term solution to prevent seepage from S49 can be implemented, pumping of water will continue from the seepage collection trench (Photo 17) and where required from the front storage pond.	Management Assertion Environment Incident Report Ryan Street Broken Hill Site Inspection	There are no recommendations.
S3.22a	Water Supply 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.	NC	It was indicated by the Senior Environment and Community Officer that there is ample water supply on site. The BHOP IA states that "there has been sufficient water from excessive rainfall events during 2011 and 2012". However there was no reference in the SWMP to adjusting the scale of mining operations to match its water supply in case of drought. The SWMP addressed only actions to be taken in case of excess water due to heavy rainfall.	Management Assertion BHOP IA SWMP	S3.22a.1 The SWMP should be revised to include adjusting the scale of mining operations to match its water supply in case of drought. Ranking: I
S3.22b	Water Supply The Proponent is required to obtain the necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.	NC	Condition no. 2 of the Bore Licence Certificate #85BL256109 has not been completed. See also condition C77.	Bore Licence Certificate #85BL256109 Management Assertion	S3.22b.1 Condition 2 (a), (b), (c) and (d) noted in the Bore Licence Certificate #85BL256109 should be completed. This includes furnishing to NSW Office of Water: (a) details of the work completed by a licensed driller; (b) a location plan; (c) details of any pumping tests carried out; and (d) details of any water analysis Ranking: U
S3.23 (i)	Water Management Plan The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. 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 DECCW, NOW and I&I NSW.	C	The Site Water Management Plan was submitted to DoPI in June 2011. The SWMP was prepared by Golder Associates and a revised version was issued on 30 April 2012. This version includes results of review by the EPA. The BHOP IA states that "the Site Water Management Plan has now been updated to include the processing plant and rail areas. Extensive consultation has occurred with the EPA in the development of the Plan. The Plan was also provided to DRE and NOW (latest version in April 2012) however no comments have yet been received".	SWMP BHOP IA	There are no recommendations.
S3.23 (ii)	Water Management Plan The plan must be submitted to the Director-General for approval by the end of June 2011.	C	A draft SWMP was submitted to DoPI in June 2011. Detailed design for the processing plant and rail siding was then incomplete and it was agreed with DoPI that a final SWMP would be submitted when these designs were completed. This occurred in November 2011.	SWMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.23a (i)	Water Management Plan The plan must include a Site Water Balance, which must include details of: - sources and security of water supply; - water use on site; - water management on site; - any off-site water transfers.	C	The Site Water Balance is set out in section 13 of the SWMP.	SWMP	There are no recommendations.
S3.23a (ii)	Water Management Plan The plan must include a Site Water Balance, which must investigate and implement all reasonable and feasible measures to minimise water use by the project.	C	The Site Water Balance includes arrangements for reclaiming water where possible.	SWMP	There are no recommendations.
S3.23b (i)	Water Management Plan The plan must include an Erosion and Sediment Control Plan, which must identify activities that could cause soil erosion, generate sediment or affect flooding.	C	Included in section 10 of the SWMP.	SWMP	There are no recommendations.
S3.23b (ii)	Water Management Plan The plan must include an Erosion and Sediment Control Plan, which must describe measures to minimise soil erosion and the potential for transport of sediment to downstream waters, and manage flood risk.	C	Section 10 of the SWMP describes a strategy for dividing the site into 68 individual catchments with local storage ponds to minimise transportation of sediment. Storages are designed to meet 1 in 100 ARI events.	SWMP	There are no recommendations.
S3.23b (iii)	Water Management Plan The plan must include an Erosion and Sediment Control Plan, which must describe the location, function and capacity of erosion and sediment control structures and flood management structures.	C	Set out in detail in sections 10.2 and 10.5 of the SWMP and attached plans.	SWMP	There are no recommendations.
S3.23b (iv)	Water Management Plan The plan must include an Erosion and Sediment Control Plan, which must describe what measures would be implemented to maintain the structures over time.	C	Maintenance requirements are set out in sections 10.2 and 10.3 of the SWMP.	SWMP	There are no recommendations.
S3.23c (i)	Water Management Plan The plan must include a Surface Water Management Plan, which must include detailed baseline data on surface water flows and quality in creeks and other water bodies that could potentially be affected by the project.	C	Described in section 12.1 of the SWMP. Peak flow estimates for the principal catchments are included in Sec 10.6. Surface water discharges from the mine site are assessed to be only possible in rare major storm events (> 100 year events).	SWMP	There are no recommendations.
S3.23c (ii)	Water Management Plan The plan must include a Surface Water Management Plan, which must include surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts.	C	There are no natural watercourses or creeks flowing through the site. The proposed drainage network layout restricts runoff leaving the active area of the site up to the 1 in 100 year event. Sec 12.1 of the SWMP indicates that monitoring is required only for Horwood Dam which is the only storage that may potentially discharge water offsite but only in a 1 in 1,000 year event. Contingency measures in the event of a discharge are discussed in Sec 12.54.	SWMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.23c (iii)	Water Management Plan The plan must include a Surface Water Management Plan, which must include a program to monitor and assess: - surface water flows and quality; - impacts on water users; - stream health; and - channel stability.	C	Set out in section 12 of the SWMP.	SWMP Procedure - Monitoring of Tailings Trench (See also condition C72)	There are no recommendations.
S3.23d (i)	Water Management Plan The plan must include a Groundwater Monitoring Program, which must provide a program to monitor seepage movement within and adjacent to the tailings storage facility.	C	Set out in section 11 of the SWMP.	SWMP Monitoring Location Overview	There are no recommendations.
S3.23d (ii)	Water Management Plan The plan must include a Groundwater Monitoring Program, which must include details of parameters and pollutants to be monitored for: - 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	C	Set out in section 11 of the SWMP.	SWMP Monitoring Location Overview	There are no recommendations.
S3.23d (iii)	Water Management Plan The plan must include a Groundwater Monitoring Program, which must 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.	C	Set out in section 11.3 of the SWMP.	SWMP	There are no recommendations.
S3.23d (iv)	Water Management Plan The plan must include a Groundwater Monitoring Program, which must include details of contingency measures to be implemented in the event that an unacceptable impact is identified.	C	Set out in section 11.3.3 of the SWMP.	SWMP	There are no recommendations.
Transport					
S3.24	The Proponent shall maintain the existing 66 carparking spaces, or an equivalent number elsewhere on the site, for the duration of the project.	C	The BHOP IA states that "BHOP has constructed a fully fenced car park on site for employees and contractors with 55 spaces. In addition there is a truck and contractor car park located at the old mill plant with spaces for over 50 vehicles depending on the number of trucks. There are a further 28 car parking spaces around the administration buildings and numerous areas to park around the plant site". The Administration buildings are not part of CML7.	BHOP IA (Attachment 3, Photos 22 and 23) Site Inspection Management Assertion	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.25	The Proponent shall consult with the RTA 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 RTA or BHCC.	C	A letter from BHCC dated 3/9/2012 regarding completion of work for 130 Eyre Street was sighted which confirmed that works have been completed and complied with all relevant standards. See also condition C95.	BHCC letter re: 130 Eyre St BHOP IA (Attachment 3, Photo 24) Site Inspection Management Assertion	There are no recommendations.
S3.26	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.	C	The BHOP IA states that "BHOP determined not to transport ore to the Endeavor Mine hence B-doubles and trucks were not leaving or entering site for this activity. A truck parking area was established for delivery vehicles to the left of the driveway above the current changehouse".	BHOP IA (Attachment 3, Photo 23) Site Inspection	There are no recommendations.
S3.27	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 RTA and Council with respect to traffic access at this location.	NA	Construction is complete.		There are no recommendations.
S3.28	The Proponent shall commission dilapidation reports for roads likely to be affected by the construction of the project, 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.	C	A dilapidation report was completed August 2011 prior to construction activities. A review post-construction was undertaken and completed end of August 2012.	Dilapidation report 2012 BHOP IA	There are no recommendations.
S3.29	Traffic Management Plan The Proponent shall prepare and implement a traffic management plan to the satisfaction of the Director-General. The plan shall focus on traffic management during construction of the project, and must be developed in consultation with the RTA and Council. The plan must be submitted for the approval of the Director-General prior to the commencement of construction.	C	A Traffic Management Plan for the site covering both the construction and operational phases was prepared by GR Engineering Services. The current version was issued on 20/7/2011. The BHOP IA states that "the Construction Traffic Management Plan was submitted to DoPI in July 2011 following meetings with BHCC and RTA. No written response was received by either BHCC or RTA".	TMP BHOP IA	There are no recommendations.
Heritage					
S3.30	The Proponent shall prepare and implement a Conservation Management Plan for the site to the satisfaction of the Director-General. 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 Department (Heritage Branch) and Council. The plan must be submitted for the approval of the Director-General by December 2011.	C	The draft Conservation Management Plan was prepared by Austral Archaeology Pty Ltd in November 2011. It is still in progress and currently in discussions with DoPI. An extension to the end of December 2012 was sought and agreed. See also conditions C78 - C81.	CMP BHOP IA	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Visual Amenity					
S3.31	The Proponent shall: (a) minimise the visual impacts, and particularly the off-site lighting impacts, of the project; (b) take all practicable measures to further mitigate off-site lighting impacts from the project; and (c) ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version, to the satisfaction of the Director-General.	O	The community complaints summary for 2012 was reviewed and found to have no complaints in relation to lighting. There was no evidence provided that the project complies with Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting. See also conditions C84 and C85.	BHOP IA Community complaints summary	S3.31.1 In the event that the site includes legacy lighting installed prior to the re-opening of the mine, such lighting should be investigated for compliance with the Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting. Ranking: N
Waste					
S3.32a	The Proponent shall minimise the waste generated by the project to the satisfaction of the Director-General.	C	See condition S3.33a. See also conditions C96a - 96g.	WMP	There are no recommendations.
S3.32b	The Proponent shall ensure that the waste generated by the project is appropriately stored, handled, and disposed of, to the satisfaction of the Director-General.	O	There were a number of chemical and hydrocarbon IBCs stored on site that were unbanded (Photo 18 and 19). The lead concentrate storage tank was inadequately banded and showed evidence of overflow or spillage outside the bund (Photo 9).	Site inspection	S3.32b.1 All unbanded liquid waste should be relocated and stored in banded storage containers or in banded areas. Ranking: E
S3.33a	The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with I&I NSW, and submitted the Director-General for approval by the end of March 2011.	C	The WMP BHO-ENV-PLN-006 was prepared by ENVIRON Pty Ltd and submitted to DoPI in March 2011. The Plan was revised in May 2012 and submitted to DRE and EPA for comment, and no response was received. An updated revision was prepared in August 2012 to include the changes to tailings management. The current version of the WMP is dated 25/4/2012.	BHOP IA WMP	There are no recommendations.
S3.33b	This plan must identify the various waste streams of the project.	C	Section 6 of the WMP lists waste streams from the project including mineral and non-mineral waste.	WMP	There are no recommendations.
S3.33c	This plan must estimate the volumes of tailings and other waste material that would be generated by the project.	C	Estimates are provided in the WMP, section 8.3.1. An estimated 6.55 million dry tonnes of tailings will be generated from the Project, and estimates are provided for tailings volumes over the first 9 years of mine life.	WMP	There are no recommendations.
S3.33d	This plan must describe and justify the proposed strategy for disposing of this waste material.	C	The tailings management strategy is described in sections 8.3.4 and 8.3.5 of the WMP. Disposal of non-mineral waste is addressed in section 8.4.	WMP	There are no recommendations.
S3.33e	This plan must describe what measures would be implemented to meet the requirements set out above in S3.32.	C	Waste minimisation measures, which relate primarily to non-mineral waste, are set out in section 8.4.	WMP	There are no recommendations.
S3.33f	This plan must include a program to monitor the effectiveness of these measures.	C	Monitoring arrangements including monitoring and reporting of waste volumes and inspections and audits of onsite waste storage, treatment and disposal facilities are set out in section 10 of the WMP.	WMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Rehabilitation					
S3.34a	Rehabilitation Objectives The Proponent shall carry out rehabilitation progressively, that is, as soon as reasonably practicable following disturbance.	NA	It was indicated that there is nothing to rehabilitate yet and therefore rehabilitation has not yet been undertaken.	Management Assertion	
S3.34b	Rehabilitation Objectives The Proponent shall achieve the following rehabilitation objectives: - sealing and/or treating 'free areas' of the site and other potential sources of wind-blown dust to prevent the emission of dust following closure; - preserving the heritage value of the site; and -making the site suitable for commercial and/ or educational uses, to the satisfaction of the Director-General of I&I NSW.	O	These objectives are to be addressed in the Mine Closure Plan and Conservation Management Plan. See S3.35a. It should be noted that these objectives relate to activities which will be undertaken over the life of the project, as well as at mine closure.	Management Assertion	S3.34b.1 The Mine Closure Plan should address progressive rehabilitation activities to be undertaken over the life of the mine. Ranking: I
S3.35a	Rehabilitation Management Plan The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Director-General of I&I NSW. This plan must be prepared in consultation with the Department, DECCW, NOW, Council and I&I NSW.	C	A Draft Closure Plan was completed in March 2011 and submitted to DRE with the Mining Operations Plan. No comments have been received. There will be major changes to this Plan following the completion of the Conservation Management Plan (see condition S3.30) as the majority of closure issues relate to the management of heritage items. This will be completed following the completion of the Conservation Management Plan. As agreed in discussions with DoPI (Georgia Dragicevic) an extension to the end of December 2012 was sought and agreed in line with the Conservation Management Plan.	BHOP IA	S3.35a.1 Development of the Mine Closure Plan should proceed, so far as possible, in accordance with the agreed timetable. Ranking: I
S3.35b	Rehabilitation Management Plan This plan must be prepared in accordance with relevant I&I NSW guidelines.	NA	See condition S3.35a.		
S3.35c	Rehabilitation Management Plan This plan must be generally consistent with the closure concept presented in the EA;	NA	See condition S3.35a.		
S3.35d (i)	Rehabilitation Management Plan This plan must reflect the aims of rehabilitation and closure to retain heritage items, as agreed by relevant regulators.	NA	See condition S3.35a.		
S3.35d (ii)	Rehabilitation Management Plan This plan must manage stormwater to minimise erosion and restrict the potential for off-site pollution.	NA	See condition S3.35a.		
S3.35d (iii)	Rehabilitation Management Plan This plan must provide final landforms that are safe, stable and sympathetic to the mining heritage of Broken Hill.	NA	See condition S3.35a.		
S3.35d (iv)	Rehabilitation Management Plan This plan must minimise the generation of dust and adequately contain potentially hazardous materials within the landform.	NA	See condition S3.35a.		
S3.35d (v)	Rehabilitation Management Plan This plan must install barriers to restrict access to potentially hazardous locations (e.g. decline, shafts or open cut pits).	NA	See condition S3.35a.		

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S3.35e	Rehabilitation Management Plan This plan must build, to the maximum extent practicable, on the other management plans required under this approval.	NA	See condition S3.35a.		
S3.35f	Rehabilitation Management Plan This plan must be submitted to the Director-General of I&I NSW for approval by the end of December 2011.	C	See S3.35a		See Recommendation S3.35a.1.
SCHEDULE 4 - ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING					
Environmental Management					
S4.1a	Environmental Management Strategy The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must be submitted to the Director- General for approval by the end of June 2011.	C	The Environmental Management Strategy was submitted in June 2011. DoPI requested changes to this document and these were completed. The current Environment Management Strategy is dated June 2012.	Environment Management Strategy V2 June 2012 BHOP IA	There are no recommendations.
S4.1b	Environmental Management Strategy This strategy must provide the strategic framework for the environmental management of the project.	C	The Environmental Management Strategy was reviewed and provides the necessary information to satisfy this requirement.	Environment Management Strategy V2 June 2012	There are no recommendations.
S4.1c	Environmental Management Strategy This strategy must identify the statutory approvals that apply to the project.	C	Statutory requirements are set out in section 5 of the Environmental Management Strategy.	Environment Management Strategy V2 June 2012	There are no recommendations.
S4.1d	Environmental Management Strategy This strategy must describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project.	C	Commitments and responsibilities are set out in section 2 of the Environmental Management Strategy and Table 1 outlines the major environmental responsibilities of key personnel.	Environment Management Strategy V2 June 2012	There are no recommendations.
S4.1e (i)	Environmental Management Strategy This strategy must describe the procedures that would be implemented to keep the local community and relevant agencies informed about the operation and environmental performance of the project.	C	Community consultation and communication are set out in section 8.1 and 8.2 of the Environmental Management Strategy.	Environment Management Strategy V2 June 2012	There are no recommendations.
S4.1e (ii)	Environmental Management Strategy This strategy must describe the procedures that would be implemented to receive, handle, respond to, and record complaints.	C	Community Complaints and Dispute Resolution is set out in section 8.3 of the Environmental Management Strategy.	Environment Management Strategy V2 June 2012	There are no recommendations.
S4.1e (iii)	Environmental Management Strategy This strategy must describe the procedures that would be implemented to resolve any disputes that may arise during the course of the project.	C	Community Complaints and Dispute Resolution is set out in section 8.3 of the Environmental Management Strategy.	Environment Management Strategy V2 June 2012	There are no recommendations.
S4.1e (iv)	Environmental Management Strategy This strategy must describe the procedures that would be implemented to respond to any non-compliance.	C	Compliance and Auditing is set out in section 10 of the Environmental Management Strategy.	Environment Management Strategy V2 June 2012	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S4.1e (v)	Environmental Management Strategy This strategy must describe the procedures that would be implemented to respond to emergencies.	O	Environmental emergency response is set out in section 9 of the Environmental Management Strategy. Sec 9 refers to an emergency response plan developed for safety and which extends to environmental emergencies. It was made compulsory for organisations with an existing EPL to develop a Pollution Incident Response Management Plan (PIRMP) by 1 September 2012 and upload it to their website. The Pollution Incident Response Management Plan BHO-PLN-ENV-002 is dated 10 November 2012 and was uploaded to the CBH Resources website on 19 November 2012.	Environment Management Strategy V2 June 2012 PIRMP CBH Resources website	S4.1e(v).1 The Pollution Incident Response Management Plan (PIRMP) should be referenced within section 9 'Environmental Emergency Response' of the Environmental Management Strategy. Ranking: I
S4.1f (i)	Environmental Management Strategy This strategy must include copies of any strategies, plans and programs approved under the conditions of this approval.	NC	The Environmental Management Strategy does not include copies of any strategies, plans and programs approved under the conditions of this approval.	Environment Management Strategy V2 June 2012	S4.1f(i).1 Review the Environmental Management Strategy to include copies of any strategies, plans and programs approved under the conditions of the Project Approval. Ranking: I
S4.1f (ii)	Environmental Management Strategy This strategy must include a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.	C	Section 7.8 refers to the Environmental Monitoring Program and a summary of the Environmental Monitoring Program is outlined in Appendix C.	Environment Management Strategy V2 June 2012	There are no recommendations.
S4.2a	Management Plan Requirements The Proponent shall ensure that the management plans required under this approval are prepared in accordance with relevant guidelines, and include detailed baseline data. Note: The Director-General may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.	C	Management Plans include references and related documents used in the preparation of the plans. Baseline data are included in Appendix D of the Air Quality Monitoring Program BHO – ENV – PLN - 001. Baseline chemical properties of groundwater are included in section 11.3.1 of the Site Water Management Plan, however this does not appear to include baseline data for surface water. Section 3.2 of the CLMP includes baseline data including the history of elevated blood lead levels in Broken Hill. Not all Management Plans (e.g. the Traffic Management Plan) include baseline data, which may not be available or appropriate in all cases.	AQ Monitoring Program SWMP CLMP TMP	There are no recommendations.
S4.2b	Management Plan Requirements The Proponent shall ensure that the management plans include a description of: -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.	C	A sample of Management Plans were reviewed and found to include the relevant requirements outlined in this condition. The BHOP IA documents that the requirements outlined in this condition have been used for the scope of works for Management Plans and points have been addressed as appropriate.	SWMP AQMP NBMP CLMP LMP BHOP IA	There are no recommendations.
S4.2c	Management Plan Requirements The Proponent shall ensure that the management plans include a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria.	C	The Management Plans include strategies or plans for complying with the relevant statutory requirements, limits, or performance measures/criteria.	SWMP AQMP NBMP CLMP LMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S4.2d	Management Plan Requirements The Proponent shall ensure that the management plans include a program to monitor and report on the: - impacts and environmental performance of the project; and - effectiveness of any management measures (see (c) above).	C	Monitoring and reporting requirements are set out in the Management Plans.	SWMP AQMP NBMP CLMP LMP	There are no recommendations.
S4.2e	Management Plan Requirements The Proponent shall ensure that the management plans include a contingency plan to manage any unpredicted impacts and their consequences.	NC	The AQMP indicates that any operational incident is required to be reported in accordance with the Procedure – Incident Reporting and Investigation. All significant potential incidents (SPIs) are required to be reported to the Mine Manager, CBH – Group Manager – Safety Health Environment Community, CBH – Corporate Operations Officer and CBH – Managing Director. Section 9 'Environmental Emergency Response' of the Environmental Strategy provides information for environmental emergencies based on the Emergency Response Plan. The Emergency Response Plan was not available for verification at the time of this audit. Incident Reporting and Corrective actions are provided within the Management Plans however contingency plans to manage unpredicted impacts and their consequences are not included.	SWMP AQMP NBMP CLMP LMP Environment Management Strategy V2 June 2012	S4.2e.1 An Emergency Response Plan for the site should be developed and implemented. Ranking: U S4.2e.2 Relevant Management Plans such as the AQMP and NBMP should be modified to include specific actions that will be taken in an environmental emergency, or a reference to the Emergency Response Plan. Ranking: I
S4.2f	Management Plan Requirements The Proponent shall ensure that the management plans include a program to investigate and implement ways to improve the environmental performance of the project over time.	O	Rasp Mine documentation does not include any programs to investigate and implement ways to improve the environmental performance of the project over time.	Document Review	S4.2f.1 Consideration should be given to incorporating programs to investigate and implement ways to improve the environmental performance of the project over time, which should be cross referenced as appropriate in relevant documents. Ranking: N
S4.2g	Management Plan Requirements The Proponent shall ensure that the management plans include a protocol for managing and reporting any: - incidents; - complaints; - non-compliances with the conditions of this approval and statutory requirements; and - exceedances of the impact assessment criteria and/or performance criteria.	C	The Management Plans reviewed included the requirements outlined in this condition. A PIRMP has been uploaded to the CBH Resources website, however is not yet referenced within any Management Plans.	NBMP SWMP AQMP WMP CLMP	There are no recommendations.
S4.2h	Management Plan Requirements The Proponent shall ensure that the management plans include a protocol for periodic review of the plan.	O	A sample of Management Plans were reviewed and most were found to include details for periodic review. The WMP was the only plan that did not include a protocol for periodic review.	NBMP SWMP AQMP WMP CLMP CMP	S4.2h.1 The WMP should be revised to include details on periodic review. Ranking: I
S4.3	Annual Review By the end of June 2012, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General.	C	Environmental Management Performance is set out in section 3 of the Annual Environmental Management Report 2011-2012.	AEMR 2011-2012	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S4.3a	Annual Review The review must 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 next year.	C	Rehabilitation is set out in section 5 of the AEMR. Activities proposed for the next AEMR period are outlined within section 6.	AEMR 2011-2012	There are no recommendations.
S4.3b (i)	Annual Review The review must 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 relevant statutory requirements, limits or performance measures/criteria.	C	Section 3 of the AEMR provides dust, blasting and noise monitoring results and includes the criteria for comparison. Table 23 provides a summary of the Community Complaints Register.	AEMR 2011-2012	There are no recommendations.
S4.3b (ii)	Annual Review The review must 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 - monitoring results of previous years.	C	A summary of air monitoring results is provided in Table 14 for the last four years: 2008, 2009, 2010, 2011/ March 2012 a complete data set is included at Annexure 4 of the AEMR 2011-2012. There was no other comparative data available for water, noise and vibration at the time of compilation of the AEMR 2011-2012.	AEMR 2011-2012	There are no recommendations.
S4.3b (iii)	Annual Review The review must 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 relevant predictions in the documents referred to in S2.2.	O	The AEMR includes monitoring results and complaints records over the past year and includes comparative data for air monitoring, which was the only long term data available, however it does not include a comparison of these results with the predictions referred to in S2.2, because the mine has been operating for only 6 months.	AEMR 2011-2012	S4.3b (iii).1 The monitoring results and complaints records should be compared in future reports with the predictions in the documents referred to in S2.2 when more longer term data is available. Ranking: N
S4.3c	Annual Review The review must identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance.	O	Three non-compliances relating to water discharges were identified within the AEMR and the actions taken to ensure compliance are described. There is no Compliance Assurance Program in place.	AEMR 2011-2012 Management Assertion	S4.3c.1 A regulatory Compliance Assurance Program should be established that periodically reviews compliance with the conditions of regulatory documents. Ranking: I
S4.3d	Annual Review The review must identify any trends in the monitoring data over the life of the project.	NC	Trends in the monitoring data over the life of the project are not identified within the AEMR.	AEMR 2011-2012 Management Assertion	S4.3d.1 The identification of trends in the monitoring data over the life of the project should be included in future AEMRs. Ranking: I
S4.3e	Annual Review The review must identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies.	O	Discrepancies between predicted and actual impacts of the project are not identified because the mine has been operating for only 6 months and therefore an analysis on the potential cause of any significant discrepancies has not been documented within the AEMR.	AEMR 2011-2012 Management Assertion	S4.3e.1 The AEMR must identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies. Ranking: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
S4.3f	Annual Review The review must describe what measure will be implemented over the next year to improve the environmental performance of the project.	C	A number of measures planned to protect the environment and minimise any potential impacts that may be adverse to the environment and/or community are described together with their control measures in the Mining Operations Plan, January 2011. Section 6 of the AEMR 2011-2012 provides an update on the requirements for environmental management plans as required by the Development Consent approval conditions.	AEMR 2011-2012 Management Assertion	There are no recommendations.
S4.4	Revision of Strategies, Plans & Programs Within three months of: (a) the submission of an annual review under Condition 3 above; (b) the submission of an incident report under Condition 5 below; (c) the submission of an audit report under Condition 7 below, or (d) any modification of the conditions of this approval (unless the conditions require otherwise), the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.	O	No reviews have yet been undertaken since the submission of the AEMR in March 2012, because the mine has been operating for only 6 months.	Management Assertion BHOP IA AEMR 2011-2012	S4.4.1 The Strategies, Plans and Programs required under the Project Approval should be reviewed and also revised if necessary as soon as possible, and repeated three months after the submission of the annual AEMR, the submission of an incident report under Condition 5; the submission of an audit report under Condition 7, or any modification of the conditions of the Project Approval. Ranking: U
Reporting					
S4.5	Incident Reporting The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within seven days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.	C	There have been four environmental incidents since Project Approval in January 2011. Three of these were reported to the DoPI. The most recent incident, seepage from a water storage pond at Ryan Street, was reported to EPA, DRE, Essential Water and the Health Dept; however was not reported to DoPI. Procedures have been amended to ensure DoPI are notified.	BHOP IA	There are no recommendations.
S4.6	Regular Reporting 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.	O	Environmental Monitoring Data is published on the CBH Resources website however the AEMR which provides environmental performance of the project as well as monitoring results was not available on the website. There appear to be some delays in reporting environmental monitoring data on the website - the most recent report available is for September 2012. It would also be useful if the monitoring data included a map or table showing the monitoring points reported, and other explanatory information to assist in interpretation of the data.	BHOP IA Management Assertion CBH Resources website	S4.6.1 The AEMR 2011-2012 should be uploaded onto the CBH Resources website. Ranking: U S4.6.2 Monthly monitoring reports should be uploaded to the CBH Resources website within 2 weeks of the end of the month to which they relate. Ranking: I S4.6.2 Monthly monitoring reports should include information necessary for the interpretation of the reported results including the location of monitoring points and relevant trigger values, when available. Ranking: N

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Independent Environmental Audit					
S4.7	By the end of December 2011, and every three years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must: (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General; (b) include consultation with the relevant agencies; (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); (d) review the adequacy of any approved strategies, plans or programs required under these approvals; and, if appropriate (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.	O	The date of this audit was incorrectly recorded in the BHOP schedule as required by December 2012. There was no agreement with DoPI for an extension of the audit. The current audit addresses the requirements within this condition.	BHOP IA Management Assertion	There are no recommendations.
S4.8	Within six weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.	NA	Refers to the processes for responding to this audit.		
Access to Information					
S4.9a	From the end of March 2011, the Proponent shall make copies of the following publicly available on its website: - the documents referred to in S2.1; - all current statutory approvals for the project; - all approved strategies, plans and programs required under the conditions of this approval; - 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 Director-General.	NC	Most documents required by this condition to be available on the CBH website have been uploaded. However, the complaints register has not been updated since June 2012, and the AEMR 2011-2012 is not available under the heading 'Annual Reports'. It was indicated by the Senior Environment and Community Officer that this Independent Audit would be made available on the website following its completion.	CBH Resources website Management Assertion	See recommendation C7.4 and S4.6.1.
S4.9b	The Proponent shall keep this information up-to-date.	C	The BHOP IA states that, it is the responsibility of the Senior Environment and Community Officer to maintain the website. It was reported by the Senior Environment and Community Officer that a web designer has been contracted to keep website information up-to-date on request.	Management Assertion BHOP IA	There are no recommendations.

Broken Hill Operations Pty Ltd - Rasp Project
Independent Audit for Department of Planning & Infrastructure
Detailed Findings and Recommendations
Environment Protection Licence No 12559

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Administrative Conditions					
A1.1	<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> <ul style="list-style-type: none"> - Crushing Grinding & Separating - 2 million tonnes p.a. - Mining for Minerals - 2 million tonnes p.a. 	C	<p>Processing commenced in May 2012 and the maximum planned production per annum is 44,000 tpa of lead and 87,000 tpa of zinc which is dependent on grade and recovery rates. Approximately 5000 tonnes of lead and 9000 tonnes of zinc concentrate have been produced to date. The Mining Manager indicated that the processing plant allows for a maximum of 750,000 tonnes to be processed annually. The Operations Manager also indicated that 350,000 - 375,000 tonnes will be processed in 2012 and it is estimated that 675,000 tonnes will be extracted and processed in 2013.</p> <p>See also condition S2.6.</p>	BHOP IA Management Assertion	There are no recommendations.
A3.1	<p>Information supplied to the EPA</p> <p>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>For the purposes of condition A3.1 the licence application includes:</p> <ol style="list-style-type: none"> 1) The Project Approval issued by the Department of Planning and Infrastructure on 31 January 2011; 2) The Project Approval modification titled "Rasp Mine Mod 1" issued by the Department of Planning and Infrastructure issued on 16 March 2012; 3) The Environmental Assessment titled "Final Report - Rasp Mine" dated July 2010; 4) The Environmental Assessment titled "Rasp Mine - Preferred Project Report" dated September 2010; 5) The Broken Hill Operations Pty Ltd Rasp Mine "Noise and Blast Management Plan" submitted to the EPA on the 14 October 2011. 6) The Environmental Assessment titled "Rasp Mine - Relocation of Ventilation Shaft" dated November 2011; 7) The Broken Hill Operations Pty Ltd Rasp Mine "Air Quality Management Plan" submitted to the EPA in March 2011; 8) The Broken Hill Operations Pty Ltd Rasp Mine "Site Water Management Plan" dated 20 March 2012 and; 9) The Broken Hill Operations Pty Ltd Rasp Mine "Construction and Operations Manual for Tailing Storage in Blackwood Pit" 	O	<p>Works and activities are generally carried out in accordance with the proposal contained in the licence application, however as reported elsewhere in this audit there are a number of non-compliances with relevant conditions.</p>	This audit	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Discharges to Water and Applications to Land					
P1.1	Location of monitoring/discharge points and areas Monitoring and/or the setting of limits for the emission of pollutants to the air from the point shall be undertaken at the points referred to in the table.	C	Discharge criteria is set out in the MOP. Monitoring results are available on the website and within the AEMR and the necessary points have been monitored. See also condition S3.4.	MOP BHOP IA Monitoring results (CBH Resources website)	There are no recommendations.
P1.3	Location of monitoring/discharge points and areas Utilisation areas for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area shall be at the locations set out in the table.	C	The monitoring locations overview table was reviewed which provided all the locations set out in the EPL table. Surface water is monitored when the locations contain water which is at least 2 per 12 months and groundwater is monitored quarterly. The monitoring results were also reviewed which illustrates the results of relevant locations.	Monitoring results (CBH Resources website) Monitoring Location Overview	There are no recommendations.
Limit Conditions					
L1.1	Pollution of waters 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.	NC	See condition S3.21.	Management Assertion Environment Incident Report Ryan Street	There are no recommendations.
L2.1	Concentration Limits Air concentration limits shall be as set out in the table.	NA	See condition S3.4.	BHOP IA Management Assertion	
L2.2	Concentration Limits Air concentration limits for Point 2 shall be proposed by the licensee based on the results of post commissioning test results. The limit must be proposed prior to the second sampling occurrence at Point 2.	NA	See condition S3.4.	BHOP IA Management Assertion	
L3.1	Waste 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.	C	Sec 10.2 of the WMP refers to a comprehensive Waste Inventory containing information on all wastes generated, handled and disposed of, whether on or offsite which is maintained by the Environment and Community Officer. The Waste Inventory was not available for verification at the time of this audit. The Senior Environment and Community Officer indicated that no externally generated waste has been received on the premises.	Management Assertion WMP	L3.1.1 In accordance with the commitment made in the WMP, a comprehensive Waste Inventory containing information on all wastes generated, handled and disposed of should be developed for the site. Ranking N L3.1.2 Waste Management documentation should include a statement that no waste generated outside the premises shall be received. Ranking: N
L4.1	Noise limits 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: a) Crushing must only occur between 7.00am and 7.00pm on any day. b) Shunting of the concentrate wagons must only occur between 7.00am and 6.00pm on any day; and c) Production rock blasting must only occur between 6.45am and 7.15pm on any day.	C	See conditions C13, C14 and C15.	BS Oct NBMP Management Assertion	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
L4.2	Noise limits Noise from the Rasp Mine premise must not exceed the limits presented in the table at the monitoring locations listed in column 1.	C	See conditions S3.17, C21 and C24a.	Noise Monitoring Program NBMP BHOP IA	There are no recommendations.
L4.3	Noise Limits Noise from the premise is to be measured at the most affected point within the boundary of the nominated premise, 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.	C	Set out in section 6 of the Noise Monitoring Program BHO-ENVPRM-002.	Noise Monitoring Program NBMP BHOP IA	There are no recommendations.
L5.1	Blasting The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not at any noise sensitive locations: a) exceed 5mm/second for more than 5% of the total number of blasts carried out on the premises within the 12 months annual reporting period; and b) exceed 10mm/second at any time. Conditions L5.1, L5.2, L5.3 and L5.4 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.	C	See conditions S3.19 and C22.	Environmental Monitoring Results Attachment 2 to the BHOP IA	There are no recommendations.
L5.2	Blasting The overpressure level from blasting operations carried out in or on the premises for the period 7am to 7pm must not at any noise sensitive locations: a) exceed 115 dB (Lin Peak) for more than 5% of the total number of blasts carried out on the premises within the 12 months annual reporting period; and b) exceed 120 dB (Lin Peak) at any time.	C	See conditions S3.18 and C23.	BHOP IA	There are no recommendations.
L5.3	Blasting 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.	NA	No blasting occurs during this time period.	Management Assertion	There are no recommendations.
L5.4	Blasting 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.	NA	No blasting occurs during this time period.	Management Assertion	There are no recommendations.
L6.1	Potentially offensive odour The licensee must not cause or permit the emission of any offensive odour from the premises as defined by Section 129 of the Protection of the Environment Operations Act 1997.	C	See condition S3.1.	RSR Site Inspection Management Assertion	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
L7.1	Other limit conditions 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.	C	See condition S3.23c (ii).	Site Inspection SWMP	There are no recommendations.
L7.2	Other limit conditions The water storage ponds listed below must have the base and wall artificially lined with an impermeable high density polyethylene liner: 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.	C	The Mine Settlement Pond is located at TSF1 and is lined (Photo 25) Backfill Plant Sediment Pond has not been constructed and will not be utilised until late 2013. The Plant Event Pond (Photo 11) and the Overflow Event Pond are both lined and were observed during the site inspection.	Site Inspection Management Assertion BHOP IA	There are no recommendations.
Operating Conditions					
O1.1	Activities must be carried out in a competent manner 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 carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	O	Observation of the site as well as discussions with staff lead the auditor to conclude that activities are being carried out in a competent manner. The BHOP IA states that substances are managed in accordance with the BHOP standard – BHO-SAF-STD-014 and wastes are managed in accordance with the BHOP Waste Management Plan BHO-ENV-PLN-006. However the standard – BHO-SAF-STD-014 was not available for verification at the time of this audit.	Site Inspection Management Assertion BHOP IA WMP	O1.1 A copy of the BHOP standard for waste management – BHO-SAF-STD-014 which applies to the site should be available on site. Ranking: N
O2.1	Maintenance of plant and equipment All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	C	A Maintenance Schedule for plant and equipment is maintained in Pronto and is revised weekly. Only trained and experienced personnel operate mining and processing plant and equipment. See also condition C45.	Management Assertion (Mining Manager, Mill Manager, Mining Superintendent, Workshop Superintendent)	There are no recommendations
O3.1	Dust 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.	C	Management strategies are set out in Sec 10 of the AQMP. See conditions S3.3, C46 and C47.	AQMP	There are no recommendations
O3.2	Dust Ore trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.	NA	Ore trucks do not enter or leave the premises.	Management Assertion Site Inspection	
O3.3	Dust Visible dust emissions from any tailings storage facility must be immediately suppressed by water or chemical application.	C	Blackwoods Pit is wet and therefore no visible dust emissions are evident. TSF1 has 2 cells was covered with slag to prevent dust leaving these sites.	Management Assertion Site Inspection	There are no recommendations
O3.4	Dust Crushing of extracted material must only occur inside the crusher enclosure.	C	This was observed during the site inspection. See condition S3.7.	Management Assertion Site Inspection	There are no recommendations

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
O3.5	Dust The crusher enclosure must be designed to operate under negative pressure at all times.	C	See condition S3.7.	Management Assertion Site Inspection	There are no recommendations
O3.6	Dust 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.	C	See condition S3.7.	Management Assertion Site Inspection	There are no recommendations
O3.7	Dust 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".	C	This is set out in section 10 'Management Strategies' of the AQMP. Table B1 of the AQMP documents the air quality controls within Rasp Mine Procedures.	AQMP	There are no recommendations
O4.1	Processes and management 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.	C	Set out in section 10.1 of the SWMP. It was observed that the Plant Event Pond (Photo 11) was accumulating sediment and it was reported that equipment was being sourced to remove the sediment in order to restore the full design capacity.	Management Assertion Site Inspection	There are no recommendations
Monitoring and Recording Conditions					
M1.2	Monitoring records All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	O	All monitoring data is stored in both hard and electronic copies. There does not appear to be any documented instruction in any of the Management Plans requiring records to be kept or at least 4 years after the monitoring or event to which they relate took place.	BHOP IA Management Plans	M1.2.1 A records management procedure should be considered incorporating a requirement to keep records for at least 4 years after the monitoring or event to which they relate took place. Alternatively this requirement should be documented in each Management Plan. Ranking: I
M1.3	Monitoring Records The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	O	One record was provided as an example of the contents of 23 separate folders, one for each sampling site. The folders were not sighted. The example provided partially met the criteria of this condition. The example provided did not specify the location, which is established by the folder in which it is contained. A column headed "runtime minutes" was asserted to represent an additional reading to inform when the monitor needs to be serviced. The Monitoring Location Overview table was reviewed which provides generic information about the times and points at which samples are to be taken among other details, however the time and name of the person that took the sample is not included. Sample collection records for water, air, noise, vibration etc were not available for verification at the time of this audit, however it was asserted that the field records filled in during the sampling contained all of the required information.	Monitoring results (CBH Resources website) Monitoring Location Overview Management Assertion	M1.3.1 The table retained in the 23 folders should be revised to include the information required by this condition. Ranking: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
M2.1	Requirement to monitor concentration of pollutants discharged For each monitoring/discharge point or utilisation area, the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified. The licensee must use the sampling method, units of measure, and sample at the frequency, specified.	C	Monitoring records provided on the CBH Resources website set out the monitoring to be undertaken in accordance with the table in condition M2.2 of the EPL, however statements on the website indicate that there was generally no water to be sampled in the required locations, however where water or groundwater was sampled analytical results are provided. Monitoring locations and parameters to be measured are set out in the document 'Environment Protection Licence 12559 Monitoring Data'.	Monitoring Results CBH Resources website Environment Protection Licence 12559 Monitoring Data	There are no recommendations.
M3.1	Testing methods - concentration limits Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	C	Monitoring is carried out in accordance with the conditions specified in this EPL. Samples are sent to a NATA accredited laboratory (Bureau Veritas, Adelaide) for analysis using APHA standard methods.	BHOP IA Certificate of Analysis - water results	There are no recommendations.
M3.2	Testing methods - concentration limits Analysis of heavy metals in air samples required by this licence must be done in accordance with: (a) APHA 3030 for the preparation of the sample; and (b) APHA 3111B for the measurement of lead.	C	The BHOP IA indicates that samples are tested using the APHA methods listed in this condition. A certificate of analysis for water results was sighted which indicated that APHA test methods are used, however this sample document did not include air samples.	BHOP IA Certificate of Analysis - water results	There are no recommendations.
M4.1	Weather monitoring For the monitoring point labelled "AWS" on the map titled "Figure 1" submitted to the EPA on 02/03/12 and kept on EPA file LIC07/2213-06 the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in the table.	C	Table 7 of the AQ Monitoring Program specifies the parameters to be monitored which are in accordance with the parameters specified in this condition. The monitoring results also verified that these parameters are monitored and recorded.	AQ Monitoring Program Monitoring results (CBH Resources website)	There are no recommendations.
M5.1	Recording of pollution complaints 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.	C	Table 23 of the AEMR 2011-2012 provides a summary of the Community Complaints Register. The Community Complaints Summary for 2012 was also reviewed. All community complaints records are kept electronically.	AEMR 2011-2012 Management Assertion Complaints summary 2012	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
M5.2	Recording of pollution complaints The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	C	The community complaints register for 2012 in both electronic and hard copy were sighted which included the details required by this condition.	AEMR 2011-2012 Management Assertion Community Complaints Register	There are no recommendations.
M5.3	Recording of pollution complaints The record of a complaint must be kept for at least 4 years after the complaint was made.	O	The complaints procedure was not available for verification at the time of this audit however the Senior Environment and Community Officer indicated that there is no statement written such as "the record of a complaint must be kept for at least 4 years after the complaint was made". The Senior Environment and Community Officer indicated that no record of a complaint has been deleted from the electronic record. See also condition C7.	Management Assertion	M5.3.1 The complaints procedure should include a statement such as "the record of a complaint must be kept for at least 4 years after the complaint was made" to ensure staff do not delete records. Ranking: I See also recommendation M1.2.1.
M5.4	Recording of pollution complaints The record must be produced to any authorised officer of the EPA who asks to see them.	C	The Senior Environment and Community Officer indicated that any complaint records requested would be produced to the EPA on request.	Management Assertion AEMR 2011-2012	There are no recommendations.
M6.1	Telephone complaints line 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.	NC	See condition C7.	CBH Resources Website Site Inspection Management Assertion Test of hotline by auditor	See recommendations C7.2 and C7.3.
M6.2	Telephone complaints line 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.	C	See condition C7.	CBH Resources Website Site Inspection Management Assertion Test of hotline by auditor	See recommendation C7.3.
M7.1	Blasting To determine compliance with conditions L5.1, L5.2, L5.3 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 premise at the specified locations (b) Instrumentation used to measure the airblast overpressure and ground vibration levels must meet the requirements of Australian Standards AS 2187.2-2006.	C	Airblast overpressure and ground vibration levels are measured and electronically recorded for all blasts carried out in or on the premise at the locations specified in Table 3 of the BVO Monitoring Program, which corresponds with the locations set out in condition M7.1 of the EPL.	BVO Monitoring Program Environmental Monitoring Results	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Reporting Conditions					
R1.1	Annual return documents The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: a) a Statement of Compliance; and b) a Monitoring and Complaints Summary. An Annual Return must be prepared in respect of each reporting period, except where a licence is transferred or surrendered.	C	Verified that the date received was 23 December 2011, and the end date for the next Annual Return is 1 November 2012.	EPA website	There are no recommendations.
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period.	C	The BHOP IA states that the Annual Returns for previous years were provided within 60 days of the end of the reporting period.	BHOP IA EPA website	There are no recommendations.
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.	C	The BHOP IA states that "monitoring results are provided with the Annual Return". The monitoring results were verified in the 2011 Annual Return along with statements explaining adverse trends.	BHOP IA Annual Return 2011	There are no recommendations.
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.	O	There is no procedure outlining the period of time documents need to be retained. The Senior Environment and Community Officer indicated that the Annual Return has not been deleted from the electronic records.	Management Assertion	See recommendation M1.2.1.
R1.8	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	NC	A scanned copy of the 2011 Annual Return was sighted which included hand written monitoring results, however the signed version provided to EPA was not available and therefore could not be verified.	Annual Return 2011	R1.8.1 A signed copy of annual returns submitted to the EPA should be retained in BHOP's records. Ranking: I
R2.1	Notification of environmental harm 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. Notifications must be made by telephoning the Environment Line service on 131 555.	C	Set out in Sec 9 of the PIRMP.	PIRMP	There are no recommendations.
R2.1	Notification of environmental harm The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	C	The BHOP IA states that "there have been 4 incidents since Jan 2011. All were reported to the EPA and written reports provided". Reportable Incidents are set out in Sec 3.20 of the AEMR 2011-2012.	BHOP IA AEMR 2011-2012	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
R3.1	Written report Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	C	The Ryan Street seepage incident in March 2012 has been the only event in which the EPA has requested a written report of the event. The Environment Incident Report was sighted.	Environment Incident Report Ryan St	There are no recommendations.
R3.2	Written report 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.	C	The Ryan Street Seepage Environmental Incident Report was provided to the EPA with water sample results and recommendations for future works.	Management Assertion	There are no recommendations.
General Conditions					
G1	Copy of licence kept at the premises or plant A copy of this licence must be kept at the premises to which the licence applies. The licence must be produced to any authorised officer of the EPA who asks to see it. The licence must be available for inspection by any employee or agent of the licensee working at the premises.	C	The BHOP IA states that "a current EPA licence is located on the Environment bookshelf". A copy of this licence was supplied to the auditors on request.	Management Assertion BHOP IA	There are no recommendations.
Pollution Studies and Reduction Programs					
U1.1	Installation of site water management structures and site groundwater monitoring bores The licensee must, using suitably qualified people, complete site water management structural works as detailed in Section 10.5.1 of the Site Water Management Plan by 31/1/2012.	C	It was reported that the site water management structures are substantially complete. The groundwater monitoring bores have been installed and are operational.	SWMP Management Assertion	There are no recommendations.
U2.1a	Surface Water Management The licensee must, using suitably qualified people, ensure water does not seep from the S49 dam and the trench located between the S49 dam and Ryan Street. This is to be achieved by: (a) Monitoring for water within the trench. (b) Pumping all water out of the trench. (c) Depositing water pumped from the trench to Horwood dam.	C	It is reported in section 3.20.2 of the AEMR.	AEMR 2011-2012 Environment Incident Report Ryan St	There are no recommendations.
U2.1b	Surface Water Management The licensee must, using suitably qualified people, produce a report which investigates the feasibility of rehabilitating the catchment area which is part of CML7 and drains to the S49 dam by 30 June 2013.	NA	Report not due until 30 June 2013.		

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
U3.1a	<p>Eliminate and remediate contamination at Eyre Street bund (Short term measures) Commencing 8/9/2011, the licensee must, using suitably qualified people,</p> <ol style="list-style-type: none"> Excavate a sump at the bund where the seepage is occurring and pump the water into the Horwood Dam on the Rasp mining lease to stop the intermittent water seepage. Undertake weekly monitoring of the Eyre Street bund to ensure no seepage occurs 	C	A trench has been excavated which was observed during the site inspection (Photo 17). Sec 3.20.3 of the AEMR 2011-2012 confirms that a sump has been installed and water is pumped into Horwood Dam. The 'Monitoring of Tailings Trench Procedure' sets out trench integrity monitoring and inspection guidelines on a weekly basis.	Procedure - Monitoring of Tailings Trench Site Inspection AEMR 2011-2012 Eyre Street Dam Environmental Investigation Report 5/3/2012	There are no recommendations.
U3.1b	<p>Eliminate and remediate contamination at Eyre Street bund (Long term measures) The licensee must, using suitably qualified people, implement the longer term recommendations from the Eyre Street investigation report. This includes;</p> <ol style="list-style-type: none"> Submission of a seepage collection system design and operation proposal including performance monitoring criteria, approved by the EPA by 31/8/2012. Construct and commission the approved seepage collection system by 31/8/2012. Installation of capping on the Eyre Street Dam to control rainfall infiltration into the fill materials within the dam 	C	It is reported in the BHOP IA that the following works have been undertaken: Excavate sump and pump water from Eyre Street Dam to Horwood Dam to stop seepage, to continue until all rectification works are completed to the satisfaction of the EPA (see condition C72); Monitor Eyre Street bund weekly for seepage (see condition C72); Construct and commission the seepage collection system (Photo 17); Install capping on Eyre Street Dam to control rainfall infiltration (Photo 25); Monitor performance to demonstrate effectiveness, underway.	Management Assertion Eyre Street Dam Environmental Investigation Report 5/3/2012 BHOP IA Site Inspection	There are no recommendations.
U3.1c	<p>Eliminate and remediate contamination at Eyre Street bund Performance monitoring must be presented demonstrating the seepage collection system is functioning to the satisfaction of the EPA.</p>	C	This has not been submitted however the Senior Environment and Community Officer indicated that it is functioning.	Management Assertion Site Inspection	There are no recommendations.

Broken Hill Operations Pty Ltd - Rasp Project
Independent Audit for Department of Planning & Infrastructure
Detailed Findings and Recommendations
Revised Statement of Commitments - Preferred Project Report, September 2010

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Stakeholder Engagement					
BHOP is committed to further developing the community consultation programme, which includes:					
C1	Continued support of the Community Consultation Group who will continue to meet on a regular basis.	NC	There is currently no Community Consultation Group. Rasp is involved in the Lead Reference Group, which includes government representatives on health and water and Broken Hill City Council. It was asserted that there had been some community consultation prior to employment of the present Senior Environment and Community Officer, but that has been discontinued.	Management Assertion	C1.1 A Community Consultation Group should be established as required by this condition, and arrangements made to hold regular meetings. Ranking: U
C2	Provision of the Rasp Mine News Updates to local neighbours surrounding the mine to outline information on activities.	NC	This requirement has not been fulfilled. There is an example of Community Consultation Material provided as Annexure D in the Rasp Mine EA, showing a Newsletter dated July 2007, but it appears that such Newsletters have not been continued.	EA Management Assertion	C2.1 The Rasp Mine Newsletter should be re-established and provided to local neighbours surrounding the mine and to the wider community and other interested parties to outline information on activities. Ranking: U
C3	Rasp Mine information notice board to be located at the Café and Miner's Memorial.	NC	A Rasp Mine information notice board has been budgeted for 2013 to be located at the Café and Miner's Memorial.	Management Assertion	C3.1 The 2013 budget for a Rasp Mine information notice board to be located at the Café and Miner's Memorial should be confirmed and an action plan prepared for its construction and installation. Ranking: U
C4	Annual distribution of a Rasp Mine magazine providing a summary of environmental monitoring, initiatives and activities.	NC	There is no Rasp Mine magazine, however a summary of environmental monitoring, initiatives and activities is available on the Rasp Mine website through the AEMR. The CBH Resources website under "Sustainability" states that CBH projects and operations will endeavour to "Openly communicate our environmental performance with our workforce, Government and the wider community".	Management Assertion	C4.1 As an alternative to a Rasp Mine magazine, consideration should be given to incorporating a summary of environmental monitoring, initiatives and activities in the Rasp Mine Newsletter recommended in C2.1, possibly as a reference to the AEMR published annually on the CBH Resources website. Ranking: I
C5	Targeted consultation involving presentations and briefings on specific issues as they arise.	NC	There have been some presentations to the Lead Reference Group, but no other targeted presentations and briefings on specific issues as they arise. Specific issues were identified as noise, dust, blasting and odour, blasting being the most significant. It was asserted that a community presentation night is being organised, possibly in the new year, and that it will be advertised in the local newspaper. No specific plans for this presentation were available.	Management Assertion	C5.1 Targeted consultation involving presentations and briefings on specific issues as they arise could be provided through the Community Consultation Group recommended in C1.1, as well as general community presentation nights as required. Ranking: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C6	Consultation with relevant stakeholders during the preparation of the final closure plan.	C	The final closure plan was in preparation at the time of this audit, and it was asserted that consultation was in progress with Broken Hill City Council, EPA, DoPI and Department of Trade and Investment, Minerals and Petroleum Branch, however this was not verified.	Management Assertion	C6.1 Relevant stakeholders who would have an interest in the preparation of the final closure plan should be identified and documented to ensure that all interested parties are included. Ranking: N
C7	Continued implementation of the complaints procedure to address individual issues as they arise.	NC	A Complaints Hotline is maintained. The telephone is on the desk of the Senior Environment and Community Officer, and if not answered a message can be left. This telephone is attended only during office hours Monday to Friday and not at nights or weekends, nor is it diverted to an alternate number when not attended. Condition M6.1 of the EPL No. 12559 requires that the licensee must "operate" a complaints line during "operating hours", which is 24 hours, 7 days per week (as opposed to office hours). The noncompliance reflects this deficiency. The number of the Complaints Hotline is available on the CBH Resources website but can only be found by going to CBH Resources > Operations > Rasp Mine > Environment > Complaints Register and finding the wording "For complaints please call 08 80881211". At the time of this audit, the last graphical complaints summary on the website and also in the site Complaints Register was for June 2012, which is four months behind assuming October figures are available. The Complaints Hotline number is also on a board at the gate of the Administration buildings at the mine (Photo 5), and was reported to be advertised in the local newspaper, however this was not verified as it is only advertised occasionally. The Senior Environment and Community Officer indicated that the Complaints Procedure does not reflect the current methodology for recording complaints, which is electronic, and has not been updated from the previously used manual process, however no complaints procedure was available for verification at the time of this audit.	CBH Resources Website Site Inspection Management Assertion Test of hotline by auditor	C7.1 The update of the Complaints Procedure to reflect current practice should be completed and a revised procedure issued as soon as possible. Ranking: U C7.2 The telephone Complaints Hotline system should be reviewed and if considered necessary, after hours diversion to a 24 hour operator's telephone or an appropriate mobile phone should be established to make it operational during operating hours. The Complaints Procedure should also reflect this change. Ranking: U C7.3 The Rasp Mine Complaints Hotline telephone number should be more prominent on the CBH Resources website to make it easier to find. Ranking: I C7.4 The Rasp Mine Complaints Summary on the CBH Resources website should be kept up to date.
Noise and Vibration					
BHOP have made a number of commitments to mitigate noise levels from the Project including:					
C8	Re-location of the processing plant to the north-eastern end of the site, away from residential dwellings to the south.	C	Included in NBMP, section 7.	NBMP Site Inspection	There are no recommendations.
C9	Re-location of mine ventilation fans to Little Kintore Pit and away from residential and commercial areas and installing noise suppression on the fan units.	C	Included in NBMP, section 7, which varies this condition to re-locating of the mine ventilation fans underground and installing noise suppression on the fan units. These fans are not yet in operation, however all equipment is in place and awaiting final commissioning. The ventilation exhaust outlets are installed in Little Kintore Pit.	NBMP Site Inspection	C9.1 Consideration should be given to using shotcrete or some other sealant on the wall of the Little Kintore Pit that will be directly impacted by the airflow from the fans, in order to ensure the elimination of dust generation when the ventilation system is operational. Ranking: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C10	Smaller stope designs to reduce blast vibrations, designing blasts and arranging firing times to minimise potential community impacts.	C	Included in NBMP, section 7. This is underway but is still a "work in progress" as blast design, planning and implementation progressively refines the blasting program. Blasting levels are below those specified in the EPL but they still attract community complaints, the EPA asserting that as many as 20 complaints are received from one blast (not verified).	Management Assertion Site Inspection (underground) Pers. Comm. Darren Wallett (EPA) 16 Nov. 2012.	C10.1 As blasting has been identified as the most significant environmental issue for the Rasp Mine, and attracts the greatest number of complaints, methods should continue to be investigated to minimise vibration from blasting and its impacts on the local community. Ranking: I
C11	Construction of noise barriers with 4 m high bunding along the southern side of the haul road and the southern perimeter of the ROM pad mine truck haul route.	C	Included in NBMP, section 7. Complete - see Photos 15 and 16.	NBMP Site Inspection	There are no recommendations.
C12	Silencers installed on haul trucks and noise suppression kits on the FEL(s) used on the ROM pad, container stockpile and rail loading areas.	C	Included in NBMP, section 7. Haul trucks have noise suppression fitted to the radiators and engine revolutions are limited.	NBMP Interview with Maintenance Superintendent Site Inspection	There are no recommendations.
C13	Limiting crushing to dayshift (7:00am to 7:00pm) seven days a week.	C	Included in NBMP, section 7	NBMP Management Assertion	There are no recommendations.
C14	Limiting shunting of concentrate wagons to between 7:00am and 6:00pm seven days a week.	NA	Included in NBMP, section 7. No shunting of concentrate wagons occurs on site.	NBMP Management Assertion	
C15	Prohibiting production rock blasting between 7:15pm and 6:45am seven days a week.	C	Included in NBMP, section 7. Weekly blasting schedule indicates no production rock blasts between 7:15pm and 6.45am.	BS Oct NBMP	There are no recommendations.
C16	Restricting construction activities to day shift.	NA	Included in NBMP, section 7. Construction is now complete.	NBMP	
C17	Cladding of the primary crusher and installing noise abatement bunding to the north and south of the crusher.	C	Included in NBMP, section 7. Photo 23.	NBMP Site Inspection	There are no recommendations.
C18	Installing a building around the flotation facility providing shielding of the SAG and Ball mills.	C	Included in NBMP, section 7. Photo 24.	NBMP Site Inspection	There are no recommendations.
C19	Covered conveyors and transfer stations prior to the grinding circuit.	C	Included in NBMP, section 7. Photos 6 and 7.	NBMP Site Inspection	There are no recommendations.
C20	Installation of two overlapping bunds at the northern side of the wagon stockpile area to shield Crystal Street residences.	C	Included in NBMP, section 7. There is no stockpile area for concentrates as they are loaded into sealed shipping containers inside the concentrate building (Photo 21).	NBMP Site Inspection	There are no recommendations.
C21	Operational noise is within limits of the NSW Industrial Noise Policy.	C	The NSW Industrial Noise Policy is identified in the Definitions of the NBMP.	NBMP	There are no recommendations.
C22	Rock blast vibration levels are within guidelines issued by the Australian and New Zealand Environmental and Conservation Council.	C	Included in NBMP, section 7. All recorded levels are within the ANZECC Guidelines, but this still causes complaints. The ANZECC (and EPL) limit is 5mm/sec, however there is an undocumented internal limit of 3mm/sec but this is not a legal obligation.	NBMP Management Assertion AEMR Jan 2011-Mar 2012	There are no recommendations.
C23	Rock blast overpressure limits are within guidelines issued by the Australian and New Zealand Environmental and Conservation Council.	NA	Included in NBMP, section 7. This is not applicable as all blasting is underground and does not create any surface overpressure.	NBMP	

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C24a	The noise, vibration and overpressure management plan will include trigger limits for noise levels with response actions plans.	C	Set out in the Noise Monitoring Program section 6.2 and the BVO Monitoring Program section 6.4. Trigger limits have not been reached.	Noise Monitoring Program	There are no recommendations.
C24b	The noise, vibration and overpressure management plan will include details of major emission sources and their mitigation measures.	C	The major emission sources are identified in section 7.1 of the NBMP - Noise Mitigation Measures.	NBMP	There are no recommendations.
C24c	The noise, vibration and overpressure management plan will include details of inspection and monitoring programmes.	C	Included in section 6.1 of both the Noise Monitoring Program and Blasting Vibration & Overpressure Monitoring Program	Noise Monitoring Program BVO Monitoring Program	There are no recommendations.
C24d	The noise, vibration and overpressure management plan will include details and requirements for a noise awareness programme for employees and contractors.	C	The NBMP recommends that those involved in the implementation of the procedures associated with the NBMP are fully trained in newly developed procedures and undertake periodic refresher training. Training is to be aligned to competency standards which can be assessed to be sure an understanding of the procedure being implemented. Training is to be implemented as per the requirements of Rasp Mine Training and Competency Management System, which describes training requirements including record keeping, competency testing and details of training courses.	NBMP	There are no recommendations.
C24e	The noise, vibration and overpressure management plan will include details of the community complaints procedure.	C	Set out in section 9 of the NBMP. Details of community complaints including noise and vibration are included in the Community Complaints Summary 2012 (Attachment 14 to the BHOP IA)	NBMP Community Complaints Summary	There are no recommendations.
C24f	The noise, vibration and overpressure management plan will include internal and external reporting requirements.	C	Set out in section 8.2 of the NBMP.	NBMP	There are no recommendations.
C25	The construction environmental management plan will outline specific requirements for noise, vibration and overpressure mitigation and reduction during construction activities.	NA	Construction is complete	Management Assertion	
Air Quality					
BHOP is committed to implementing the following dust mitigation and suppression measures:					
C26	Use of water spray / chemical dust suppressant system at the tailings storage facilities.	NA	Included in AQMP, section 10.5.2, which is for TSF 1 (Photo 25) that is no longer in use. It has been capped with broken slag, the source of which was not known at the time of this audit. Tailings are now stored in Blackwoods Pit adjacent to the concentrator, and are kept wet to prevent dust generation (Photo 4).	AQMP Site Inspection	There are no recommendations.
C27	Installation of vehicle wash facilities with a wash facility installed post concentrate loading to accommodate both the truck and concentrate container.	C	Included in AQMP, section 10.16. Constructed and in use (Photo 21)	AQMP Site Inspection	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C28	Extensive sealing of haul roads and other primary roadways in accordance with the included schedule.	O	Included in AQMP, Section 10.2 and 10.3. Roads to be sealed are set out in a Table in Annexure A to the Rasp Mine Preferred Project Report. It was asserted that all of these roads have been sealed. There is a Procedure – Roadway Dust Management BHO-ENV-PRO-007 which states that as a minimum, the majority of roads under the operational control of BHOP will be sealed and that this comprises the roads detailed in Appendix 1, however there is no Appendix 1 in this Procedure.	AQMP Procedure – Roadway Dust Management Site Inspection	C28.1 The Roadway Dust Management Procedure should be reviewed to ensure that Appendix 1 is included. The numbering should also be revised (6.1.29 and 6.1.30 are missing). There are three Appendices (A, B and C) listed at the end of the Procedure and none of these are attached. Ranking: I
C29	Application of chemical dust suppression as per the manufacturer's specification, or more often as required, on all "free areas" of the site.	O	Included in AQMP, section 10.1. There is a Procedure – Management of Exposed Areas BHO-ENV-PRO-003, the intent of which is to ensure that exposed areas are controlled to the maximum practical extent to minimise off-site particulate migration associated with wind erosion. It requires chemical dust suppressant is to be applied as per manufacturer's specifications to the following areas, as a minimum: <ul style="list-style-type: none"> Existing 'free areas'; Mine unsealed surface areas; All trafficked areas (FEL and dump trucks) within the ROM stockpile area Not all exposed areas required to be treated have yet been treated with chemical dust suppressant in accordance with Procedure BHO-ENV-PRO-003. See also conditions C57 and C88.	AQMP Procedure - Management of Exposed Areas Map showing areas treated with chemical dust suppression	C29.1 Existing free areas as defined that have not been treated in accordance with the procedure BHO-ENV-PRO-003 should be treated in accordance with a timetable to be developed by Rasp mine. Ranking: I
C30	Enclosure of all above ground conveyors and transfer points prior to the grinding circuit (SAG and ball mills).	C	Included in AQMP, section 10.10 and verified by inspection (Photos 6 and 7).	AQMP Site Inspection	There are no recommendations.
C31	Restricted height of ROM stockpile and installation of static wind breaks (orientated perpendicular to the dominant wind direction) along with top-mounted water sprays.	C	Included in AQMP, section 10.8 and verified by inspection (Photos 15 and 16). There is a Procedure - ROM Pad Management BHO-ENV-PRO-008, the intent of which is to ensure that exposed areas are controlled to the maximum practicable extent to minimise off-site particulate migration associated with materials handling and wind erosion.	AQMP ROM Pad Management Procedure Site Inspection	There are no recommendations.
C32	Water sprays on all permanent stockpiles.	C	The only permanent stockpiles are located at the ROM pad (see Photos 15 and 16).	AQMP Site Inspection ROM Pad Management Procedure	There are no recommendations.
C33	Maintaining a concentrate moisture level of around 9 percent.	C	Included in AQMP, section 10.11. Concentrate moisture is between 7% and 9%, however all concentrate released from the filters is immediately deposited into sealed shipping containers and is not exposed to the atmosphere or wind that could create dust.	AQMP Site Inspection	There are no recommendations.
C34	Service roads and tip points around the stockpile will be laid with compacted road base (high moisture and low silt content).	C	There are two Procedures relating to this activity – Roadway Dust Management BHO-ENV-PRO-007 and ROM Pad Management BHO-ENV-PRO-008. Photo 15 shows the surface of the ROM pad which is the only location where there is a stockpile.	Roadway Dust Management Procedure ROM Pad Management Procedure Site Inspection	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C35	Installation of real-time air quality monitoring to assist in the active management of emissions.	C	Included in AQMP, section 10.18. There is a Procedure - Real-Time Particulate Monitoring for Operational Dust Management BHO-ENV-PRO-006, which provides guidance on the interpretation of real time air quality and meteorological monitoring data to identify when elevated short term particulate matter levels may result in the exceedance of 24-hour average criterion for particulate matter less than 10 microns in aerodynamic diameter (PM10). There are two real time dust monitors on site (Photos 1 and 2) and one offsite, the locations of which were selected by a consultant. These provide data in real time to the computer of the Senior Environment and Community Officer which is alarmed and also sends out an email alert. This is not recorded as an incident until it is investigated as it occurs almost every day and can be caused by someone driving past or by a dust storm, or other cause.	AQMP Real Time Particulate Monitoring for Operational Dust Management Procedure Site Inspection	There are no recommendations.
C36	Limitation of vehicle or work access in exposed areas.	C	Included in AQMP, Section 10.1. It was asserted that not many people drive around the site other than in their designated work locations, and therefore creation of dust from this activity is minimal.	AQMP Management Assertion Site Inspection	There are no recommendations.
C37	Maintaining of surface crust to minimise potential wind erosion.	C	Included in AQMP, section 10.5.2. Chemical dust suppressants are applied by specialised equipment to create a crust in exposed areas. A green/blue dye is incorporated to provide a visual verification of where this has been applied. It is asserted that the treatment lasts about a year, and the environmental technician has a monitoring schedule to check the integrity and effectiveness of the crust.	AQMP Management Assertion Site Inspection	There are no recommendations.
C38	Identification and remediation of areas where fines or silt has built up (typically after heavy rain storms).	NC	It was asserted that fines and silt does not build up, and that roads are cleaned by street sweeper every week. The haul road is sealed and has a high volume of traffic. There is an after-rain checklist which does not include roads. The Site Water Management Plan (Golder Associates 2012) section 10 "Catchment Runoff and Sediment Management Plan" sets out erosion and sediment control measures through the management of 68 individual small catchment areas on the site.	Management Assertion Site Inspection SWMP	C38.1 A survey should be undertaken to identify and document any areas on site where fines or silt may build up and measures established to remediate them through appropriate actions to prevent dust generation when they dry out. Ranking: U C38.2 The after-rain checklist should be reviewed for completeness and inspection of roads and associated drainage should be added. Also add inspection of any areas identified through recommendation C38.1. Ranking: I
C39	Remediation of disturbed areas including but not limited to, removal and burial of fine material, capping with inert waste rock, or use of dust suppressants.	NC	No site remediation has been carried out.	Management Assertion Site Inspection	C39.1 A remediation action plan should be prepared as part of the Mine Closure Plan (see C98 for details). Rating: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C40	Undertaking sampling to quantify road surface silt loadings on an ongoing basis.	NC	Included in AQMP, section 10.3, which requires that minimum frequency of street sweeper use is to be determined through road silt load testing during the operation phase. This is not done. A dust control strategy for all roadways under BHOP operational control has been developed, and is included in Procedure – Roadway Dust Management.	AQMP Management Assertion Procedure – Roadway Dust Management	C40.1 Add sampling to quantify road surface silt loadings on an ongoing basis to the Procedure – Roadway Dust Management. Ranking: I
C41	Installation of video recording equipment to assist in the active management of emissions for the TSF.	NA	Included in AQMP, section 10.5.3. This was not done as TSF 1 is not used and has been capped with slag. Tailings are now deposited in Blackwoods Pit and are kept wet so that there is no dust generation.	AQMP Site Inspection	
C42	Adoption of a lead management plan to address specific issues dealing with personal hygiene of employees, blood lead action guidelines, sampling and environmental monitoring.	C	Section 4 of the Community Lead Management Plan (CLMP) refers to the Occupational Lead Management Plan (OLMP) which addresses specific issues dealing with personal hygiene of employees, blood lead sampling and action guidelines.	CLMP	There are no recommendations.
C43	Continuation and expansion of the existing air quality management program to include high volume samplers, dust deposition jars and real time monitors.	C	14 air/dust samplers to the requirements in the EPL have been installed (Photos 1, 2 and 28). Two are not yet operational (Vent Shaft and Process Enclosure/Baghouse Stack).	Monitoring Location Overview Site Inspection	There are no recommendations.
C44	Regular maintenance of pollution control equipment to ensure that it is functioning at optimal performance levels. A maintenance schedule will be documented and implemented for all pollution control equipment as part of an environmental management plan.	NC	A maintenance schedule has not been documented and implemented for all pollution control equipment as part of an environmental management plan. It is noted that there is no environmental management plan or EMS documented. Regular maintenance is however carried out including: <ul style="list-style-type: none"> • The silt trap and oily water separator on the washdown bay are maintained by contractor. The silt trap is maintained weekly and the oily water separator is inspected weekly as per a maintenance schedule (not sighted) which is the responsibility of the Mill Maintenance Supervisor. • Sealed roads are swept weekly by a street sweeper. • Diesel emissions from all light and heavy mobile equipment is monitored monthly • The Site Water Management Plan requires quarterly inspections of stormwater management works, or after each significant rainfall event. Ponds are desilted once water storage capacity is reduced by 10%. 	SWMP Site Inspection Pers comm Mine Maintenance Superintendent	C44.1 A maintenance schedule should be documented and implemented for all pollution control equipment, including actions to be taken, timetables and responsibilities. Ranking: U C44.2 An environmental management plan, program or EMS should be considered to formalise environmental management on site, and to incorporate a pollution control and monitoring equipment maintenance schedule. Ranking: I
C45	Maintain and operate all plant and equipment installed or used at the site in a proper and efficient manner.	C	A Maintenance Schedule for plant and equipment is maintained in Pronto and is revised weekly. Only trained and experienced personnel operate mining and processing plant and equipment.	Management Assertion (Manager Operations, Manager Metallurgy, Mining Superintendent, Mine Maintenance Superintendent)	There are no recommendations.
C46	Maintaining the premises in a condition which minimises or prevents the emission of dust from the premises.	C	Included in AQMP, section 10 and Procedure - Management of Exposed Areas BHO-ENV-PRO-003. Water trucks and chemical dust suppressants are used. Wind speed and direction is monitored in real time on site [see S3.11c (iii) and Photo 26], and if necessary an extra water truck is hired in or dust generating activities are postponed. Water sprays are maintained on the ROM pad (Photos 15 and 16). Sealed roads are swept weekly by a PM ₁₀ -certified street sweeper.	AQMP Procedure - Management of Exposed Areas ROM Pad Management Procedure Procedure - Roadway Dust Management Site Inspection	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C47	Ensuring visible dust emissions from any tailings storage facility are negligible.	C	TSF 1 is decommissioned and has been capped with slag. Tailings are now stored in Blackwoods Pit adjacent to the concentrator, and are kept wet to prevent dust generation (Photo 4).	Site Inspection	There are no recommendations.
C48	A CEMP will be developed prior to construction. The plan will include management and monitoring measures relating to air quality that will be implemented during all construction works.	NA	Construction has been completed.	Site Inspection	
C49	A Tailing Construction and Operation Manual will be completed and implemented prior to the commencement of any construction activities at the site.	C	Referred to in the AQMP, section 10.5.1 (Construction) and 10.5.2 (Operations), which both refer to TSF 1 which has been decommissioned. Tailings are now stored in Blackwoods Pit and a Tailings Storage Facility Construction and Operations Manual has been prepared for the Blackwood Pit tailing storage facility.	AQMP Construction and Operations Manual for Tailings Storage in Blackwoods Pit (April 2012)	There are no recommendations.
C50	Efficiency of all new mobile and fixed equipment will be considered during procurement for both diesel and electric powered equipment.	NC	Referred to in the AQMP, section 10.17, however there is no procedure for this requirement and no evidence was provided that this was carried out consistently. It was asserted that a risk assessment was conducted for all mobile equipment once it was on site.	AQMP Management Assertion (Mine Maintenance Superintendent)	C50.1 A Procedure should be developed to assess the efficiency of all new mobile and fixed equipment during procurement for both diesel and electric powered equipment. Ranking: I
C51	Within 12 months of commencement of underground mining, an energy audit will be conducted to compare predicted and actual energy consumption.	NA	Referred to in the AQMP, section 10.17. Project Approval was received on 31 January 2011, and the first stope was developed in July 2012, which is taken as the commencement of underground mining. Emissions and abatement strategies were reported in the January 2011 - March 2012 AEMR.	AQMP	
C52	Equipment will be maintained to retain high levels of energy efficiency.	C	Referred to in the AQMP, section 10.17. Fuel and air filters are properly maintained, correct inflation on tyres is maintained, and haul trucks have engine revolution limiters and gear limiters, which are activated automatically at the entrance to the decline. Further development of this facility is underway to ensure maximum energy efficiency is achieved.	AQMP Management Assertion (Mine Maintenance Superintendent)	There are no recommendations.
C53	The inventory of emissions developed for this assessment will be regularly updated and maintained.	C	Referred to in the AQMP, section 8.1 and 10.17. It was asserted that this was provided in the Annual NPI report (not verified as the Rasp Mine NPI Report had not been uploaded by the regulator on to their website at the time of this audit).	AQMP Management Assertion	There are no recommendations.
C54	Emissions and abatement strategies will be reported annually in the AEMR.	C	Referred to in the AQMP, section 10.17. Emissions and abatement strategies were reported in the AEMR 2011-2012.	AEMR 2011-2012	There are no recommendations.
Community Health					
BHOP is committed to implementing dust mitigation and suppression measures to manage emissions and prevent adverse impacts from its operations contributing to increased blood lead levels in the local community through a lead management plan.					
C55a	The lead management plan will include requirements for employee and contractor hygiene.	C	Section 15 of the LMP covers personal hygiene, and applies to employees, contractors, visitors and the general public.	LMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C55b	The lead management plan will include requirements for washing lead soiled articles, for example laundering of work clothes.	C	Laundering of work clothes included in the LMP section 12, and the CLMP Sec 4.13. It was verified that there is a laundry on site for this purpose.	LMP CLMP Management Assertion	There are no recommendations.
C55c	The lead management plan will include requirements for washing vehicles prior to leaving the site.	C	This is included in section 21.3 of the LMP. The AEMR 2012 reported that a vehicle wash station has been constructed to enable vehicles to be cleaned prior to leaving site. This was verified by site inspection (Photo 20).	LMP AEMR 2011-2012 Site Inspection	There are no recommendations.
C55d	The lead management plan will include requirements for monitoring of lead blood levels with actions to be taken when designated trigger levels are reached.	C	This is included in sections 17-20 of the LMP. Table 1 lists the levels BHOP has adopted as trigger levels when action is required.	LMP	There are no recommendations.
C55e	The lead management plan will include requirements for inspections and housekeeping for each operational area to minimise dust buildup and the potential for subsequent off-site movement.	C	This is included in section 16 of the LMP, however there do not appear to be any documented procedures to support the statements in the LMP.	LMP	C55e.1 Documented procedures should be prepared for inspections and housekeeping for each operational area to minimise dust buildup and the potential for subsequent off-site movement. The procedures should include the action to be taken, responsibility, frequency and reporting requirements, as well as maintenance requirements (to be entered into Pronto if appropriate). Ranking: U
C56	Conduct bi-annual assessment of soil contamination on land in Eyre Street and land adjacent to TSF1 until TSF1 is decommissioned and rehabilitated.	C	One assessment of soil and water contamination has been conducted by Golder Associates, subsequent to the decommissioning and capping of TSF 1.	Eyre Street Dam Environmental Investigation Report 5/3/2012	There are no recommendations
C57	If the dust suppressant chosen to be used at the site is not included in the Screening Assessment undertaken as part of the EAR (Annexure I(b)), then a new health risk assessment of the dust suppressant will be undertaken and forwarded to Greater Western AHS and NSW Health for approval prior to its use on-site.	NC	This is not in CLMP. See also condition C88.	CLMP	C57.1 The requirement for a new health risk assessment of the dust suppressant to be undertaken and forwarded to Greater Western AHS and NSW Health for approval prior to its use on-site should be documented in a procedure and implemented if the dust suppressant chosen to be used at the site is not included in the Screening Assessment undertaken as part of the EAR (Annexure I(b)). Ranking: I
C58	Maintain a high level of lead awareness within the local community by contributing to lead awareness education programmes.	C	Included in Section 5 of the CLMP, which commits to a contribution of up to \$50,000 per year provided to the Broken Hill Child & Family Health Centre to be used for 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.	CLMP	There are no recommendations

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Water Resources					
BHOP is committed to the following water conservation measures:					
C59	Treatment of mine dewatering to enable usage in the processing plant.	C	A water treatment plant has been installed that treats water from mine dewatering and other sources (Photo 22) which is stored in a lined pond for reuse in the processing plant (Photo 11).	Site Inspection Pers comm Manager Metallurgy	There are no recommendations
C60	Tailings water to be returned to the processing plant for reuse.	C	Tailings water is recovered from Blackwoods Pit for reuse in the adjacent Processing Plant (Photo 13).	Site Inspection	There are no recommendations
C61	Water to be recycled from Horwood Dam to the processing plant.	C	Horwood Dam (Photo 27) water is recycled to the processing plant.	Site Inspection Pers comm Senior Environment and Community Officer	There are no recommendations
C62	Investigation of the use of the silver tank as water holding tank for water to be recycled to the processing plant, reducing the potential for evaporation from open type storages.	C	The use of the silver tank (in background of Photo 1) as a water holding tank for water to be recycled to the processing plant was investigated. The silver tank holds raw water from the town supply used for makeup and is not part of the water recycling system.	Site Inspection Pers comm Senior Environment and Community Officer Surface Piping Raw Water System Flow Diagram 2011 BHOP-100-FD-001	There are no recommendations
C63	Investigate the use of grey water from domestic facilities for use in ground management.	C	The use of grey water from domestic facilities for use in ground management was investigated, however the site currently has sufficient water available and grey water is discharged to the City of Broken Hill sewage system operated by Essential Water.	Management Assertion	There are no recommendations
C64	Installation of flow metres to monitor water usage.	C	Flow meters have been installed and are shown in the System Flow Diagram.	Surface Piping Raw Water System Flow Diagram 2011 BHOP-100-FD-001	There are no recommendations
C65	If sufficient water is not available, the scale of their operations will be adjusted to match the licensed water entitlements.	NA	The operation has no licenced water entitlements	Management Assertion	
C66	Provision and location of spill kits and requirements for training.	NC	Spill kits have been provided in areas where hydrocarbons are used or stored (Photo 8), however no training has been provided and there is no training planned.	Management Assertion Site Inspection	C66.1 Verification should be obtained that spill kits provided are suitable for recovering spills of substances located at the location of the spill kit, e.g. are only hydrocarbons stored or are other chemicals present as well. Ranking: I C66.2 Training should be planned and provided either by the supplier or site trainers, for personnel who are likely to use the spill kits. Ranking: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C67	Design and installation of chemical storage to include bunds with suitable sumps, and where appropriate roofed to prevent stormwater entry.	O	Chemical storage is mainly at the mill, magazine and workshops. The main chemical storage is covered and is sloped to a sump that reports to the tailings storage in Blackwoods Pit (Photo. 12). There were a number of chemical and hydrocarbon IBCs stored on site that were unbunded (Photo 18 and 19). The lead concentrate storage tank was inadequately bunded and showed evidence of overflow or spillage outside the bund (Photo 9).	Site Inspection	C67.1 An inventory of chemicals stored on site should be developed and maintained, including a plan, documenting where chemicals are stored, the types and quantities at each location, and the type of storage facilities (roofed, inside building, outdoors, type of bunding and drainage etc). A risk assessment should be undertaken to determine if facilities are adequate and whether improvements should be made. Ranking: I
C68	Bunding of the diesel refuelling station.	C	There are two 63,000 litre diesel tanks that are internally bunded with an internal bladder (Transtanks - Photo 10).	Management Assertion Site Inspection	There are no recommendations
C69	Oil / water separators to be installed at vehicle wash facilities and the diesel refuelling station.	C	This has been done.	Management Assertion Site Inspection	There are no recommendations
C70	Management of sediment and sludge from vehicle washing facilities.	C	It was asserted that sediment and sludge from vehicle washing facilities were pumped out weekly. No formal procedure or documentary evidence of this was provided at the time of this audit.	Management Assertion	C70.1 A procedure or other document should be developed requiring the pumpout of sediment and sludge from all vehicle washing facilities including at the boom gate, workshop and processing plant for concentrate trucks and containers, and records of pumpout activities should be maintained. Ranking: I
C71	Water quality monitoring including groundwater (represented by mine dewatering) and at locations to the east of TSF1, and surface water represented by Horwood Dam.	C	Water from mine dewatering is monitored monthly at the decline at Kintore Pit; surface water represented by Horwood Dam is monitored quarterly, and piezometers east of TSF 1 are monitored quarterly as required by EPA licence conditions. Results are published on the CBH Resources/Rasp Mine website.	Site Water Management Plan 2012 Environment Management Strategy V2 June 2012, Appendix C, Summary of Environmental Monitoring Site Inspection Website, Environmental Monitoring	There are no recommendations

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C72	Monitor the quality and quantity of water captured by the toe drains on the Tailings Storage Facility (TSF).	NC	A toe drain has been constructed along the base of the dam wall of TSF 1 (Photo 17) called the Eyre Street dam seepage trench, to collect seepage water, which is pumped to Horwood Dam through a flow meter to measure the movement of the seepage. It was reported that the quality of this water is not monitored, which is not a requirement but is advisable to track any changes over time. The Monitoring of Tailings Trench Procedure requires that groundwater quality monitoring from the trench will be undertaken sampling for heavy metals only taking a sample from the pipeline running from the trench to Horwoods Dam. It also requires that groundwater quality samples should be taken on a weekly basis until otherwise specified.	Site Inspection Monitoring of Tailings Trench Procedure Website, Environmental Monitoring	C72.1 The quality and quantity of water captured by the toe drains on the TSF should be monitored in accordance with the requirements of the Monitoring of Tailings Trench Procedure. Ranking: U C72.2 The Monitoring of Tailings Trench Procedure should be reviewed for accuracy. It is filed under Procedure - Monitoring Trench Integrity, and is titled in the header Application of Dust Suppression Procedure BHO-ENV-PRO-010 Ranking: I
C73	Monitor the movement of seepage sourced from the TSF and to monitor the quality of the local groundwater system.	C	See C72. The groundwater outside the trench is monitored quarterly through piezometers.	Environment Management Strategy V2 June 2012, Appendix C, Summary of Environmental Monitoring Location Overview Schedule	See recommendation C72.1.
C74	The recommendations from the Stormwater Management Plan as proposed by Golder Associates (Golder 2010, Annexure K) will be implemented and will address potential impacts from new Project activities prior to the commencement of those activities.	C	The Stormwater Management Plan (2010) is now superceded by the Site Water Management Plan (Golder Associates, 2012) which addresses potential impacts from new Project activities prior to the commencement of those activities. The recommendations from the Stormwater Management Plan (2010) have been substantially or entirely completed. Table 1 of the SWMP outlines all of the water management conditions in Schedule 3 of the Project Approval (January 2011) and lists where these have been addressed in the SWMP.	Management Assertion Site Inspection SWMP	There are no recommendations.
C75a	The Stormwater Management Plan will include erosion and sediment control measures.	C	Section 10 of the SWMP addresses Catchment Runoff and Sediment Management Plan	SWMP	There are no recommendations.
C75b	The Stormwater Management Plan will include design requirements for on-site retention evaporation basins.	C	Table 5 and the accompanying text in the SWMP provides design requirements for on-site retention ponds and catchments.	SWMP	There are no recommendations.
C75c	The Stormwater Management Plan will include requirements for management of catchment areas, including drains, pipework, bunding and sumps.	C	Included in the SWMP, Sections 10.2 and 10.3.	SWMP	There are no recommendations.
C75d	The Stormwater Management Plan will include quarterly inspections of the site storm water management structures to confirm that they are operational.	NC	Section 15.3 "Erosion and Sediment Transportation Reporting" of the SWMP provides for quarterly inspections and inspections following storm events of the drainage system and batters based on an Inspection Check List. This is not done.	SWMP Management Assertion	There are no recommendations.
C76	A Groundwater Management Plan will be prepared to provide details of the monitoring of seepage movement within and adjacent to the TSF.	C	Section 11 of the SWMP addresses the Groundwater Monitoring Program which provides details of the monitoring of seepage movement within and adjacent to the TSF.	SWMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C77	All necessary licences under the Water Act 1912 will be obtained prior to the commencement of activities on site.	C	It was asserted that all necessary licences under the Water Act 1912 were obtained prior to the commencement of activities on site for the groundwater monitoring bores (piezometers), however there is no indication of this in the SWMP and there is no listing of water licences for monitoring bores in the AEMR. Conditions of Statement Referred to on 85BL256109 issued under Part V of the Water Act 1912 on 03 July 2012 was provided to the auditors. Table 3 of the AEMR lists a Water Extraction licence (no number provided) issued by the NSW Office of Water for the purposes of water extraction from Shaft 7 and underground mine dewatering for site use and use by Perilya – CML5.	Management Assertion AEMR 2011-2012 Conditions of Statement referred to on Bore Licence Certificate #85BL256109	C77.1 All Licences under the Water Act 1912 including those held for groundwater monitoring bores should be listed in the AEMR and the Site Water Management Plan (Golder Associates, 2012) when revised, as well as in other documentation. All licences, permits, approvals etc should be referenced by their official number, as well as the Rasp Mine number. Ranking: I
Heritage The Conservation Management Plan will include:					
C78	Implementation of a Conservation Management Plan that will provide the strategic framework for all heritage items located on the Lease based on the principles of the Burra Charter.	C	A Draft Conservation Management Plan prepared by Austral Archaeology Pty Ltd dated November 2011 has been prepared and submitted to DoPI for approval, which had not been received at the time of this audit. Some of the recommendations in this Plan have been or are being implemented.	CMP Site Inspection Management Assertion	There are no recommendations.
C79a	The Conservation Management Plan will include a photographic record of listed heritage buildings.	NC	The Draft Conservation Management Plan does not include a photographic record of listed heritage buildings. There is a separate inventory of heritage items (sighted) which is listed to be Volume 2 of the final Conservation Management Plan, but is currently incomplete. However, recommendation 4 of the Draft Conservation Management Plan recommends that an archival photographic record of all structures should be undertaken which should comply with the NSW Heritage Branch guidelines for archival photography, and should be commissioned within the next six months.	CMP Inventory of Heritage Items	C79a.1 The final Conservation Management Plan should include the photographic record of listed heritage buildings from the existing Inventory of Heritage Items, and any additional archival photographic record produced. Ranking: I
C79b	The Conservation Management Plan will include programmes for each building for adaptive reuse outlining measures to maintain its structural stability and identify requirements for retention, renovations, permitted re-use and ongoing maintenance.	O	For each heritage item listed in the Draft Conservation Management Plan there is Heritage Inventory Form in the Inventory of Heritage Items that includes programmes for each building for adaptive reuse outlining measures to maintain its structural stability and identify requirements for retention, renovations, permitted re-use and ongoing maintenance. It is noted that the Inventory of Heritage Items is not in a final form and lacks title, author, date, footers etc.	CMP Inventory of Heritage Items	C79b.1 The final Conservation Management Plan should include the Inventory of Heritage Items and the Heritage Inventory Forms. Ranking: I C79b.2 The Inventory of Heritage Items should be completed and put into a final format as soon as possible. Ranking: U
C79c	The Conservation Management Plan will include preservation requirements for buildings not to be reused.	NC	This is not done. There are some preservation requirements for buildings not to be reused included in the Inventory of Heritage Items.	CMP Inventory of Heritage Items	C79c.1 The Inventory of Heritage Items should be reviewed and completed to include preservation requirements for all buildings not to be reused. Ranking: U
C79d	The Conservation Management Plan will include inspection and monitoring programme.	C	Recommendation 7 in the Draft Conservation Management Plan.	CMP	There are no recommendations

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C79e	The Conservation Management Plan will include inventory of all mobile items remaining on site.	NC	The Draft Conservation Management Plan at Recommendation 9 proposed that all portable or movable heritage items should be documented at the time of a dilapidation study outlined in Recommendation 5.	CMP	C79e.1 The results of Recommendation 9 in the Draft CMP proposing that all portable or movable heritage items should be documented at the time of a dilapidation study outlined in Recommendation 5 of the CMP should be included or referenced in the Final Conservation Management Plan. Ranking: I
C79f	The Conservation Management Plan will include agreement with a mining history organisation to preserve and care for relocated items.	NC	This is included as Recommendation 10 of the Draft Conservation Management Plan, but no agreement has been made or a suitable mining history organisation identified.	CMP	C79f.1 A suitable mining history organisation should be identified and an agreement entered into to preserve and care for relocated items. Ranking: I
C79g	The Conservation Management Plan will include procedures for the preservation of opportunistic finds, including Aboriginal and European objects.	C	Included in Section 6.9 of the Draft Conservation Management Plan, Policy 8 – Management of Opportunistic Finds.	CMP	There are no recommendations
C80	The Conservation Management Plan will outline specific requirements for the management of historical heritage.	C	This is included in the Heritage Inventory Forms.	Heritage Inventory Forms	See recommendation C79b.2.
C81	The Conservation Management Plan will include appropriate management measures to be implemented in the event that an Aboriginal object is identified on-site.	C	Included in Section 6.9 of the Draft Conservation Management Plan, Policy No.8 – Management of Opportunistic Finds, which states that in the event that there are unexpected discoveries of Aboriginal or historic archaeological sites or artefacts, they will be managed in accordance with the relevant legislation.	CMP Policy No.8 – Management of Opportunistic Finds	There are no recommendations
Visual Amenity					
Visual impacts will be minimised by implementation of the following management measures:					
C82	Material stockpiles, waste, plant, equipment and vehicle parking will be restricted to designated areas.	C	Material stockpiles, waste, plant, equipment and vehicle parking is restricted to designated areas.	Site Inspection	There are no recommendations
C83	Where possible, avoid the use of highly reflective materials and colours on the site, unless necessary for safety reasons.	C	It was apparent that this condition is fulfilled, however there is no procedure requiring that this condition is observed.	Site Inspection	C83.1 A procedure, standard, policy or other document should be prepared incorporating a requirement that where possible, the use of highly reflective materials and colours on the site should be avoided, unless necessary for safety reasons. Ranking: I
C84	Lighting being kept to a minimum necessary to safely carry out operations.	C	It was reported that there have been no complaints or incidents relating to lighting, however there is no procedure requiring that this condition is observed.	Management Assertion	C84.1 A procedure, standard, policy or other document should be prepared incorporating a requirement that lighting being kept to a minimum necessary to safely carry out operations. Ranking: I

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C85	Lighting being directed away from residences through the use of directional lighting equipment and shielding.	C	It was reported that there have been no complaints or incidents relating to lighting, however there is no procedure requiring that this condition is observed.	Management Assertion	C85.1 A procedure, standard, policy or other document should be prepared incorporating a requirement that lighting is directed away from residences through the use of directional lighting equipment and shielding. Ranking: I
C86	Implementation of a rehabilitation and mine closure strategy post operations, aimed at retaining the mining character of the site.	NA	The mine closure plan is in preparation (see condition C6) and "Rehabilitation and Closure" section below. See also condition C100e.	Management Assertion	
Traffic and Transport					
BHOP is committed to providing a safe road network for its employees, contractors and the surrounding community. The major measures to manage road safety include:					
C87	Sealing of all main traffic routes including the roads indicated in the table located at 3.4.	C	This has been completed in accordance with Table 2-2: Existing and Proposed Sealed Roads of the Response to Submissions Report. Concern has been expressed by Darren Wallett of the Wagga Office of the EPA that the haul road is not wide enough and that when two haul trucks pass they are required to drive partially off the sealed surface, thus creating dust which can be avoided by having a wider sealed road surface. While there is a commitment in the Response to Submissions Report to seal the haul road from the Kintore Pit intersection (truck wash and haul roads) to ROM pad (haul road for ore mine trucks) totalling 1186 m in length, there is no mention of the width to be sealed.	RSR Procedure - Management of Exposed Areas Pers comm, Darren Wallett, 16 November 2012 Site Inspection Management Assertion	C87.1 The generation of dust from the haul road due to haul trucks passing on a pavement that is not wide enough to accommodate two trucks should be investigated as soon as possible. Ranking: E C87.2 If necessary, the haul road should be widened, or passing bays should be constructed at strategic locations to enable trucks to remain on a sealed surface at all times. Ranking: E
C88	Placing compacted moisture conditioned road base on other internal roads and chemical dust suppressant as required to minimise off site dust levels.	C	Chemical dust suppressants are used extensively on unsealed roads and other exposed "free" areas on site, and include a green dye to indicate where the suppressant has been used. It was reported that a new improved chemical surface sealant is to be trialled on unsealed roads in high activity areas.	Procedure - Management of Exposed Areas Site Inspection Management Assertion	There are no recommendations.
C89	Requiring heavy vehicles associated with deliveries to the mine to use approved B-Double routes.	NC	There is no procedure requiring that heavy vehicles associated with deliveries to the mine to use approved B-Double routes, and it can not be verified that this condition is complied with.	Management Assertion	C89.1 A procedure should be prepared requiring that heavy vehicles associated with deliveries to the mine use approved B-Double routes, which should be clearly marked on a street map of the area. A method of conveying this requirement to the owners and drivers of heavy transport contracted by the mine or its suppliers should be included in the procedure. Ranking: I
C90	Restrict trucking movements for off site ore transport to between 7 am and 6 pm.	NA	There is no offsite ore transport.	Management Assertion Site Inspection	

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C91	Providing sufficient parking spaces on-site for employee and contractor vehicles.	C	This is done. See also condition S3.24.	Site Inspection Photo 22 Employee Car Park, and Photo 23 Truck/Contractor Car Park in Attachment 3 to the BHOP IA	There are no recommendations.
C92	Implementing safety procedures to be adhered to during temporary usage of the South Road access.	NA	Access from South Road is locked and not used.	Management Assertion Site Inspection	
C93	Assessing the capability of the existing road pavement along Eyre Street to withstand the intended road and traffic movement associated with the Project. This assessment would be undertaken prior to the commencement of construction. If it is found that the road pavement is inadequate, then BHOP will consult with BHCC to agree on any feasible contributions for road pavement improvement and/or maintenance works.	C	This is done via the Dilapidation Report, Eyre Street Access, August 2012. It is noted in the 2012 report that there was also a previous Dilapidation Report dated August 2011.	Dilapidation Report 2012	There are no recommendations.
C94	The construction environmental management plan will outline specific requirements for the management of traffic and transport, and a traffic management plan will be developed for operations.	NA	Construction is complete.	Management Assertion Site Inspection	
C95	Additional works to be implemented at the Eyre Street site entrance/exit would be undertaken at the costs of BHOP.	C	Complete. The entrance has been widened.	Site Inspection Photo 15 in Attachment 3 to the BHOP IA	There are no recommendations.
Waste Management Prior to commencement of operations, the procedures for managing wastes will be detailed in the waste management programme. The waste management programme will describe the following:					
C96a	The waste management programme will include recycling of wastes, where practicable.	C	The WMP addresses reuse of waste rock (Sec 8.2) and recycling opportunities for non-mineral waste (Sec 8.4). Only limited commercial recycling services are available in Broken Hill.	WMP	There are no recommendations.
C96b	The waste management programme will include storage of general waste, which cannot be recycled, in bins on-site prior to collection and off-site disposal by a licensed waste disposal contractor.	C	Provided for in the WMP, Sec 8.4.	WMP	There are no recommendations.
C96c	The waste management programme will include burying of packaging from explosive products in a separated, designated site in the bottom of BHP Pit or disposed of as part of the back fill for stopes.	C	Provided for in the WMP, Sec 8.4.	WMP	There are no recommendations.
C96d	The waste management programme will include storage of other regulated or hazardous waste in drums or designated bins on-site in a bunded area until collected by a licensed contractor for recycling or disposal off-site at a regulated facility.	C	Provided for in the WMP, Sec 8.4.	WMP	There are no recommendations.
C96e	The waste management programme will include depositing mineralised waste rock in the BHP Pit or used as rock fill in underground stoping voids.	C	Addressed in the WMP, Sec 8.3.4. It is planned to utilise about 50% of tailing in underground voids and to deposit the remainder in the Blackwood Pit.	WMP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C96f	The waste management programme will include using non-mineralised waste rock as road base, fill material for earth bunding, rehabilitative covering for disturbed areas or rock fill in underground stoping voids.	C	Provided for in the WMP, Sec 8.2.3.	WMP	There are no recommendations.
C96g	The waste management programme will include using tailings as part of the back fill mix for stopes underground.	C	See C96e.	WMP	There are no recommendations.
C97	The construction environmental management plan will outline specific requirements for the management of waste.	NA	Construction is complete.	Management Assertion	
Rehabilitation and Closure The rehabilitation and mine closure strategy will include:					
C98	Preparing and implementing a Rehabilitation Environmental Management Plan (or any such plan as required by the project approval), which addresses all aspects of rehabilitation and mine closure.	C	A Draft Closure Plan was completed in March 2011 and submitted to DRE with the Mining Operations Plan. No comments have been received. There will be major changes to this Plan following the completion of the Conservation Management Plan as the majority of closure issues relate to the management of heritage items. This will be completed following the completion of the Conservation Management Plan. As agreed in discussions with DoPI (Georgia Dragicevic) an extension to the end of December 2012 was sought and agreed in line with the Conservation Management Plan. See also S3.35a	BHOP IA	See Recommendation S3.35a.1.
C99a	The rehabilitation and mine closure strategy will include development of a conceptual mine closure plan.	C	See C98	BHOP IA	See Recommendation S3.35a.1.
C99b	The rehabilitation and mine closure strategy will include objectives for landscape management and rehabilitation.	NA	To be included in the revised Closure Plan to be prepared in conjunction with the Conservation Management Plan. See condition C98.		
C99c	The rehabilitation and mine closure strategy will include methodology for decommissioning, landscape management and rehabilitation of the Project Area.	NA	See condition C99b.		
C99d	The rehabilitation and mine closure strategy will include post-mining care and maintenance, and ongoing monitoring and management requirements.	NA	See condition C99b.		
C99e	The rehabilitation and mine closure strategy will include mine planning to consider and implement rehabilitation and closure strategy on an ongoing basis for the life of mine through progressive rehabilitation.	NA	See condition C99b.		
C100a	The rehabilitation and mine closure strategy will address final land form – confirm that the resulting landform will be similar to the current landform.	NA	See condition C99b.		
C100b	The rehabilitation and mine closure strategy will address drainage and erosion control – re-assessment and implementation of stormwater management plan for post-mining activities.	NA	See condition C99b.		

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
C100c	The rehabilitation and mine closure strategy will address safety – audit of Project Area to identify potential post-mining hazards and implement the appropriate controls.	NA	See condition C99b.		
C100d	The rehabilitation and mine closure strategy will address tailings – contain tailings to provide for long-term stability and prevention of dust generation.	NA	See condition C99b.		
C100e	The rehabilitation and mine closure strategy will address heritage items – preserve the heritage value of the Project Area for future use by the community.	C	This will be addressed in the Conservation Management Plan to be produced at the same time as the Mine Closure and Rehabilitation Plan.	CMP	There are no recommendations.

Broken Hill Operations Pty Ltd - Rasp Project
Independent Audit for Department of Planning & Infrastructure
Detailed Findings and Recommendations
Consolidated Mining Lease 7 (CML7)

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
Notice to Landholders					
ML1	<p>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>Note: 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>	NA	The lease was last renewed on 31/12/2005, prior to the period of this audit.	CML 7	
Mining, Rehabilitation, Environmental Management Process (MREMP)					
ML2a	<p>Mining Operations Plan 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>	C	Section 1.1 of the MOP indicates that the MOP was approved by the DPI in October 2006, and decline development commenced in February 2007. An amendment to the MOP was approved in May 2008 to extend the decline to 3,000 m (3,500 m including drilling cuddies). This amendment has been incorporated into this MOP together with clarification of points raised by the DPI at a review meeting in October 2008.	MOP	There are no recommendations.
ML2b.1	<p>Mining Operations Plan The MOP must:</p> <ul style="list-style-type: none"> identify areas that will be disturbed by mining operations 	C	Defined in plans and aerial photographs in section 1 of the MOP.	MOP	There are no recommendations.
ML2b.2	<p>Mining Operations Plan The MOP must:</p> <ul style="list-style-type: none"> detail the staging of specific mining operations 	C	Section 3 of the MOP sets out the proposed activities for the mine. Table 3.1 'Summary Project Schedule' of the MOP outlines an estimated Project schedule for the period of the MOP.	MOP	There are no recommendations.
ML2b.3	<p>Mining Operations Plan The MOP must:</p> <ul style="list-style-type: none"> identify how the mine will be managed to allow mine closure 	C	Addressed in sections 4 and 5 of the MOP. A Rehabilitation Management Plan (including mine closure) is also required by the Project Approval. See condition S3.35a.	MOP	There are no recommendations.
ML2b.4	<p>Mining Operations Plan The MOP must:</p> <ul style="list-style-type: none"> identify how mining operations will be carried out on site in order to prevent and or minimise harm to the environment 	C	Section 7 of the MOP sets out the environmental management controls and measures.	MOP	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
ML2b.5	Mining Operations Plan The MOP must: <ul style="list-style-type: none"> reflect the conditions of approval under: 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. 	C	Section 1.3 of the MOP outlines the consents, leases and licences held by BHOP. These are reflected in the MOP and other management plans.	MOP	There are no recommendations.
Annual Environmental Management Report (AEMR)					
ML3a	Reporting The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.	C	The 2009-2010 AEMR and 2011-2012 AEMR were sighted.	AEMR 2011-2012 AEMR 2009-2010	There are no recommendations.
ML3b.1	Reporting The EMR must: <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. 	C	The 2009-2010 and 2011-2012 AEMRs meet this requirement. The 2011-2012 AEMR was prepared in accordance with annual reporting requirements included in the Project Approval (see condition S4.3).	AEMR 2011-2012 AEMR 2009-2010	There are no recommendations.
ML3b.2	Reporting 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.	C	See conditions S4.5 and S4.6.	BHOP IA Management Assertion CBH Resources website Environment Incident Report Ryan Street Broken Hill	There are no recommendations.
ML6	Control of Operations If an Environmental Officer of the Department believes that the lease holder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the lease holder to:- (i) cease working the lease; or (ii) cease that part of the operation not complying with the Act or conditions; until in the opinion of the Environmental Officer the situation is rectified. The lease holder must comply with any direction given. The Director General may confirm, vary or revoke any such direction.	NA	No instances of directions being given to the lease holder by an Environmental Officer were identified during the audit.	Environment Incident Report Ryan St Management Assertion	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
ML7	<p>Reports</p> <p>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: (a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period; (b) Details of expenditure incurred in conducting that exploration; (c) A summary of all geological findings acquired through mining or development evaluation activities; (d) A statement of the ore and mineral reserves (e) Particulars of exploration proposed to be conducted in the next twelve months period; (f) All plans, maps, sections and other data necessary to satisfactorily interpret the report.</p>	C	Exploration activities are reported in the AEMR. No exploration activities were undertaken during the period of the audit.	AEMR 2011-2012 AEMR 2009-2010	There are no recommendations.
ML13	<p>Rehabilitation</p> <p>Disturbed land must be rehabilitated to a sustainable/agreed end land use to the satisfaction of the Director-General.</p>	C	See condition C98 and S3.35a.	BHOP IA	There are no recommendations.
ML15.1	<p>Exploratory Drilling</p> <p>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>	NA	No exploration activities were undertaken during the period of the audit.	AEMR 2011-2012 AEMR 2009-2010	
ML15a	<p>Exploratory Drilling</p> <p>If the lease holder drills exploratory drill holes he must satisfy the Director General that:- (a) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established</p>	NA	See condition ML15.1.		
ML15b	<p>Exploratory Drilling</p> <p>If the lease holder drills exploratory drill holes he must satisfy the Director General that:- b) all holes cored or otherwise are sealed to prevent the collapse of the surrounding surface</p>	NA	See condition ML15.1.		
ML15c	<p>Exploratory Drilling</p> <p>If the lease holder drills exploratory drill holes he must satisfy the Director General that:- (c) all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters</p>	NA	See condition ML15.1.		

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
ML15d	Exploratory Drilling If the lease holder drills exploratory drill holes he must satisfy the Director General that:- (d) if any drill hole meets natural or noxious gases it is plugged or sealed to prevent their escape	NA	See condition ML15.1.		
ML15e	Exploratory Drilling If the lease holder drills exploratory drill holes he must satisfy the Director General that:- (e) if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers.	NA	See condition ML15.1.		
ML15f	Exploratory Drilling If the lease holder drills exploratory drill holes he must satisfy the Director General that:- (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.	NA	See condition ML15.1.		
ML15g	Exploratory Drilling If the lease holder drills exploratory drill holes he must satisfy the Director General that:- (g) once any drill hole ceases to be used the land and its immediate vicinity is left in a clean, tidy and stable condition.	NA	See condition ML15.1.		
Transmission lines, Communication lines and Pipelines					
ML18a	Fences, Gates 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.	C	Activities on the lease have not interfered with or damaged fences.	Site inspection Management Assertion	There are no recommendations.
ML18b	Fences, Gates Gates within the lease area must be closed or left open in accordance with the requirements of the landholder.	C	BHOP is the landholder of the site.	Site inspection Management Assertion	There are no recommendations.
ML19a	Roads and Tracks 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.	C	See conditions C92, C93, S2.7a, S3.27 and S3.28.	Management Assertion Site Inspection Dilapidation Report 2012 BHOP IA	There are no recommendations.
ML19b	Roads and Tracks The lease holder must pay to the designated authority in control of the road (generally the local councillor 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 Compensation Fund.	C	See conditions S3.28 and C93. No damage has yet been identified.	Site Inspection Photo 15 in Attachment 3 to the BHOP IA	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
ML20	Roads and Tracks 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.	C	Requirements for use, upgrading and maintenance of roads on site are included in the Project Approval. See condition S3.6, C28, C87.	Site inspection BHOP IA Procedure - Management of Exposed Areas Procedure – Roadway Dust Management	There are no recommendations.
ML22	Use of Mercury or Cyanide 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.	NA	Not applicable to the current mining process.		
ML23	Resource Recovery 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.	NA	No such notice was identified during the audit.		
SPECIAL CONDITIONS					
ML26	General 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 subject to such conditions as may be stipulated.	C	Mining activities take place in accordance with the Project Approval.	Project Approval	There are no recommendations.
ML27	General 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.	C	Mining activities take place in accordance with the Project Approval.	Project Approval	There are no recommendations.
ML28	General The registered holder shall not deposit any refuse or waste rock on the dumps located on the areas indicated by Catalogue Plan Nos 03564, 03565, 03566 and 02322 unless authorised by the Minister and subject to such conditions as may be stipulated.	C	Mining activities take place in accordance with the Project Approval.	Project Approval	There are no recommendations.

Clause	Requirement	Compliance	Audit Finding	Objective Evidence	Recommendation
ML30a	Catchment Areas and Reserves 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.	NA	No such notice was identified during the audit.		
ML30b	Catchment Areas and Reserves 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.	C	Water management is undertaken in accordance with the Site Water Management Plan. See Condition S3.23.	SWMP	There are no recommendations.
ML30c	Catchment Areas and Reserves 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.	C	No dwellings have been erected.	Site inspection	There are no recommendations.
ML30d	Catchment Areas and Reserves 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.	C	The mine is connected to town water and sewerage.	Management Assertion	There are no recommendations.
ML31	Catchment Areas and Reserves 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.	C	Operations are confined to the mine site and have regard to water and Sewerage assets on site. The SWMP addresses use of town water in mining operations.	SWMP	There are no recommendations.
ML32	Catchment Areas and Reserves 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.	C	Operations are in accordance with the Project Approval and do not impact on off-site areas.	Project Approval	There are no recommendations.
ML33a	Prospecting/Mining Restriction The registered holder must not prospect or mine any mineral on the surface of the areas shown by:- 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.	C	Operations are in accordance with the Project Approval and do not impinge on identified exclusion areas.	Project Approval	There are no recommendations.



Appendices

Appendix 1 – Documents Reviewed

Appendix 2 – Persons Interviewed

Appendix 3– Audit Team Members

Appendix 4 – Expert Opinion on Air Quality Management

Appendix 5– Audit Photographs

Appendix 6 – Audit Recommendations and Response Table



Appendix 1

Documents Reviewed

No.	Document Title	Citation (as referred to in Audit Report)
1	Air Quality Management Plan BHO-ENV-PLN-001	AQMP
2	Air Quality Monitoring Program BHO-ENV-PRM-001	AQ Monitoring Program
3	Annual Environment Management Report, 2009 - 2010	AEMR 2009-2010
4	Annual Environment Management Report, 1 January 2011 - 31 March 2012	AEMR 2011-2012
5	Annual Return 2/11/2010 – 1/11/2011	Annual Return 2011
6	Attachment 3 Photographic Record of the BHOP IA	
7	BHCC letter re: Completion of work - 130 Eyre St, September 3, 2012	BHCC letter re: 130 Eyre St
8	Blasting Schedule 2012 (26 September - 5 October)	BS Oct
9	Blasting Vibration & Overpressure Monitoring Program BHO-ENVPRM-003 September 2011	BVO Monitoring Program
10	Bore Licence Certificate #85BL256109 - 3 July 2012	Bore Licence Certificate #85BL256109
11	Certificate of Analysis – water results	Certificate of Analysis – water results
12	Community Complaints Summary 2012 Attachment 14 to the BHOP IA	Community Complaints Summary
13	Community Lead Management Plan BHO-ENV-PLN-008	CLMP
14	Conservation Management Plan November 2011	CMP
15	Construction and Operations Manual for Tailings Storage in Blackwoods Pit - April 2012	Construction and Operations Manual for Tailings Storage in Blackwoods Pit (April 2012)
16	Dilapidation Report Eyre Street Access - August 2012	Dilapidation Report 2012
17	Electronic and manual community complaints register	Community Complaints Register
18	Environment Incident Report Ryan Street Broken Hill March 2012	Environment Incident Report Ryan Street Broken Hill
19	Environment Incident Report Ryan Street Broken Hill March 2012	Environment Incident Report Ryan Street
20	Environment Management Strategy V2 June 2012	Environment Management Strategy V2 June 2012
21	Environment Protection Licence 12559 Monitoring Data	Environment Protection Licence 12559 Monitoring Data
22	Environmental Assessment Report – Volume 1 July 2010	EA
23	Environmental Monitoring Results - Attachment 2 to the BHOP IA	Environmental Monitoring Results - Attachment 2 to the BHOP IA
24	Eyre Street Dam Environmental Investigation 5 March 2012	Eyre Street Dam Environmental Investigation Report 5/3/2012
25	Heritage Inventory Forms	Heritage Inventory Forms
26	Independent Environmental Compliance Audit 2012	This audit



No.	Document Title	Citation (as referred to in Audit Report)
27	Inventory of Heritage Items	Inventory of Heritage Items
28	Lead Management Plan BHO-SAF-PLN-004	LMP
29	Management of Exposed Areas BHO-ENV-PRO-003	Procedure - Management of Exposed Areas
30	Map showing areas treated with chemical dust suppression	Map showing areas treated with chemical dust suppression
31	Mining Operations Plan MOP0111 January 2011	MOP
32	Monitoring Location Overview - Attachment 12 to the BHOP IA	Monitoring Location Overview
33	Monitoring Operators Log Sample	Monitoring Operators Log Sample
34	Noise & Blasting Management Plan BHO-ENV-PLN-003	NBMP
35	Noise Monitoring Program BHO-ENVPRM-002 September 2011	Noise Monitoring Program
36	Pollution Incident Response Management Plan BHO-PLN-ENV-002	PIRMP
37	Preferred Project Report September 2010	PPR
38	Procedure - Management of Exposed Areas BHO-ENV-PRO-003	Procedure - Management of Exposed Areas
39	Procedure - Meteorological Forecasting to Guide Dust Management, BHO-ENV-PRO-004	Procedure - Meteorological Forecasting to Guide Dust Management
40	Procedure - Monitoring of Tailings Trench BHO-ENV-PRO-010	Procedure - Monitoring of Tailings Trench
41	Procedure - Real-Time Particulate Monitoring for Operational Dust Management BHO-ENV-PRO-006	Real-Time Particulate Monitoring for Operational Dust Management Procedure
42	Procedure – Roadway Dust Management BHO-ENV-PRO-007	Procedure – Roadway Dust Management
43	Project Approval - 07_0018 Broken Hill Operations Pty Ltd, 31st January 2011	Project Approval
44	Response to Submission Report July 2010	RSR
45	Revised Statement of Commitments	RSC
46	ROM Pad Management Procedure BHO-ENV-PRO-008	ROM Pad Management Procedure
47	Site Water Management Plan 30 April 2012 (Golder Associates)	SWMP
48	Summary of Project Approval and EP Licence Conditions Internal Audit, August 2012	BHOP IA
49	Surface Piping Raw Water System Flow Diagram 2011 BHOP-100-FD-001	Surface Piping Raw Water System Flow Diagram 2011 BHOP-100-FD-001
50	Traffic Management Plan July 2011	TMP
51	Waste Management Plan V2 April 2012 BHO-ENV-PLN-006	WMP



Appendix 2

Persons Interviewed

Name	Position
Tony Davis	General Manager
Brendan Barker	Manager Operations
Ian Patterson	Manager Metallurgy
Duncan Pickering	Mine Maintenance Superintendent
Pat Evers	Mining Superintendent
Ben Jones	Senior Environment and Community Officer
Paul Walson	Manager Health, Safety & Environment
Jan Corey	Health Coordinator
Michael Millstead	Mill Supervisor



Appendix 3

Audit Team Members

Graham Brown



Audit Role

- Lead Auditor
- Erosion and sedimentation specialist
- Quality Assurance

Relevant Experience

Graham Brown is the Principal of Graham A Brown & Associates. He holds a Master of Science degree in Geology. He is registered by RABQSA International in Australia as a Lead Environmental Auditor; as a Principal Environmental Auditor by the Institute of Environmental Management and Assessment (IEMA) in the UK; as a Certified Professional Environmental Auditor (CPEA) by the Board of Environmental, Health and Safety Auditor Certifications (BEAC) in the USA; as a Greenhouse and Energy Auditor – Technical under the Australian National Greenhouse and Energy Reporting Scheme; and as a Lead Auditor under the International Cyanide Management Code. He has over 40 years experience in the mining and resource industries, along with other industry sectors, including over 30 years as an environmental consultant, during which time he has carried out more than 500 environmental assignments. Graham Brown is the author of a series of environmental guidebooks including *The Environmental Audit Guidebook* and the *Environmental Management Systems Guidebook*, environmental audit protocols and other publications. He is also one of Australia's leading trainers of environmental auditors and regularly conducts accredited public and in-house training workshops.



Jade Molloy



Audit Role

- Environmental Auditor-in-training

Relevant Experience

Jade Molloy holds a Bachelor of Environmental Science and Management majoring in Social Systems from the University of Newcastle.

Jade has worked with the Environmental Health and Protection department of the Gosford City Council assisting environmental compliance officers in their daily operations including water quality sampling, analysis and reporting; routine environmental compliance inspections; investigations of corporations and individuals in breach of the Protection of the Environment Operations Act, 1997.

During her time at Graham A Brown & Associates, Jade has been involved with a variety of projects, such as developing management procedures for a number of clients; reviewing vegetation management plans developed in response to enforceable consent conditions under the EPBC Act requiring the protection of threatened species, ecological communities and habitats; developing environmental compliance audit protocols and OHS audit protocols for a variety of industries, some with especially difficult compliance regimes; document review as part of government environmental compliance audits; undertaking decommissioning site audits; participating in client meetings both in-house and on-site; and undertaking numerous research projects for senior consultants reporting in a concise and timely manner. Jade is also a support consultant for the Intelex software program which is a tool for managing Safety, Quality and Environmental Management Systems.



Ken Page



Audit Role

- Legal and Regulatory Compliance Specialist

Relevant Experience

Ken Page is a Senior Consultant with Graham A Brown & Associates and is a specialist in environmental compliance issues. He has developed legislative compliance databases and protocols, including the multiclient *eComp* legislative compliance system, and has participated in many environmental compliance audits. He is an economist who worked for over 20 years as a senior policy advisor to the Commonwealth and ACT governments. He has wide experience in evaluating the economic and social impact of projects and programs in areas including the environment, transport, industry and natural resources. He also has extensive experience in management consulting in the government and private sectors, including environmental and compliance management systems and Corporate Social Responsibility programs. He has extensive experience in auditing and program reviews internationally in a broad range of categories including financial, natural resources, environmental and social.



Appendix 4

Expert Opinion on Air Quality Management

20 December 2012

Paul Noonan
Senior Consultant
Graham A Brown & Associates
Level 1, 7 Newcomen Street
Newcastle NSW 2300
Via email: Paul@grahamabrown.com.au

RE: Review of Audit findings for Rasp Mine Broken Hill Audit

Dear Paul,
Thank you for engaging Todoroski Air Sciences to conduct this review.

We have examined the following in our review:

1. Draft Rasp Mine Broken Hill Audit Protocol (GA Brown)
2. Air Quality Management Plan
3. Air Quality Monitoring Program
4. Annual Environment Monitoring Report (AEMR) January 2011 – March 2012
5. Procedure – Management of Exposed Areas
6. Procedure – Real Time Particulate Monitoring for Operational Dust Management
7. Procedure – Roadway Dust Management
8. Procedure – ROM Pad Management
9. Construction and Operations Manual for Tailings Storage in Blackwoods Pit (April 2012)
10. Photo evidence of dust monitors
11. Photo evidence of roads
12. Selected CBH Resources monitoring results
13. Rasp Mine Broken Hill - Internal Audit

Findings

The review found that overall the mine management system and documentation includes the majority of ameliorative controls that would need to be taken to manage the dust and lead particulate emissions from each of the activities, individually to a high level. However several areas were found to be lacking. This includes issues with incomplete and inconsistent documentation and document control, and a lack of evidence that the mine's air quality management system is delivering overall best practice management of dust and lead particulate. For example despite the comprehensive list of actions, we did not find evidence that dust levels were checked and analysed daily for elevated emissions due to the mine or that daily actions to minimise dust on days of recorded elevated emissions had occurred.

In other words, the mine has comprehensively documented what could be done, but appears to lack a coherent system to ensure that it is done to the maximum extent feasible at the required time.

Nevertheless, it is considered that the issues identified can be readily corrected in a short time with advice from a suitably experienced air quality specialist to assist the mine to co-ordinate its overall system and documentation.



Specific air quality matters that warrant attention

Specific details in regard to each of the air quality management plan documents are outlined below.

These comments only outline issues that may be lacking and warrant attention. It needs to be noted that the actions listed by the RASP mine for dust management include the great majority of what, in a well-coordinated AQMP, would deliver best practice dust management, and the many positive aspects in this regard are not commented on to provide focus to the review.

Air Quality Management Plan

The purpose of the AQMP overlooks the key requirement for the Proponent to "implement best practice dust management", and instead focuses on specific individual requirements for dust mitigation that are a secondary subset of the more stringent best practice management requirement.

The AQMP overview does not include a feedback provision for continuous ongoing improvement.

The AQMP system inter-relationships are not dealt with, apart from a figure showing the AQMP being related to the air quality monitoring program and a number of individual procedures. This structure has potential to curtail the ability to apply holistic management of the mine in regard to dust and lead particulate.

The AQMP considers that Schedule 3.5 requirements for best practice, visible dust and regular assessment of monitoring and weather forecast data are dealt with in Sections 10, 10.18 and 10.19 of the AQMP. However these sections do not deal with these requirements. We were unable to find any evidence that these requirements are adequately dealt with in the AQMP.

Section 8.1.1 suggests that the "mining related emissions sources may be controlled by a factor of approximately 95% compared to uncontrolled emissions from the site." This is unlikely to be achievable and may need to be revised.

The risk ranking for mine emission sources was developed by considering the impacts at three representative receptor locations. These locations are not identified and only a single risk ranking for each source is presented, whereas the risk ranking will differ at various receptors around the site, depending on the varying factors, such as proximity to the specific source. This raises concerns as to how useful such a risk ranking may be, as it appears the ranking may be an average or some other homologation that may underestimate the actual risk of impact at any location.

The tailings storage facility TSF is omitted from the risk ranking as it is not considered to be a significant source of lead. It is understood that millions of dollars have been spent to rehabilitate large areas of land contaminated by deposited surface lead particulate that was most elevated in the vicinity of historic tailings facilities at this site. This statement is also incongruous with the significant effort that is apparent in the AQMP for mitigating dust from the TSF. Therefore it would seem reasonable that this omission be justified.

Table 7 of the AQMP states that the objective of the AQMP is to "ensure that all air quality sources are adequately controlled". The term "adequate" is not defined and it is not clear whether this means adequate in the general sense of a typical mine or in the case in question of a mine required to implement best practice dust management.

Section 10.8 refers to operators visually monitoring dust and acting to control the level of dust. It is not clear how the operator would know when to act and when not to act or how this would be consistent between operators, or would function if the activity occurs at night when air dispersion may be poor and impact may be elevated.



Section 10.18 refers to off-site monitoring, but there is no evidence that this has occurred. The suitable locations that have been identified do not appear to be documented in the air quality monitoring program.

Air Quality Monitoring Program

Dust deposition gauge DG6 is located against a sheet metal fence and does not appear to be compliant with the EPA requirements for the locating of ambient air monitoring equipment.

Section 5.3 identifies data screening rules to be applied to TEOM data. These rules do not accord with any known or accepted EPA or other regulatory procedure. For example, short term TEOM data is regularly above $500 \mu\text{g}/\text{m}^3$ and should not be excepted from the 24-hour average calculation, doing so will underestimate the results significantly and would render the results produced invalid. Similarly an increase of $100 \mu\text{g}/\text{m}^3$ between consecutive readings is relatively normal for short term TEOM data results, indeed it is the very thing that a TEOM can be used to successfully uncover. Any TEOM data produced using the procedure at 5.3 should be re-calculated based on the original raw data, using and acceptable regulatory methodology.

Section 9.6 identifies that 24-hour PM_{10} levels on site exceeded ambient receptor criteria approximately 10% of the time from January 2008 to December 2009. This indicates that on approximately 70 days over two years the dust levels exceeded the criteria, whereas the AEMR shows no exceedance. This should be explained.

Annual Environment Management Report (AEMR) January 2011 – March 2012

The AEMR does not:

- ✦ present 24-hour PM_{10} results from the TEOM monitors.
- ✦ Present the period of monitoring and only lists the year - it appears that less than a year of monitoring is presented (missing data aside).
- ✦ Incorrectly identifies exceedances of the dust deposition criteria for D2, D3 and D6. The criteria is an annual average level expressed as a monthly deposition rate. The results comply with the criteria.

The complaints register includes a complaint on 16/9/2011 about road dust and states that a trial of dust suppression will soon occur. Given the requirement for chemical dust suppression, it is unclear whether suppressants were in use or were proposed to be trialed.

Procedure – Roadway Dust Management

This refers to controlling dust emission potential to the maximum practicable extent - which is one of the few references in the documentation that is generally consistent with best practice management.

The document is not dated, and has no approval.

The procedure defines a chemical dust suppressant as a crusting agent. Crusting agents may be useful on undisturbed areas but would not generally be useful for active roads.

The sampling procedure to test surface silt loadings is not in accordance with an accepted regulatory compliant method. There are potentially serious shortcomings in the adapted, non-standard approach suggested in this procedure and it is likely to underestimate actual silt loadings.

Section 6.1.46 suggests that if silt loading criteria are exceeded, unpaved roads would be swept with a street sweeper and the sampling frequency of silt loading evaluation will be reduced. This is clearly incorrect and



unintended, however a more serious issue arises in that silt loadings only apply to paved roads, and silt fraction applies to unpaved roads. These two parameters are different and require different methodologies to measure, whereas the document does not appear to make any distinction between them and treats paved and unpaved roads similarly.

This and the non-standard sampling approach are serious deficiencies in the procedure. It is recommended that a suitably experienced air quality consultant be engaged to correct these issues.

Procedure - Real Time Particulate Monitoring for Operational Dust Management

The purpose does not refer to best practice management, only compliance with criteria values.

The document is not dated, and has no approval.

The procedure is focused on deriving a ratio between 15 minute PM₁₀ levels and 24-hour average PM₁₀ levels as a means of developing triggers for compliance. Apart from the obvious mathematical 1/96 relationship that will exist, it will not be not feasible to develop any reliable mine management procedure based simply on a ratio between short term 15-minute PM₁₀ measurements and 24-hour levels.

The procedure also suggests that 15-minute measurements greater than 300 µg/m³ may be associated with an exceedance of the criteria. It is noted that any 15-minute PM₁₀ dust level above zero is associated with an exceedance of 24-hour average criteria if the exceedance it occurs, and indeed TEOM results regularly produce negative values, even on days when 24-hour levels exceed criteria.

The success with the required real time management is significantly more involved than the author of this procedure appears to contemplate and it is suggested that assistance from a suitably experienced consultant in such matters be enlisted.

General

The documentation refers to numerous procedures and documents or appendices which do not appear to exist. This should be corrected, and it is suggested that advice from a suitably experienced air quality expert in mining best management practice would be of benefit in this regard and in relation to specific issues identified above.

Concluding observation

Whilst the above review identifies some significant shortcomings, one should bear in mind that the majority of the mitigation actions required to be conducted by the mine are well comprehensive and are documented. The mine should now focus on coordinating these actions within an effective management procedure for the overall mine.

Todoroski Air Sciences

Aleks Todoroski



Appendix 5

Audit Photographs



Photo 1. Automatic air monitoring station, noise and vibration monitors.



Photo 2. Automatic air quality monitoring station, dust deposition monitor and noise monitor.



Photo 3. Blackwoods Pit showing proximity to residential area.



Photo 4. Blackwoods Pit with tailings disposal.



Photo 5. Board at entrance to Rasp Mine providing the Complaints Hotline phone number.



Photo 6. Covered conveyors and enclosed transfer point.



Photo 7. Covered conveyor from crusher to ore storage bin.



Photo 8. Hydrocarbon storage area with spill kit.



Photo 9. Inadequately banded lead concentrate tank.



Photo 10. Internally banded 63,000 litre diesel Transtanks. The sump discharges to an oily water separator.



Photo 11. Lined storage pond for water from the water treatment plant.



Photo 12. Main chemical storage.



Photo 13. Processing plant adjacent to Blackwoods Pit.



Photo 14. Processing Plant.



Photo 15. Rail cars loaded with zinc concentrate containers.



Photo 15. ROM pad showing ore stockpile, bund and water sprays.



Photo 16. ROM pad showing ore stockpile, bunds and water sprays.



Photo 17. Toe drain at TSF 1.



Photo 18. Unbunded IBC 1.



Photo 19. Unbunded IBC 2.



Photo 20. Vehicle washdown at site boom gate.



Photo 21. Washdown for trucks and concentrate containers leaving processing plant (in background).



Photo 22. Water Treatment Plant.



Photo 23. Crusher enclosure and bag house. (Photo by Rasp Mine).



Photo 24. Building installed around the flotation facility providing shielding of the SAG and Ball mills.



Photo 25. TSF 1 capped with slag and a lined water storage.



Photo 26. Meteorological Station on site (photo by Rasp Mine).



Photo 27. Horwood Dam.



Photo 28. Dust sampling jar on site and microphone for noise monitoring.



Appendix 6

Audit Recommendations and Response Table

Broken Hill Operations Pty Ltd - Rasp Project
Independent Audit for Department of Planning & Infrastructure
Audit Recommendations and Response Table

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
PROJECT APPROVAL							
S2.2	The Proponent shall carry out the project generally in accordance with the: (a) EA; (b) Response to Submissions and PPR; (c) Statement of Commitments; and (d) conditions of this approval. If there is any inconsistency between the documents listed in this condition, 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.	C	S2.2.1 The recommendations in the body of this audit should be addressed as appropriate to cover the non-compliance with this condition. Ranking: N				
S2.8b	Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.	NC	S2.8b.1 Copies of construction and occupation certificates for mine buildings should be made available in BHOP's records. Ranking: N				
S2.11	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.	NC	S2.11.1 Copies of correspondence with DoPI in relation to the surrender of existing development consents should be available in BHOP's records. Ranking: N				
S3.6	The Proponent shall seal and maintain the roads listed in Table 6 to the satisfaction of the Director-General. The roads shall be sealed prior to the commencement of ore extraction, unless otherwise agreed by the Director-General.	C	See recommendation C87.1 and C87.2.	See recommendation C87.1 and C87.2.			
S3.11c (l)	Air Quality Management Plan The Plan must include an air quality monitoring program that provides for periodic point source monitoring at Point 1 (Ventilation Shaft – Little Kintore Pit) and Point 2 (Process Enclosure/ Baghouse Stack).	O	S3.11c (l).1 The Air Quality Monitoring Program should be revised to include Point 1 and Point 2 as monitoring locations listed within Table 6. Ranking: I				

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
S3.11f	Air Quality Management Plan The Plan must include provision for regular review of dust monitoring data, with comparison of monitoring data with that assumed and predicted in the documents referred to under S2.2.	O	S3.11f.1 The annual environmental performance reviews referred to in the AQMP should be completed and provided to DoPI in a timely manner, i.e. not more than 3 months after the period to which they relate. Ranking: I				
S3.11h	Air Quality Management Plan The Plan must include specific complaints management procedures in the event that dust monitoring indicates elevated off-site impacts.	C	See Recommendations C7.1 - C7.4.	See Recommendations C7.1 - C7.4.			
S3.11j	Air Quality Management Plan The Plan must include protocols for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions.	NC	S3.11j.1 A protocol should be established in the AQMP for regular maintenance of plant and equipment to minimise the potential for elevated dust generation, leaks and fugitive emissions. Ranking: I				
S3.11k	Air Quality Management Plan The Plan must include 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.	NC	S3.11k.1 A revised incident reporting and investigation procedure reflecting current practice should be completed and issued as soon as possible. Ranking: U S3.11k.2 The AQMP should be revised to include a contingency plan for incidents leading to elevated dust impacts. Ranking: I				
S3.13b	Lead Management Plan This plan must be submitted to the Director-General for approval by 30 June 2011.	NC	S3.13b.1 The Lead Management Plan (undated) and the Community Lead Management Plan (issued as a draft on 22/11/2011) should be finalised as a matter of urgency and submitted to the Director-General for approval. Ranking: U				

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
S3.13f	Lead Management Plan This plan must 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.	O	S3.13f.1 Appropriate links reporting the relevant dust and blood level monitoring data should be established on CBH Resources website when available on the NSW Health website. Ranking: I				
S3.17	Noise Limits The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 7. Table specifies operational noise criteria at 14 receiver locations.	NC	S3.17.1 The requirement for noise monitoring at 14 receiver locations specified in Table 7 of the Project Approval should either be complied with, or approval should be sought from the Director-General to reduce the monitoring locations to the 5 off-site locations currently monitored. Ranking: I				
S3.20b	Noise Management Plan This plan must describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time noise management system that employs both reactive and proactive mitigation measures.	O	S3.20b.1 The NMBP should be revised to correct the reference in Table 2 to 'Management Strategies for Noise and Blasting' to read section 7 instead of section 8.1. Ranking: I				
S3.20c (l)	Noise Management Plan This plan must include a noise monitoring program that uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the project.	O	S3.20c (l).1 The reference to the Noise Monitoring Program in the NBMP should be changed from Appendix A to BHO-ENV-PRM-002. Ranking: I				
S3.20d	Noise Management Plan This plan must describe the blast mitigation measures that would be implemented to ensure compliance with the relevant condition of this approval.	O	S3.20d.1 The reference to the BVO Monitoring Program in the NBMP should be changed from Appendix B to BHO-ENV-PRM-003. Ranking: I				
S3.20e	Noise Management Plan This plan must describe the measures that would be implemented to ensure that the public can get up-to-date information on the proposed blasting schedule on-site.	NC	S3.20e.1 The blasting schedules that are published weekly on the CBH Resources website should be referenced within the NBMP. Ranking: I				
S3.22a	Water Supply 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.	NC	S3.22a.1 The SWMP should be revised to include adjusting the scale of mining operations to match its water supply in case of drought. Ranking: I				

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
S3.22b	Water Supply The Proponent is required to obtain the necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.	NC	S3.22b.1 Condition 2 (a), (b), (c) and (d) noted in the Bore Licence Certificate #85BL256109 should be completed. This includes furnishing to NSW Office of Water: (a) details of the work completed by a licensed driller; (b) a location plan; (c) details of any pumping tests carried out; and (d) details of any water analysis Ranking: U				
S3.31	The Proponent shall: (a) minimise the visual impacts, and particularly the off-site lighting impacts, of the project; (b) take all practicable measures to further mitigate off-site lighting impacts from the project; and (c) ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version, to the satisfaction of the Director-General.	O	S3.31.1 In the event that the site includes legacy lighting installed prior to the re-opening of the mine, such lighting should be investigated for compliance with the Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting. Ranking: N				
S3.32b	The Proponent shall ensure that the waste generated by the project is appropriately stored, handled, and disposed of, to the satisfaction of the Director-General.	O	S3.32b.1 All unbanded liquid waste should be relocated and stored in banded storage containers or in banded areas. Ranking: E				
S3.34b	Rehabilitation Objectives The Proponent shall achieve the following rehabilitation objectives: - sealing and/ or treating 'free areas' of the site and other potential sources of wind-blown dust to prevent the emission of dust following closure; - preserving the heritage value of the site; and -making the site suitable for commercial and/ or educational uses, to the satisfaction of the Director-General of I&I NSW.	O	S3.34b.1 The Mine Closure Plan should address progressive rehabilitation activities to be undertaken over the life of the mine. Ranking: I				
S3.35a	Rehabilitation Management Plan The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Director-General of I&I NSW. This plan must be prepared in consultation with the Department, DECCW, NOW, Council and I&I NSW.	C	S3.35a.1 Development of the Mine Closure Plan should proceed, so far as possible, in accordance with the agreed timetable. Ranking: I				

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
S3.35f	Rehabilitation Management Plan This plan must be submitted to the Director-General of I&I NSW for approval by the end of December 2011.	C	See Recommendation S3.35a.1.	See Recommendation S3.35a.1.			
S4.1e (v)	Environmental Management Strategy This strategy must describe the procedures that would be implemented to respond to emergencies.	O	S4.1e(v).1 The Pollution Incident Response Management Plan (PIRMP) should be referenced within section 9 'Environmental Emergency Response' of the Environmental Management Strategy. Ranking: I				
S4.1f (l)	Environmental Management Strategy This strategy must include copies of any strategies, plans and programs approved under the conditions of this approval.	NC	S4.1f(l).1 Review the Environmental Management Strategy to include copies of any strategies, plans and programs approved under the conditions of the Project Approval. Ranking: I				
S4.2e	Management Plan Requirements The Proponent shall ensure that the management plans include a contingency plan to manage any unpredicted impacts and their consequences.	NC	S4.2e.1 An Emergency Response Plan for the site should be developed and implemented. Ranking: U S4.2e.2 Relevant Management Plans such as the AQMP and NBMP should be modified to include specific actions that will be taken in an environmental emergency, or a reference to the Emergency Response Plan. Ranking: I				
S4.2f	Management Plan Requirements The Proponent shall ensure that the management plans include a program to investigate and implement ways to improve the environmental performance of the project over time.	O	S4.2f.1 Consideration should be given to incorporating programs to investigate and implement ways to improve the environmental performance of the project over time, which should be cross referenced as appropriate in relevant documents. Ranking: N				
S4.2h	Management Plan Requirements The Proponent shall ensure that the management plans include a protocol for periodic review of the plan.	O	S4.2h.1 The WMP should be revised to include details on periodic review. Ranking: I				

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
S4.3b (iii)	Annual Review The review must 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 relevant predictions in the documents referred to in S2.2.	O	S4.3b (iii).1 The monitoring results and complaints records should be compared in future reports with the predictions in the documents referred to in S2.2 when more longer term data is available. Ranking: N				
S4.3c	Annual Review The review must identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance.	O	S4.3c.1 A regulatory Compliance Assurance Program should be established that periodically reviews compliance with the conditions of regulatory documents. Ranking: I				
S4.3d	Annual Review The review must identify any trends in the monitoring data over the life of the project.	NC	S4.3d.1 The identification of trends in the monitoring data over the life of the project should be included in future AEMRs. Ranking: I				
S4.3e	Annual Review The review must identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies.	O	S4.3e.1 The AEMR must identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies. Ranking: I				
S4.4	Revision of Strategies, Plans & Programs Within three months of: (a) the submission of an annual review under Condition 3 above; (b) the submission of an incident report under Condition 5 below; (c) the submission of an audit report under Condition 7 below, or (d) any modification of the conditions of this approval (unless the conditions require otherwise), the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.	O	S4.4.1 The Strategies, Plans and Programs required under the Project Approval should be reviewed and also revised if necessary as soon as possible, and repeated three months after the submission of the annual AEMR, the submission of an incident report under Condition 5; the submission of an audit report under Condition 7, or any modification of the conditions of the Project Approval. Ranking: U				

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
S4.6	<p>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>	O	<p>S4.6.1 The AEMR 2011-2012 should be uploaded onto the CBH Resources website. Ranking: U</p> <p>S4.6.2 Monthly monitoring reports should be uploaded to the CBH Resources website within 2 weeks of the end of the month to which they relate. Ranking: I</p> <p>S4.6.2 Monthly monitoring reports should include information necessary for the interpretation of the reported results including the location of monitoring points and relevant trigger values, when available. Ranking: N</p>				
S4.9a	<p>From the end of March 2011, the Proponent shall make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> - the documents referred to in S2.1; - all current statutory approvals for the project; - all approved strategies, plans and programs required under the conditions of this approval; - 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 Director-General. 	NC	See recommendations C7.4 and S4.6.1.	See recommendations C7.4 and S4.6.1.			

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
EPL 12559							
L3.1	Waste 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.	C	L3.1.1 In accordance with the commitment made in the WMP, a comprehensive Waste Inventory containing information on all wastes generated, handled and disposed of should be developed for the site. Ranking: N L3.1.2 Waste Management documentation should include a statement that no waste generated outside the premises shall be received. Ranking: N				
O1.1	Activities must be carried out in a competent manner 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 carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	O	O1.1 A copy of the BHOP standard for waste management – BHO-SAF-STD-014 which applies to the site should be available on site. Ranking: N				
M1.2	Monitoring records All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	O	M1.2.1 A records management procedure should be considered incorporating a requirement to keep records for at least 4 years after the monitoring or event to which they relate took place. Alternatively this requirement should be documented in each Management Plan. Ranking: I				
M1.3	Monitoring Records The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	O	M1.3.1 The table retained in the 23 folders should be revised to include the information required by this condition. Ranking: I				

Clause	Requirement	Compliance	Recommendation	BHOP Response	Proposed Action	Target Completion Date	Responsibility
M5.3	Recording of pollution complaints The record of a complaint must be kept for at least 4 years after the complaint was made.	O	M5.3.1 The complaints procedure should include a statement such as "the record of a complaint must be kept for at least 4 years after the complaint was made" to ensure staff do not delete records. Ranking: I See also recommendation M1.2.1.				
M6.1	Telephone complaints line 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.	NC	See recommendation C7.2 and C7.3.	See recommendation C7.2 and C7.3.			
M6.2	Telephone complaints line 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.	C	See recommendation C7.3.	See recommendation C7.3.			
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.	O	See recommendation M1.2.1.	See recommendation M1.2.1.			
R1.8	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	NC	R1.8.1 A signed copy of annual returns submitted to the EPA should be retained in BHOP's records. Ranking: I				
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C1	Continued support of the Community Consultation Group who will continue to meet on a regular basis.	NC	C1.1 A Community Consultation Group should be established as required by this condition, and arrangements made to hold regular meetings. Ranking: U				

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C2	Provision of the Rasp Mine News Updates to local neighbours surrounding the mine to outline information on activities.	NC	C2.1 The Rasp Mine Newsletter should be re-established and provided to local neighbours surrounding the mine and to the wider community and other interested parties to outline information on activities. Ranking: U				
C3	Rasp Mine information notice board to be located at the Café and Miner's Memorial.	NC	C3.1 The 2013 budget for a Rasp Mine information notice board to be located at the Café and Miner's Memorial should be confirmed and an action plan prepared for its construction and installation. Ranking: U				
C4	Annual distribution of a Rasp Mine magazine providing a summary of environmental monitoring, initiatives and activities.	NC	C4.1 As an alternative to a Rasp Mine magazine, consideration should be given to incorporating a summary of environmental monitoring, initiatives and activities in the Rasp Mine Newsletter recommended in C2.1, possibly as a reference to the AEMR published annually on the CBH Resources website. Ranking: I				
C5	Targeted consultation involving presentations and briefings on specific issues as they arise.	NC	C5.1 Targeted consultation involving presentations and briefings on specific issues as they arise could be provided through the Community Consultation Group recommended in C1.1, as well as general community presentation nights as required. Ranking: I				
C6	Consultation with relevant stakeholders during the preparation of the final closure plan.	C	C6.1 Relevant stakeholders who would have an interest in the preparation of the final closure plan should be identified and documented to ensure that all interested parties are included. Ranking: N				

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C7	Continued implementation of the complaints procedure to address individual issues as they arise.	NC	<p>C7.1 The update of the Complaints Procedure to reflect current practice should be completed and a revised procedure issued as soon as possible. Ranking: U</p> <p>C7.2 The telephone Complaints Hotline system should be reviewed and if considered necessary, after hours diversion to a 24 hour operator's telephone or an appropriate mobile phone should be established to make it operational during operating hours. The Complaints Procedure should also reflect this change. Ranking: U</p> <p>C7.3 The Rasp Mine Complaints Hotline telephone number should be more prominent on the CBH Resources website to make it easier to find. Ranking: I</p> <p>C7.4 The Rasp Mine Complaints Summary on the CBH Resources website should be kept up to date. Ranking: U</p>				
C9	Re-location of mine ventilation fans to Little Kintore Pit and away from residential and commercial areas and installing noise suppression on the fan units.	C	<p>C9.1 Consideration should be given to using shotcrete or some other sealant on the wall of the Little Kintore Pit that will be directly impacted by the airflow from the fans, in order to ensure the elimination of dust generation when the ventilation system is operational. Ranking: I</p>				

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C10	Smaller stope designs to reduce blast vibrations, designing blasts and arranging firing times to minimise potential community impacts.	C	C10.1 As blasting has been identified as the most significant environmental issue for the Rasp Mine, and attracts the greatest number of complaints, methods should continue to be investigated to minimise vibration from blasting and its impacts on the local community. Ranking: I				
C28	Extensive sealing of haul roads and other primary roadways in accordance with the included schedule.	O	C28.1 The Roadway Dust Management Procedure should be reviewed to ensure that Appendix 1 is included. The numbering should also be revised (6.1.29 and 6.1.30 are missing). There are three Appendices (A, B and C) listed at the end of the Procedure and none of these are attached. Ranking: I				
C29	Application of chemical dust suppression as per the manufacturer's specification, or more often as required, on all "free areas" of the site.	O	C29.1 Existing free areas as defined that have not been treated in accordance with the procedure BHO-ENV-PRO-003 should be treated in accordance with a timetable to be developed by Rasp mine. Ranking: I				
C38	Identification and remediation of areas where fines or silt has built up (typically after heavy rain storms).	NC	C38.1 A survey should be undertaken to identify and document any areas on site where fines or silt may build up and measures established to remediate them through appropriate actions to prevent dust generation when they dry out. Ranking: U C38.2 The after-rain checklist should be reviewed for completeness and inspection of roads and associated drainage should be added. Also add inspection of any areas identified through recommendation C38.1. Ranking: I				

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C39	Remediation of disturbed areas including but not limited to, removal and burial of fine material, capping with inert waste rock, or use of dust suppressants.	NC	C39.1 A remediation action plan should be prepared as part of the Mine Closure Plan (see C98 for details). Rating: I				
C40	Undertaking sampling to quantify road surface silt loadings on an ongoing basis.	NC	C40.1 Add sampling to quantify road surface silt loadings on an ongoing basis to the Procedure – Roadway Dust Management. Ranking: I				
C44	Regular maintenance of pollution control equipment to ensure that it is functioning at optimal performance levels. A maintenance schedule will be documented and implemented for all pollution control equipment as part of an environmental management plan.	NC	C44.1 A maintenance schedule should be documented and implemented for all pollution control equipment, including actions to be taken, timetables and responsibilities. Ranking: U C44.2 An environmental management plan, program or EMS should be considered to formalise environmental management on site, and to incorporate a pollution control and monitoring equipment maintenance schedule. Ranking: I				
C50	Efficiency of all new mobile and fixed equipment will be considered during procurement for both diesel and electric powered equipment.	NC	C50.1 A Procedure should be developed to assess the efficiency of all new mobile and fixed equipment during procurement for both diesel and electric powered equipment. Ranking: I				

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C55e	The lead management plan will include requirements for inspections and housekeeping for each operational area to minimise dust buildup and the potential for subsequent off-site movement.	C	C55e.1 Documented procedures should be prepared for inspections and housekeeping for each operational area to minimise dust buildup and the potential for subsequent off-site movement. The procedures should include the action to be taken, responsibility, frequency and reporting requirements, as well as maintenance requirements (to be entered into Pronto if appropriate). Ranking: U				
C57	If the dust suppressant chosen to be used at the site is not included in the Screening Assessment undertaken as part of the EAR (Annexure I(b)), then a new health risk assessment of the dust suppressant will be undertaken and forwarded to Greater Western AHS and NSW Health for approval prior to its use on-site.	NC	C57.1 The requirement for a new health risk assessment of the dust suppressant to be undertaken and forwarded to Greater Western AHS and NSW Health for approval prior to its use on-site should be documented in a procedure and implemented if the dust suppressant chosen to be used at the site is not included in the Screening Assessment undertaken as part of the EAR (Annexure I(b)). Ranking: I				
C66	Provision and location of spill kits and requirements for training.	NC	C66.1 Verification should be obtained that spill kits provided are suitable for recovering spills of substances located at the location of the spill kit, e.g. are only hydrocarbons stored or are other chemicals present as well. Ranking: I C66.2 Training should be planned and provided either by the supplier or site trainers, for personnel who are likely to use the spill kits. Ranking: I				

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C67	Design and installation of chemical storage to include bunds with suitable sumps, and where appropriate roofed to prevent stormwater entry.	O	C67.1 An inventory of chemicals stored on site should be developed and maintained, including a plan, documenting where chemicals are stored, the types and quantities at each location, and the type of storage facilities (roofed, inside building, outdoors, type of bunding and drainage etc). A risk assessment should be undertaken to determine if facilities are adequate and whether improvements should be made. Ranking: I				
C70	Management of sediment and sludge from vehicle washing facilities.	C	C70.1 A procedure or other document should be developed requiring the pumpout of sediment and sludge from all vehicle washing facilities including at the boom gate, workshop and processing plant for concentrate trucks and containers, and records of pumpout activities should be maintained. Ranking: I				
C72	Monitor the quality and quantity of water captured by the toe drains on the Tailings Storage Facility (TSF).	NC	C72.1 The quality and quantity of water captured by the toe drains on the TSF should be monitored in accordance with the requirements of the Monitoring of Tailings Trench Procedure. Ranking: U C72.2 The Monitoring of Tailings Trench Procedure should be reviewed for accuracy. It is filed under Procedure - Monitoring Trench Integrity, and is titled in the header Application of Dust Suppression Procedure BHO-ENV-PRO-010 Ranking: I				
C73	Monitor the movement of seepage sourced from the TSF and to monitor the quality of the local groundwater system.	C	See recommendation C72.1.	See recommendation C72.1.			

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C77	All necessary licences under the Water Act 1912 will be obtained prior to the commencement of activities on site.	C	C77.1 All Licences under the Water Act 1912 including those held for groundwater monitoring bores should be listed in the AEMR and the Site Water Management Plan (Golder Associates, 2012) when revised, as well as in other documentation. All licences, permits, approvals etc should be referenced by their official number, as well as the Rasp Mine number. Ranking: I				
C79a	The Conservation Management Plan will include a photographic record of listed heritage buildings.	NC	C79a.1 The final Conservation Management Plan should include the photographic record of listed heritage buildings from the existing Inventory of Heritage Items, and any additional archival photographic record produced. Ranking: I				
C79b	The Conservation Management Plan will include programmes for each building for adaptive reuse outlining measures to maintain its structural stability and identify requirements for retention, renovations, permitted re-use and ongoing maintenance.	O	C79b.1 The final Conservation Management Plan should include the Inventory of Heritage Items and the Heritage Inventory Forms. Ranking: I C79b.2 The Inventory of Heritage Items should be completed and put into a final format as soon as possible. Ranking: U				
C79c	The Conservation Management Plan will include preservation requirements for buildings not to be reused.	NC	C79c.1 The Inventory of Heritage Items should be reviewed and completed to include preservation requirements for all buildings not to be reused. Ranking: U				

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C79e	The Conservation Management Plan will include inventory of all mobile items remaining on site.	NC	C79e.1 The results of Recommendation 9 in the Draft CMP proposing that all portable or movable heritage items should be documented at the time of a dilapidation study outlined in Recommendation 5 of the CMP should be included or referenced in the Final Conservation Management Plan. Ranking: I				
C79f	The Conservation Management Plan will include agreement with a mining history organisation to preserve and care for relocated items.	NC	C79f.1 A suitable mining history organisation should be identified and an agreement entered into to preserve and care for relocated items. Ranking: I				
C80	The Conservation Management Plan will outline specific requirements for the management of historical heritage.	C	See recommendation C79b.2.				
C83	Where possible, avoid the use of highly reflective materials and colours on the site, unless necessary for safety reasons.	C	C83.1 A procedure, standard, policy or other document should be prepared incorporating a requirement that where possible, the use of highly reflective materials and colours on the site should be avoided, unless necessary for safety reasons. Ranking: I				
C84	Lighting being kept to a minimum necessary to safely carry out operations.	C	C84.1 A procedure, standard, policy or other document should be prepared incorporating a requirement that lighting being kept to a minimum necessary to safely carry out operations. Ranking: I				

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C85	Lighting being directed away from residences through the use of directional lighting equipment and shielding.	C	C85.1 A procedure, standard, policy or other document should be prepared incorporating a requirement that lighting is directed away from residences through the use of directional lighting equipment and shielding. Ranking: I				
C87	Sealing of all main traffic routes including the roads indicated in the table located at 3.4.	C	C87.1 The generation of dust from the haul road due to haul trucks passing on a pavement that is not wide enough to accommodate two trucks should be investigated as soon as possible. Ranking: E C87.2 If necessary, the haul road should be widened, or passing bays should be constructed at strategic locations to enable trucks to remain on a sealed surface at all times. Ranking: E				
C89	Requiring heavy vehicles associated with deliveries to the mine to use approved B-Double routes.	NC	C89.1 A procedure should be prepared requiring that heavy vehicles associated with deliveries to the mine use approved B-Double routes, which should be clearly marked on a street map of the area. A method of conveying this requirement to the owners and drivers of heavy transport contracted by the mine or its suppliers should be included in the procedure. Ranking: I				
C98	Preparing and implementing a Rehabilitation Environmental Management Plan (or any such plan as required by the project approval), which addresses all aspects of rehabilitation and mine closure.	C	See Recommendation S3.35a.1.	See Recommendation S3.35a.1.			
C99a	The rehabilitation and mine closure strategy will include development of a conceptual mine closure plan.	C	See Recommendation S3.35a.1.	See Recommendation S3.35a.1.			